



MINISTERIO
DE ECONOMÍA, INDUSTRIA
Y COMPETITIVIDAD



DIVISIÓN DE COORDINACIÓN,
EVALUACIÓN Y SEGUIMIENTO
CIENTÍFICO Y TÉCNICO

SUBDIVISIÓN DE PROGRAMAS
CIENTÍFICO-TÉCNICOS
TRANSVERSALES,
FORTALECIMIENTO Y
EXCELENCIA

CONSOLIDER-INGENIO 2010 PROGRAMME

SCIENTIFIC CLOSING REPORT

| |
|--|
| PROJECT REFERENCE NUMBER: CSD2009-00064 |
| Coordinating Researcher: Carlos Muñoz |
| Project Title: Multimessenger Approach for Dark Matter Detection - MultiDark, http://www.multidark.es |
| Managing Institution *: Universidad Autónoma de Madrid (UAM) |
| Project Start Date: 17/12/2009 |
| Project Final Date: 16/12/2014 extended until 16/06/2017 |

*Entidad Gestora

The closing report must be written in English and must conform to the following structure:

- 1.-An abstract of the project: summary and main goals
- 2.-A summary of the main advances and profits obtained from the project, considering its possible public diffusion
- 3.-All the key indicators achieved and initially listed in the implementation agreement and in the final proposal presented in phase II should be detailed. A comparative indicator table with the quantitative numerical data of the indicators planned and achieved should be presented
- 4.-Describe the difficulties and/or problems that may have been encountered during the development of the project, as well as any change that have been occurred with respect to the objectives of the initial work plan
- 5.-Describe the scientific and technical activities to reach the goals outlined in the project. Indicate, for each activity, the members of the equipment who have participated
- 6.-Relate the collaborations between all team members
- 7.-Relate the collaborations with other groups of research and the added value for the project. Describe, if necessary, the access to equipment or infrastructures of other groups or institutions
- 8.-Relate the collaborations with companies or other socioeconomic sectors and the added value for the project, the knowledge transference or other results
- 9.-National and international Program visibility
- 10.- Problems and suggestions

1.-Abstract of the project

MultiDark was an excellence project in which most of the Spanish research community working in the field of dark matter was involved. The project was funded by the Spanish [CONSOLIDER-Ingenio](#) 2010 Programme for a period of 5 years, starting December 2009, and extended two and a half years more, until June 2017.

MultiDark consisted of 11 theoretical and experimental groups formed by particle physicists, astrophysicists and cosmologists from 18 Spanish universities and research institutes, experts in astroparticle physics. It also included 11 senior researchers from foreign institutions. In total, the project involved about 120 researchers, more than 20 of which were directly hired by the project as Postdocs, Ph.D. students, or Technicians.

The main goal of MultiDark was to push forward the Spanish position in the field by creating synergies and collaborations among the participating groups, in order to contribute significantly to the worldwide efforts to identify and detect the dark matter. To this end, the most plausible particle candidates for dark matter were studied, the way these candidates are distributed in the Universe was investigated, and the development of experiments aiming at their detection was supported.



2.-Summary of the main advances and profits obtained from the project

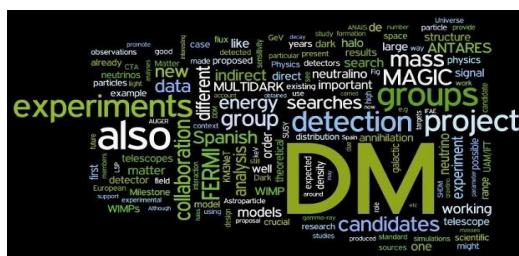
One of the great scientific enigmas today is the nature of dark matter. Simple gravitational arguments allow to deduce that most of the mass in the Universe, about 85%, is some (unknown) non-luminous matter, implying that we are not made of what most of the Universe is made of. Particle candidates for dark matter have been proposed all of which imply new physics. Experiments searching for these relic particles are carried out by many groups around the world, and they are becoming more sensitive every year.

Given these international efforts in the search for dark matter, we considered in 2009 that it was the right moment for the Spanish institutions to support strongly the joint efforts of experimental and theoretical physicists, astrophysicists and cosmologists to take up this task from a multidisciplinary perspective and at a national level. The main profit of MultiDark was therefore to reinforce the existing dark matter groups and those groups interested in dark matter research, and to foster synergies among them. As result of this, there have been significant advances in the Spanish contribution to the worldwide efforts to identify and detect the dark matter. In particular:

We analyzed in detail the most plausible candidates for dark matter. This is the case for example of the neutralino, sneutrino or gravitino, predicted by the supersymmetric extension of the standard model of particle physics, or the axion, the Majoron, the branon, etc. In summary, theoretical groups have strengthened their research on dark matter modelling, such as in the characterization of various candidates and their detection prospects.

We investigated how these candidates form the dark halos hosting the galaxies, and, as a consequence, how likely it is to detect them in the experiments. We also developed new astrophysical and cosmological databases, which are already well-known tools in the international community.

We contributed to the development of experiments. This is the case of ANAIS, EURECA, CDMS, COUPP/PICO and MOSCAB for the direct detection of dark matter in underground laboratories, through its elastic interaction with nuclei inside detectors. It is also possible the indirect detection of dark matter through the analysis of its annihilation products in the galactic halo or the Sun, such as gamma rays, antimatter and neutrinos. MultiDark contributed to ANTARES and KM3Net neutrino telescopes, MAGIC and CTA gamma-ray observatories, and NASA Fermi satellite. The combination of data from some these experiments with those of the LHC was also analyzed. MultiDark also contributed through SDSS-III/BOSS and DESI to surveys of the distant Universe. Contributions from MultiDark to Spanish groups working in the cosmic ray observatories AUGER, and JEM-EUSO, to be located in the International Space Station, and the gravitational wave observatory LIGO, were also valuable.



3.-All the key indicators initially planned and those achieved

The summary of the final proposal presented in 2009 is copied below. As can be seen, the main goal of the project was to reinforce the existing Spanish dark matter groups and those groups interested in dark matter research, fostering synergies among them in order to attack the challenges from a multidisciplinary perspective. We will show in this section that this goal has been fully achieved, and even surpassed.

SUMMARY OF THE PROPOSAL IN 2009

Up to now science has failed to identify the nature of what makes up 85% of all existing matter in the Universe. Elucidating the nature of dark matter and its possible detection constitutes a key challenge in modern physics. There has been an impressive progress on this issue in recent years, with significant improvements in the precision and sensitivity of experiments. We seem to be closer than ever to the detection of dark matter. We therefore consider this is a unique moment for the Spanish experimental and theoretical physicists, astrophysicists and cosmologists to take up the task from a multidisciplinary perspective and at a national level.

To this end, we propose (i) to analyse in detail the most plausible candidates for dark matter, (ii) to investigate how they form the dark halos hosting the galaxies and (iii) to contribute to the development of experiments to detect the dark matter.

In the proposed project we will optimize the infrastructure and experiments to which Spain is already committed, as well as promote the most promising ones where Spain is not yet present. This will allow us to combine complementary strategies, such as direct and indirect detection of the dark matter, in a multimessenger approach. Experiments include the Spanish project ANAIS for direct detection of the dark matter in the underground Canfranc laboratory, the neutrino telescope ANTARES, the gamma-ray Cherenkov observatory MAGIC built with a substantial Spanish participation in the Canary islands, the FERMI and PAMELA satellites and the cosmic ray observatory AUGER. Since MAGIC is already in operation (with the second telescope, MAGIC-II, currently in its commissioning phase), and that FERMI, PAMELA, ANTARES and AUGER are starting to analyze the first data and will be operative for several years, our multimessenger dark matter detection proposal is very timely. Last, but not least, these experiments cover the full range of more plausible dark matter candidates, so one avoids the risk of putting all efforts in a single given experiment that might not be the right one.

The current challenges to the Spanish community in this field to carry out this initiative are:

1. - To consolidate and to promote the existing groups. Despite their scientific contributions and international recognition, many Spanish groups are too small, especially when compared with those of other EU countries. This is the case in direct detection experiments, and even more in experiments for indirect dark matter detection. The number of Spanish scientists involved in the detection of dark matter in the latter, if any, is very small.

2 - To promote the synergies among the different groups, which is currently almost nonexistent, by increasing the exchange of personnel, knowledge and information between theoretical and experimental groups, and especially among the various experimental groups. This will allow exploiting the complementarity among the different detection techniques, direct and indirect, as well as the possible synergies with accelerator searches at the upcoming LHC. This is the only way to optimize the Spanish commitment to this internationally competitive and multidisciplinary research area.

3. – To promote the Spanish participation in successful experimental efforts in which we are currently not strongly involved, such as FERMI, where there is no Spanish representation in the dark matter working groups.

4. – To position ourselves well in longer term projects, such as EURECA, KM3NeT, CTA, JEM-EUSO and others, so that the Spanish participation in their construction and the dark matter working groups is ensured and significant from the start.

In order to meet these challenges we need a new flexible funding source over a reasonable period of time so as to allow the continued collaboration of the relevant groups. Currently the Consolider-Ingenio 2010 program is the only one that can offer the required level of funding.

In order to construct a comprehensive evaluation scheme for the project, we consider therefore that the following four main criteria are appropriate:

1. Increase, consolidation and cooperation among the groups
2. Experimental and theoretical developments
3. International collaborations
4. Scientific outcome

The following initiatives have fulfilled **type 1** criterion:

- The five Working Groups of the project succeeded to create a high degree of cooperation between the different MultiDark groups. This is explained in detail in Section 6, “*Relate the collaborations between all team members*”, where an account of scientific articles and collaborations in common, congresses, meetings and training schools organized, etc., is given.
- The training of undergraduate and master students, through the Summer Student Programme established by MultiDark, which contributed to increase the size of the groups. In particular, 14 former students are now working in 9 of the groups.
- The opening of several Calls with the result of a substantial number of postdocs, PhD students and technicians hired, contributed to increase and consolidate all the existing 11 groups.

These last two initiatives also contribute to fulfil criterion **type 2**. This is explained in much detail in Section 5, “*Describe the scientific and technical activities to reach the goals*”, where an account of how the hired personnel contributed to the investigations of the groups, as well as to the participation of several experimental groups of MultiDark in national and international collaborations like ANAIS, CDMS, COUPP/PICO, ANTARES, MAGIC, SDSS-III/BOSS, etc., is given. Also there, is explained how the economic support of MultiDark for equipment and technological developments has been instrumental to consolidate the role of the groups within the experimental collaborations.

Type 3 criterion, but also **type 2**, are fulfilled by the international collaborations established by MultiDark. This is explained in much detail in Section 7, “*Relate the collaborations with other groups of research*”, where an account of new the collaborations established, such as those with Fermi-LAT, SDSS-III/BOSS, CDMS, COUPP/PICO, MOSCAB, etc., is given. There, is also emphasized how they would have been impossible without the existence of the MultiDark project.

As can be figured out from the summary of activities in the Table below, the degree of achievement of **type 4** criterion during these years of the project has been very high. We highlight the following:

- The large number of publications in refereed journals and proceedings (see the Tables in the Annex), and the creation of the MultiDark cosmological databases.
- The instrumentation and technology development and transfer activities that were carried out, even though MultiDark was focused on basic research. See an account of them in Section 8, “*Relate the collaborations with companies*”

We can then say that, due to all scientific initiatives and activities summarized here, MultiDark has more than complied with its mission of increasing the quantity and quality of Spanish research in the competitive field of dark matter.

| Summary of Activities | Achieved in 2010-17 |
|--|--------------------------------|
| Publications in refereed journals focused on dark matter | 318 |
| Other publications in refereed journals that could be relevant for the project | 549 |
| Publications in proceedings focused on dark matter | 44 |
| Other publications in proceedings that could be relevant for the project | 90 |
| International collaborations established | 12 |
| Databases created | 2 |
| Experiments and collaborations supported with equipment | 7 |
| Technology transfer | 7 |
| MultiDark Consolider Workshops | 14 |
| Meetings of the Working Groups | 7 |
| International Programs | 3 |
| Presentations to international congresses | 801 |
| Training Schools | 3 |
| PhD theses defended | 42 |
| PhD theses in progress | 25 |
| Scientific activities sponsored | 35 |
| Media interviews and public talks | > 140 |
| Press releases | 21 |
| <hr/> | |
| <u>Hired personnel</u> | |
| Postdocs | 14 (4 of them co-financed) |
| Ph.D. students | 18 (11 of them co-financed) |
| Technicians | 3 (1 of them co-financed) |
| Summer students | 55 |

4.-Describe the difficulties encountered during the development of the project

The main difficulty arose concerning the ANAIS experiment. Nevertheless, thanks to the extension granted by the Consolider Program until June 2017, MultiDark has been able to fund as planned three high quality NaI(Tl) detectors of the total 9 detectors of the experiment. The degree of goals achievement is therefore highly satisfactory.



The chronology of the problem as explained in the annual reports sent to the Consolider Program was as follows:

2014

The ANAIS-25 detectors have a background level at low energy higher than the initial goal of ANAIS. The main contributions to the low energy region background of the ANAIS-25 detectors have been identified. Although the excellent threshold energy achieved (1keV) partially compensate this drawback, an additional background reduction would assure an excellent sensitivity for WIMPs in the full mass range. In the first months of 2015, the new 12.5 kg module will allow to obtain more data about the background in the improved purification and growing conditions. Then, a protocol should be elaborated for the purification and growing of the crystals of the full experiment.

2015

The need of Alpha Spectra to incorporate additional protocols in the growing and encapsulation of crystals in order to guarantee their required radiopurity (in terms of K-40, Pb-210 and cosmogenic isotopes) increased the price of the detectors. Taking into account the new price and available funds, the experiment has been reduced from the original plan of 250 kg to 112.5 kg (3x3 matrix of crystals of 12.5 kg each one). This reduction in the total mass is compensated by the reduction achieved on the threshold energy with respect to the original goal (1 keV instead of 2 keV) and the background levels already obtained in D2 detector. The 112.5 kg experiment has excellent sensitivity prospects for exploring the DAMA/LIBRA signal in a model independent way with an exposure of \approx 500 kg y. Moreover, to increase the sensitivity of the experiment, a Liquid Scintillator Veto System is under study.

2016

The testing of the first module (D3) received in 2016 showed an alpha rate higher than the previous one (D2). Our analysis concluded that it was due to a higher contamination in ^{210}Pb (1.8 mBq/kg instead of 0.7 mBq/kg of D2) while the crystal was growing or the detector being built. However, Potassium content in D3 was clearly better than in previous modules, pointing at an improvement in the potassium purification protocols. That has compelled us to carry out new studies in collaboration with Alpha Spectra: several small 1kg crystals grown from different ingots have been characterized at LSC from April till August 2016. An ingot with much lower ^{210}Pb content was identified and used to construct a 12.5 kg detector (module D5), that once characterized at LSC showed a ^{210}Pb contamination of 0.7 mBq/kg. The last three modules have been ordered from this ingot. This radiopurity problem has introduced a delay in the schedule, but it has been solved and the full set-up will be ready in spring 2017. An extension of the project was required to allow fulfilling the main experimental goals.

2017

By June 2017, nine NaI(Tl) detectors of 12.5 kg each one were installed and characterized at the Canfranc Underground Laboratory (LSC). Their low energy background is satisfactorily explained by a background model developed using data from the first modules. The detectors have an excellent light collection (15 phe/keV) which allows triggering below 1 keVee. With these properties and the radiopurity levels achieved by the crystals, the conclusion is that an experiment with nine detectors with a total mass of 112.5 kg has a very good discovery potentiality for the hypothetical dark matter annual modulation signal singled out by DAMA/LIBRA. Shielding (except for neutrons), electronics, DAQ and slow control were installed before the end of June 2016. The neutron shielding (completing the passive shielding) was also installed, and the full experiment (ANALIS-112) started to take data by August 2017.

5.-Describe the scientific and technical activities of the project

To ensure a proper operation of the project, the Steering Committee consisted of the Coordinator, *C. Muñoz*, the Deputy Coordinator, *J.J. Hernández-Rey*, and four Area Coordinators:

- Analysis and Modelling – *J.W.F. Valle*
- Astrophysical Aspects – *F. Prada*
- Direct Detection – *M.L. Sarsa*
- Indirect Detection – *J.J. Hernández-Rey*

The following 5 Working Groups (WGs) were the structures in charge of organizing and carrying out the different scientific tasks of the project:

- *Direct detection*

Coordinators: M. Ardid, D.G. Cerdeño, J. Collar and E. García

- *Indirect detection: gamma rays and cosmic rays*

Coordinators: J.A. Barrio, N. Fornengo, R. Lineros, M.A. Sánchez-Conde

- *Indirect detection: neutrinos and high-energy cosmic rays*

Coordinators: M. Masip, G. Ros, J.D. Zornoza

- *LHC, particle physics and dark matter*

Coordinators: M.E. Gómez, S. Heinemeyer, M. Hirsch

- *Cosmology*

Coordinators: S. Gottlober, A.L. Maroto

They coordinated the work of the 11 groups of the project listed below (with the corresponding PIs) in achieving the goal of MultiDark,

| | | |
|--------------------------|------------------------|-------------------------------|
| UAM/IFT – C. Muñoz | IAA – F. Prada | IFIC-Exp – J.J. Hernández-Rey |
| IFIC-AHEP – J.W.F. Valle | UZ – M.L. Sarsa | UPV – M. Ardid |
| UHU – M.E. Gómez | IFAE – A. Moralejo | U5 – M.D. Rodríguez Frias |
| UCM-Th – A.L. Maroto | UCM-GAE – J.A. Barrio, | |

where the UAM/IFT group was constituted by the nodes UAM&IFT, IFCA (S. Heinemeyer), UGR (M. Masip) and USAL (M.A. Pérez-García); the IAA group by IAA and IAC (J. Betancort); and the U5 group by UAH, USC (G. Parente), UIB (A. Sintes), UMU (J. Bussóns) and CETA-Ciemat (R. Ramos).



Let us now describe the advances and profits obtained through this organization. In the last part of this section, we will also describe the benefit of several initiatives for all team members.

Working Group on Direct Detection

- **Commissioning of ANAIS112 experiment**

MultiDark has funded three high quality NaI(Tl) detectors of 12.5 kg each one built at Alpha Spectra Inc. (US). These detectors, with another six funded by FPA projects and by Laboratorio Subterráneo de Canfranc (LSC), have been used to prepare and install at LSC the [ANAIS112](#) experiment by June 2017. The experiment, led by **UZ group** amounting 112.5 kg of target material, started its annual modulation search by the end of August 2017 and can detect the annual modulation observed by DAMA/LIBRA in five years of data or, otherwise, exclude the 3-sigma region singled out by DAMA/LIBRA. This result will be very relevant in the international context and will have a strong impact in the dark matter search field.

Moreover, MultiDark funded the acquisition of new Hamamatsu photomultipliers of very low radioactive content, to be tested in the context of ANAIS R+D. The project also funded 6 summer students and 1 postdoc positions, whose works were very useful for the development of ANAIS. In addition, MultiDark has also allowed to boost **UZ** contacts with the COSINE-100 collaboration, organizing Joint Meetings with the IBS in Daejeon (South Korea) and the KIMS researchers, that could lead to combine data in a future joint annual modulation analysis with ANAIS.

- **Cooperation with the Munich group of CRESST**

In collaboration with the HAP (*Helmholtz Alliance for Astroparticle Physics*), MultiDark has funded the cooperation between **UZ group** and the Munich group of [CRESST](#) for the measurement of radioactivity of samples of different batches of WO_3 and of CaCO_3 . These measurements have allowed the selection of the best ones to grow CaWO_4 crystals that could be used as scintillating bolometers in CRESST/EURECA experiments. In particular, MultiDark has funded the missions at LSC.

- **Participation in CDMS and SuperCDMS**

A special mention deserves the case of the **UAM&IFT** MultiDark node, since its members had no previous experience on experimental tasks, but [the node](#) became member of the [CDMS](#) collaboration, contributing to data taking, calibration and analysis of the Soudan Phase of the experiment. Employing 9kg of high purity Germanium crystals, the experiment ran from 2012 to 2015, looking directly for WIMP dark matter particles. In this time, it became the most sensitive detector for dark matter particles with masses below 6 GeV, providing world-leading upper bounds on the strength of dark matter interaction. Other leading analyses included Lightly-Ionising Particles and interpretations of dark matter effective field theories. MultiDark supported an MSc student and a postdoctoral fellow for the project.

UAM&IFT node of MultiDark has also been actively contributing to the planning of the next phase of the experiment (SuperCDMS) in the [SNOLAB](#) site in Canada, which will commence operation in 2020. MultiDark researchers have participated in the design phase, with computations of expected background levels and resulting sensitivities. MultiDark members have also investigated the potential of the experiment to test new physics in the neutrino sector.

- **Participation in COUPP/PICO**

Another special mention is deserved to the **UPV group**, which had no previous experience on dark matter research, but thanks to its expertise on acoustic detection techniques and the support of MultiDark was able to enter in contact with J. Collar (spokesperson of [COUPP](#)), and to agree on the convenience to start collaborating. Furthermore, MultiDark funded the participation of the UPV group in the COUPP/[PICO](#) Collaborations (the world-leading experiments to test proton-WIMP spin-dependent interactions). In this frame, MultiDark funded a 3-year postdoc work and a Ph. D. Student (part-time working on this), as well as some materials to build an acoustic test bench in UPV for tests of the acoustic sensors and systems of these detectors. A couple of summer students were also involved in activities related to acoustic systems for PICO/COUPP.

- **Participation in MOSCAB**

MultiDark has also funded the participation of the UPV group in the MOSCAB Collaboration, which aims to develop and operate a big geyser detector in Laboratori Nazionali del Gran Sasso (LNGS). Thanks to MultiDark, it was possible to cover some costs of the participation, such as, the contract of a Ph. D. Student (part-time working on this), some materials for the acoustic systems of the detector and some travels to Italy for meetings and for the tests of the acoustic systems and commissioning of the detector.

- **New collaborations between team members**

MultiDark stimulated collaborations among the direct detections groups, and between theoreticians and experimentalists. For instance, this is the case of the collaboration between **UZ** and **UAM/IFT** groups to study of the complementarity of different bolometric targets for dark matter direct detection, which gave rise to two publications.

Working Group on Indirect Detection: gamma rays and cosmic rays

- **Collaborations with Fermi-LAT**

MultiDark kept a strong presence in Fermi-LAT publications and activities thanks to **IAA** and **UAM/IFT** group members. Fermi-LAT is the gamma ray space telescope that has been the leading experiment for indirect dark matter searches. Thus, the involvement of MultiDark in Fermi-LAT has always represented a key objective for the Working Group and, indeed, it has been a major accomplishment for MultiDark as a

whole. By initiative of the project, several research proposals were approved by the publication board of Fermi-LAT. As a consequence, the joint effort between MultiDark and Fermi-LAT has been very fruitfull. For example:

- To understand the nature of the diffuse Gamma-Ray Background (DGRB), and to provide new insight on a possible dark matter component hidden in the DGRB, was a very prolific line of research.
- The search for axion-like particles using Fermi-LAT data from the central gamma-ray source in the Perseus galaxy cluster, has constituted a major hint both in and out the LAT Collaboration.
- The search for gravitino dark matter, focusing in sharp and smooth gamma-ray spectral signatures, has produced significant constraints on μ VSSM gravitinos.
- The assumption of contracted dark matter in the inner Galaxy has produced crucial constraints on WIMP annihilation.

See Section 7 of this report for more details and examples. In particular, for a list of papers carried out by initiative of MultiDark, as well as another list of papers of the collaboration where MultiDark authors have contributed, being also corresponding authors in several of them. Last but not least, the dark matter coordinator of the Fermi-LAT Collaboration during 2015 and 2016, M.A. Sánchez-Conde, has been member of MultiDark.

- **Consolidating the role within the MAGIC and CTA collaborations**

The project has been instrumental in consolidating the role of IFAE and UCM-GAE groups of MultiDark in the [MAGIC](#) gamma-ray telescope collaboration:

MultiDark provided economic support to **IFAE group** for the activities of the official [MAGIC data center at PIC](#) (Port d'Informació Científica). Hosting the MAGIC data center has boosted the role of Spain in the scientific exploitation of MAGIC observations in general, and those related to dark matter in particular: the two latest MAGIC publications on the topic (based on J. Aleksic's thesis), have been led by IFAE, and included MultiDark members among the corresponding authors. Another MAGIC publication on dark matter constraints, also led by IFAE, will be submitted in the coming months (based on the results in J. Palacio's thesis).

MultiDark has also funded one PhD student at **IFAE** for the whole PhD period (A. González), which helped consolidate IFAE contribution to gamma-ray propagation studies with MAGIC; this is now the topic of one of MAGIC's Key Observation Programs, led by A. Moralejo (IFAE & MultiDark member). Finally, MultiDark provided funds for hiring graduate student D. Guberman (who after few months won a PhD grant). Guberman developed a system of UV filters for the MAGIC cameras and evaluated the feasibility of using them for observations of the shadowing of charged cosmic rays by the moon. Despite those turned out to be out of reach for MAGIC, the use of filters has allowed IFAE to perform gamma-ray observations with MAGIC even during full moon nights (a result published in a paper of the Collaboration of which Guberman is corresponding author).

During the 2010-17 period, **IFAE** has also contributed significantly to the development of the [CTA](#) (Cherenkov Telescope Array) project, particularly in the design and construction of the large-size telescopes and in the evaluation of the expected CTA

performance (with various layouts and on different locations) through Monte Carlo simulations.

MultiDark has provided support to **UCM-GAE group** for developing the MAGIC search for unassociated Fermi-LAT sources as possible dark matter subhalos, and also to finalize the MAGIC dark matter search in the Segue 1 dwarf spheroidal galaxy. In this frame, MultiDark funded a 1-year postdoc and a 2-year predoc.

- **New collaborations between team members**

IAA and **UAM&IFT** nodes joined efforts to analyse the possibility of dark matter detection in Fermi-LAT. Also **IAA** and **UHU** to analyze dark matter searches with Cherenkov telescopes, as well as the impact of internal bremsstrahlung on the detection of gamma-rays from neutralinos. **UCM-Th** and **IFIC-AHEP** worked together on gamma-ray and neutrino fluxes from heavy dark matter in the galactic center. The main advances related to the UAM/IFT (**USAL**) group concern a major inter-relation among **USAL** node and other groups. This had led to an increased interest and knowledge of the lines of work developed by other groups. As a result, USAL has had collaborations with **UHU** on new gamma ray signal from gravitationally boosted neutralinos at the galactic center, with **IFIC-AHEP** on enhanced stellar neutrino emissivities in annihilating Coy Dark Matter, and has several other active collaborations that are expected to be fruitful in the coming months.

Working Group on Indirect Detection: neutrinos and high-energy cosmic rays

- **Consolidating the role within the ANTARES and KM3NeT collaborations**

The participation of the IFIC-Exp and UPV groups in MultiDark has been of major importance. Before MultiDark, they did not have any involvement in dark matter analyses, thus MultiDark has allowed to both groups to open a new research line, which has been very fruitful:

Concerning the **IFIC-Exp group**, now is leading the working group of *Dark Matter and Exotics in the [ANTARES](#)* neutrino telescope, where J.D. Zornoza (IFIC & MultiDark member) is the Coordinator, and has carried out the analyses of the most interesting sources (Sun and Galactic Centre). Along this time, members of IFIC-Exp group have been the corresponding authors of four articles in journals of high impact. They have also presented results in many international conferences. MultiDark funded the postdoctoral contract of G. Lambard, who had experience in dark matter analyses. His work was continued by C. Tönnis, a PhD student who recently defended his thesis, the first one in the IFIC-Exp group on this topic. Both have continued in the dark matter field after their contracts. Their work is being continued by M. Lotze, a new PhD student who is also working in dark matter analyses for [KM3NeT](#), showing healthy perspectives for this topic in the IFIC-Exp group.

For the **UPV group** the participation in MultiDark has also been extremely important, since it has allowed the group to increase its participation in the ANTARES and

KM3NeT projects, having a very important role in the dark matter searches with neutrino telescopes. With the grant for the Ph. D. Student Silvia Adrian, UPV group could analyse the ANTARES data for testing secluded dark matter models. Later, these models, including dark photon models, were also tested using IceCube public data. The results of these analyses, with UPV members as corresponding authors, have been published in JCAP and also presented in several international conferences.

A member of the **IFIC-Exp** group is the Coordinator of the Electronics Working Group of KM3NeT. The group has special responsibilities on the Central Logic Board (CLB) of the neutrino telescope, the electronics board in charge of controlling the Digital Optical Module (DOM), which is the key detector element of the experiment. The CLB, based on the FPGA concept, is composed of a large variety of elements and is essential to the proper functioning of the DOM. MultiDark funded the production of 50 of these boards at a very early stage of KM3NeT, which gave great visibility to the IFIC-Exp group within the KM3NeT Collaboration and provided a contribution to the experiment in a period of time when the IFIC-Exp's funding was very tight.

- **Consolidating the role within the JEM-EUSO and AUGER collaborations**

MultiDark has been crucial to consolidate the role of the U5 (**UAH**) group in the [JEM-EUSO](#) collaboration, providing economic support to build the infrared camera for the [EUSO-Balloon flight](#) who took place on August 25, 2014, and also funding a technician during 2011. In addition, MultiDark provided economic support during 2015 for the participation of the **UAH** group in AUGER.

- **New collaborations between team members**

For the UAM/IFT (**UGR**) group, the participation in MultiDark has been extremely useful and productive. Being the **UGR** node a theory group, it has been an opportunity to interact with the Spanish experimental groups, motivating the UGR work on neutrino telescopes or the physics in supernova explosions. The MultiDark project has been essential to consolidate the astroparticle theory group at the University of Granada.

Working Group on LHC, particle physics and dark matter

The world of particle physics has changed substantially over the last 7.5 years. The LHC started operation in 2010 and the discovery of a Higgs boson was announced in 2012. The activities and advances of this Working Group has to be seen in this context.

- **Incorporation of LHC data into dark matter searches**

The main challenge was the timely incorporation of the LHC results (Higgs boson measurements and searches for new physics) into the analyses and predictions for dark matter searches. The Working Group, formed by members of UAM/IFT (**IFCA**), **UHU** and **IFIC-AHEP** MultiDark groups succeeded in developing a framework

([MasterCode](#)) for supersymmetric analyses incorporating LHC results. In this framework, they were able

- to make predictions for the dark matter searches at the LHC
- to make predictions for dark matter searches in direct detection experiments
- to incorporate indirect dark matter searches

In this way, they achieved to construct the most complete and elaborate framework for analyses of Supersymmetry (the leading candidate for beyond standard model physics and explaining dark matter).

The thesis of M. Rehman funded by MultiDark for the whole PhD period, and carried out in the joined supervision of IFCA and UHU leaders, extends this framework (and will lead to improved limits/predictions for DM in the near future).

- **Theoretical developments**

On the theory side, the members of the Working Group developed a computational framework to incorporate consistently quantum corrections into the predictions of the production of (supersymmetric) dark matter at the LHC and future e+e- colliders. This new computational framework, can be used to derive any prediction for supersymmetric processes including quantum corrections in a fully consistent manner (which was not possible before).

The Working Group has studied the relation of processes not explained by the standard model, with the Physics to be found at the LHC and future linear accelerators. In this context, it has included the impact of the lepton flavor violation, required to explain neutrino oscillations, to the computation of the high precisions correction to the standard model observables. Also, it has been investigated the correlation of the discovery of supersymmetric particles with the possible observation of lepton flavor violating decays of charged leptons.

The WG has also analyzed the most plausible candidates for dark matter. This is e.g. the case of the neutralino, the sneutrino or the gravitino in supersymmetry. Non-supersymmetric candidates were also considered, such as the Majoron, the axion, the branon, those arising in low-scale left-right models, etc. The predictions for their direct and indirect detection were studied, and, where possible, the combination with LHC data was carried out.

- **New collaborations between team members**

As mentioned above, one of the PhD students of the Working Group was jointly supervised by **IFCA** and **UHU** members, giving rise to a fruitful collaboration between both groups that now share several publications in common as well as future projects.

Working Group on Cosmology

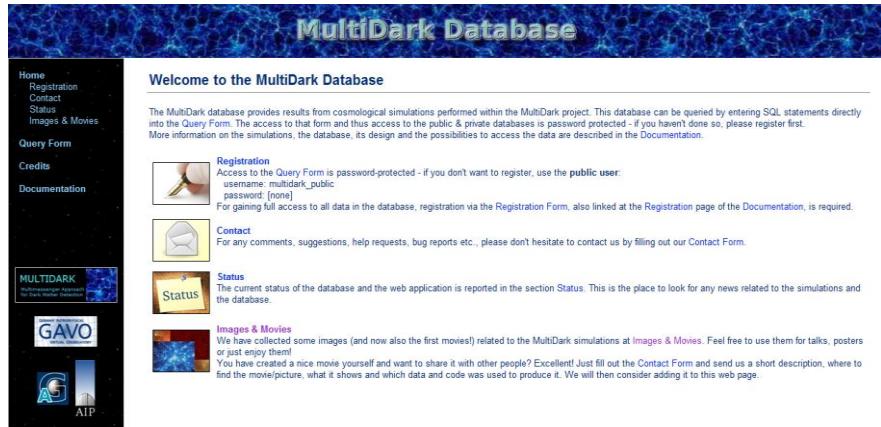
- **Participation in SDSS-III and DESI**

In the case of the **IAA group**, its existing experience and activities in the field of cosmology have been strengthened thanks to the MultiDark agreement making possible its participation in [SDSS-III/BOSS](#), which using the telescope at Apache Point Observatory in New Mexico has been one of the most successful surveys of the distant Universe. **IAA** and **UAM/IFT** groups contributed to many scientific works of the collaboration, leading several of them. See Section 7 of this report for more details and a list of contributions.

These MultiDark groups also took active part in the Spanish involvement in [DESI](#), one of the world-leading projects to measure the effect of dark energy on the expansion of the Universe, starting in 2018. They organized workshops in Spain with the LBNL (USA) responsible, and contributed to R+D activities, with the result that MultiDark has been leading the Granada-Madrid-Tenerife Participation Group in DESI.

- **Cosmological databases**

MultiDark in collaboration with the [AIP](#) in Postdam developed a new cosmological database, under the name “MultiDark”. **IAA** and **UAM/IFT** MultiDark groups led this collaboration. The [database](#) contains the products of two state-of-the-art N-body simulations: Bolshoi and MultiDark, and provides halo/subhalo catalogs as well as, for the first time, access to raw dark matter particle and density/kinematic profiles for each halo/subhalo. Scientists around the world are using this database and is already a very well known tool in the international community, where the name of MultiDark will remain in the future.



MultiDark in another collaboration with AIP, Sapienza and Departamento de Física Teórica UAM has also contributed to the development of the Multi-Hydro database at UAM that host the [MUSIC](#) dataset and other hydro simulations, constituting one of the largest samples of hydrodynamically simulated galaxy clusters.

- **Consolidating the role within the LIGO collaboration**

U5 ([UIB](#)) group participates in the [LIGO](#) collaboration and has been involved in the analysis of the first detection of gravitational waves from a binary black hole merger. It

has also contributed to several mock data challenges and science monitoring at the LIGO observatories. MultiDark economic support of 1-year postdoc and 1-year predoc for the UIB has been significant to maintain the activity of the group in these very exciting times and with so much work to do (theories of primordial black holes, even propose them as candidates for dark matter). Actually, one of this, a PhD student, is carrying out the project: “Testing gravity and the geometry of the universe through observing gravitational waves from black hole coalescence”. In particular, the dynamics of merging black hole binaries and their gravitational wave signature is simulated on supercomputers, comparing results in general relativity with modified theories of gravity. The results will inform searches for gravitational waves, and observations based on this work will constrain gravitational theories, provide an accurate measurement of the mass of the graviton, and constrain the cosmological parameters, in particular the content of dark matter and dark energy in the universe. They will also tell us about the interactions these forms of matter obey.

- **Alternative theories of the dark sector**

The main research area of the **UCM-Th** group within the Cosmology Working Group, has been the development of alternative theories of the dark sector based on modifications of gravity: vector-tensor, $f(R)$, non-local, Born-Infeld, etc. New inflationary models have also been developed and obtained observable predictions, which could be tested from present or future experiments: CMB, galaxy catalogues, SN, etc. MultiDark funded two two-year predocs for the group.

- **Neutrino cosmology**

The main research line of **IFIC-AHEP** members, working in the Cosmology Working Group of Multidark, has been neutrino cosmology. In this period, they have obtained several new results. In particular, new bounds on the cosmological lepton (neutrino) asymmetry in the presence of flavour oscillations, with and without neutrino masses; Limits on the interactions within the dark matter sector via extra radiation contributions; Bounds from Planck data on very low reheating scenarios; A new calculation of the so-called effective number of neutrinos in the standard case.

- **New collaborations between team members**

MultiDark stimulated collaborations among the groups interested in cosmology and astrophysics. For instance, **UCM-Th**, **IAA** and **UAM/IFT** have collaborated mainly on N-body simulations of large-scale structure formation. For the **IFIC-AHEP** group, one of the main scientific profit obtained from the Multidark project has been precisely a closer contact with various experts on dark matter, in particular to discuss about its distribution in the local universe.

Let us finally describe several initiatives of the project that have been very useful for all team members:

❖ **Working Group predocs and postdocs (hired or not directly by MD, and with different affiliations over the years):**

- i) Received financial support to attend the most relevant conferences and workshops, giving them the possibility to showcase the different Working Group research and discuss it with first-class world experts.
- ii) Attended conferences and training events organized by MultiDark, which allowed them to gain expertise on the most relevant topics related to dark matter searches.
- iii) Benefited from the MultiDark [postdoc](#) and [predoc](#) programs to perform their research in top-level national research centers and, thus, to keep building their careers as scientists.
- iv) Had access to a rich network of (MultiDark) scientists with extremely diverse expertise, offering them the possibility of growing as scientists as well as to build specialized work teams, tailored to tackle specific problems.
- v) Could make use of specific datasets (as, e.g., results of brand new N-body simulations) developed specifically by MultiDark.
- vi) Received support in dealing with experimental collaborations for specific research projects: simply from the fact of being conducted within the framework of MultiDark, those projects gained additional value to the eyes of the experimental collaborations.

❖ **Summer student Program**

We would also like to mention the benefit, both for the hosting groups and for the students, of the [Summer students Program](#) of MultiDark. The duration of the stays of one-two months was an excellent opportunity to attract potential researchers to the field, and indeed some of them have continued in MultiDark groups or in other groups working on dark matter.

❖ **Sponsorship Program**

MultiDark sponsored the organization by the groups of [Events](#) related to research in dark matter, such as workshops and schools that have been very useful for the development of the project.

All these key activities discussed above were summarized in the Table in Section 3. Others will be explained in more detail in Sections 6, 7 and 8.

6.-Relate the collaborations between all team members

The degree of collaborations between team members is summarized in the figure below, where the red arrows indicate groups with collaborations in common. This successful network was possible thanks to the structure of the project, with the 5 Working Groups (WGs) described in Section 5 in charge of organizing and carrying out the scientific tasks. The WGs managed to create a high degree of cooperation among the 11 national groups of MultiDark. To show that, one can see here how different research groups collaborated within the same WG:

- *Direct detection*
UAM/IFT (UAM&IFT, USAL), **IFIC-AHEP**, **UHU**, **UCM-Th**, **IAA** (IAA), **UPV**, **UZ**, **U5** (USC)
- *Indirect detection: gammas rays and cosmic rays*
UAM/IFT (UAM&IFT, USAL), **IFIC-AHEP**, **UHU**, **UCM-Th**, **IAA** (IAA), **UPV**, **IFIC-Exp**,
IFAE, **UCM-GAE**, **U5** (UAH)
- *Indirect detection: neutrinos and high-energy cosmic rays*
UAM/IFT (UAM&IFT, UGR), **IFIC-AHEP**, **UHU**, **UCM-Th**, **IAA** (IAA), **UPV**, **IFIC-Exp**,
U5 (UAH, UIB, UMU, USC)
- *LHC, particle physics and dark matter*
UAM/IFT (UAM&IFT, IFCA, UGR, USAL), **IFIC-AHEP**, **UHU**, **UCM-Th**, **IAA** (IAA), **UPV**
- *Cosmology*
UAM/IFT (UAM&IFT), **IFIC-AHEP**, **UHU**, **UCM-Th**, **IAA** (IAA, IAC), **UPV**, **U5** (UIB)



Collaborations among the eleven groups of MultiDark. UAM/IFT group was constituted by the nodes UAM&IFT, IFCA, UGR and USAL; the IAA group by IAA and IAC; and the U5 group by UAH, USC, UIB, UMU and CETA-Ciemat.

As a result of this cooperation, many outputs were obtained. Below we list several of them:

- Out of a total of 318 articles published in refereed journals, and focused on dark matter (see the first Table in the Annex), in 62 of them at least 2 MultiDark groups were collaborating.
- MultiDark stimulated collaborations between theoreticians and experimentalists. This is the case of the collaboration between **UZ** group and **UAM&IFT** node to study of the complementarity of different bolometric targets for dark matter direct detection, which gave rise to two publications (see 144 and 186 in the Annex). Also the case of the **UGR** node that being a theory group had the opportunity to interact with the Spanish experimental groups. This motivated the UGR works on neutrino telescopes and on the physics in supernova explosions. Another example are **UAH** and **USAL** nodes which are currently collaborating on exotic nuclearite models and their possible detection in the JEM-EUSO mission, as well as their implications for the production models of dark matter accretion in stellar environments.
- Collaborations between astrophysicists and particle physicists. For instance, between **IAA** and **UAM&IFT** nodes to analyse the possibility of dark matter detection in Fermi-LAT (see publications 43, 122 and 259 in the Annex). Also the case of **IAA** node and **UHU** group analysing dark matter searches with Cherenkov telescopes, as well as the impact of internal bremsstrahlung on the detection of gamma-rays from neutralinos (see publications 19 and 67).
- Collaborations between theoreticians. For example, between **USAL** and **UHU** on new gamma ray signal from gravitationally boosted neutralinos at the galactic center (see publication 91); between **USAL** and **IFIC-AHEP** on enhanced stellar neutrino emissivities in annihilating Coy Dark Matter (see publication 300); between **UCM-Th** and **IFIC-Exp** on gamma-ray and neutrino fluxes from heavy dark matter in the Galactic center (see publication 176); **IFIC-AHEP** and **UAM&IFT** also collaborated on dark matter and neutrino physics (see publication 27); and many other joint works that can be found in the papers listed in the Annex.
- Collaborations between cosmologists and astrophysicists. For instance, **UCM-Th**, **IAA** and **UAM/IFT** have collaborated mainly on N-body simulations of large-scale structure formation. Precisely, for the experts in cosmology of the **IFIC-AHEP** group, one of the main scientific profit obtained from the MultiDark project has been a closer contact with various experts on dark matter, in particular to discuss about its distribution in the local universe.
- Joint supervision of students, for example between **IFCA** and **UHU** giving rise to a fruitful collaboration between both groups that now share several publications in common as well as future projects.

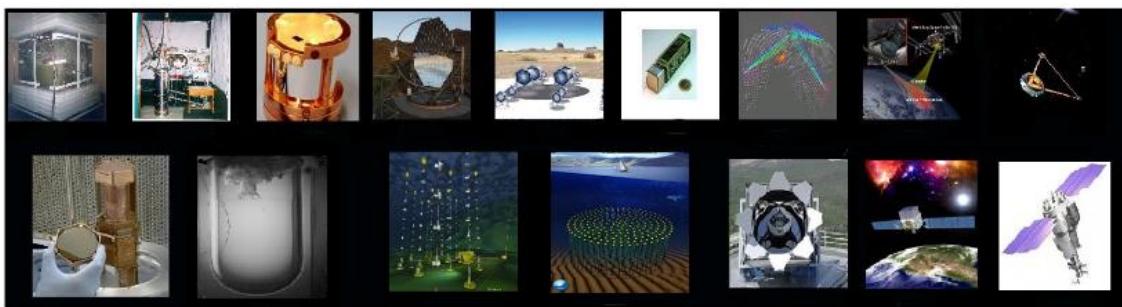
- Consolidating the collaboration within MAGIC and CTA of **IFAE** and **UCM-GAE** groups, as well as the collaboration within ANTARES and KM3NeT of **IFIC-Exp** and **UPV** groups.
- The MultiDark Consolider Workshops (14) and Meetings (7) organized by all the groups, where contributed talks and discussions involving all participants were held, in addition to WG sessions about specific issues. On average, 50 participants attended each MultiDark workshop, excepting the 4th celebrated in Madrid in 2011, that hosted 100 participants, including some members of the Advisory Committee of the project. The aim of this meeting was to bring together international experts and most of the MultiDark members one year after the beginning of the project, to discuss about its evolution and future plans.
- The Training Schools on *Fermi Science Tools* in April 2010, and on *DM tools and hands-on Fermi analysis* in April 2013, that hosted participants from all MultiDark groups, including many young researchers.



7.-Relate the collaborations with other groups of research

○ International Collaborations established by MultiDark

The most relevant initiatives undertaken during the project are listed and briefly explained below. See also the item [collaborations](#) at <http://www.multidark.es> for more details and links.



• Fermi Large Area Telescope (Fermi-LAT), <http://www-glast.stanford.edu>

The LAT is the principal scientific instrument on the Fermi Gamma Ray Space Telescope spacecraft. Fermi-LAT has been one of the world-leading experiments for the indirect detection of dark matter. MultiDark started its collaboration with Fermi-LAT by submitting in June 2010 a research proposal about “Dark matter implications of Fermi-LAT measurement of anisotropies in the gamma-ray diffuse background”. The Fermi-LAT publication board approved it in February 2011, and the research was finished and published last year (the acronym MD in the articles below means MultiDark member):

- **Angular power spectrum of the diffuse gamma-ray emission as measured by the Fermi Large Area Telescope and constraints on its Dark Matter interpretation**
M. Fornasa (MD), A. Cuoco, J. Zavala, J.M. Gaskins, M.A. Sanchez-Conde (MD), G. Gómez-Vargas (MD), E. Komatsu, T. Linden, F. Prada (MD), F. Zandanel (MD), A. Morselli (MD), Phys. Rev. D 94, (2016), [arXiv:1608.07289](https://arxiv.org/abs/1608.07289) [astro-ph.HE], 16 citations

As a result of this initiative, MultiDark researchers continued proposing other projects to Fermi-LAT, with the following scientific outcome:

- **Detection of the cosmic γ-ray horizon from multiwavelength observations of blazars;** Domínguez (MD), J. D. Finke, F. Prada (MD), J. R. Primack, F. S. Kitaura (MD), B. Siana, D. Panque, Astrophys. J. 770 (2013) 77, [arXiv:1305.2162](https://arxiv.org/abs/1305.2162) [astro-ph.CO], 53 citations
- **Constraints on WIMP Annihilation for Contracted Dark Matter in the Inner Galaxy with the Fermi-LAT;** G.A. Gomez-Vargas (MD), M.A. Sanchez-Conde (MD), J-H. Huh (MD), M. Peiro (MD), F. Prada (MD), A. Morselli (MD), A. Klypin (MD), D.G. Cerdeno (MD), Y. Mambrini (MD), C. Muñoz (MD), JCAP 10 (2013) 029, [arXiv:1308.3515](https://arxiv.org/abs/1308.3515) [astro-ph.HE], 51 citations

- **Search for 100 MeV to 10 GeV gamma-ray lines in the Fermi-LAT data and implications for gravitino dark matter in the μ vSSM;** Albert, G.A. Gomez-Vargas (MD), M. Grefe, C. Muñoz (MD), C. Weniger, E.D. Bloom, E. Charles, M.N. Mazziotta, A. Morselli (MD), JCAP10 (2014)023, [arXiv:1406.3430](https://arxiv.org/abs/1406.3430) [astro-ph.HE], 39 citations
- **The Origin of the Extragalactic Gamma-Ray Background and Implications for Dark-Matter Annihilation;** M. Ajello, D. Gasparrini, M. A. Sanchez-Conde (MD) et al., Astrophys. J. Letters, 800 (2015) 27, [arXiv:1501.05301](https://arxiv.org/abs/1501.05301) [astro-ph.HE], 85 citations
- **Limits on Dark Matter Annihilation Signals from the Fermi LAT 4-year Measurement of the Isotropic Gamma-Ray Background;** M. Ackermann et al. (the Fermi-LAT collab., M. A. Sanchez-Conde (MD) corresponding author), JCAP 09 (2015) 008, [arXiv:1501.05464](https://arxiv.org/abs/1501.05464) [astro-ph.HE], 68 citations
- **Search for Spectral Irregularities due to Photon-Axionlike-Particle Oscillations with the Fermi Large Area Telescope;** M. Ajello et al. [the Fermi-LAT collab.. M. A. Sanchez-Conde (MD) corresponding autor], Phys. Rev. Letters, 116 (2016) 161101, [arXiv:1603.06978](https://arxiv.org/abs/1603.06978) [astro-ph.HE], 26 citations

MultiDark project has therefore proposed five Cat 2 and two [Cat 1 collaborations](#) to Fermi-LAT. In total, these works have received so far about 340 citations. Other proposals from MultiDark are still under way, such as this one approved in April 2014:

-To cross-correlate the Fermi-LAT data of our study of the anisotropies with the 2MASS redshift survey catalog (2MRS), and then use the MultiDark dark matter simulation maps to predict the cross-correlation and to interpret the measurement. The interpretation of this measurement will focus on dark matter implications.

Contact authors: J. Siegal-Gaskins, A. Cuoco, M.A. Sanchez-Conde (MD), G.A. Gómez-Vargas (MD)

External Authors: T. Linden, M. Fornasa (MD), F. Zandanel (MD), J. Zavala, E. Komatsu, S. Ando, A. Benoit-Levy

- In addition, during the project, MultiDark authors contributed to the 85 refereed papers listed in this [LINK](#) with Fermi-LAT data, with more than 10,600 citations. In several of these works they were also contact authors.
- **Sloan Digital Sky Survey (SDSS-III),** <https://www.sdss.org/>

SDSS-III has been one of the most successful surveys in the history of astronomy, using the Sloan Foundation 2.5-meter Telescope at Apache Point Observatory in New Mexico. It has produced Massive Spectroscopic Surveys of the Distant Universe, the Milky Way Galaxy, and Extra-Solar Planetary Systems. MultiDark signed in July 2010 a Memorandum of Understanding (MoU) that enabled its participation in SDSS-III as an Associate Member. The main area of interest was in the Baryon Oscillation Sky Survey (BOSS), <http://www.sdss3.org/surveys/boss.php>. IAA and UAM/IFT groups led this participation.

During the project, MultiDark authors contributed to the 35 refereed papers listed in this [LINK](#) with SDSS-III/BOSS data, with more than 5,200 citations so far, leading the following 8 of them with 300 citations:

- **The Clustering of Galaxies in the Completed SDSS-III Baryon Oscillation Spectroscopic Survey: single-probe measurements from DR12 galaxy clustering-towards an accurate model;** BOSS Collaboration (Chia-Hsun Chuang (MD) *et al.*), MNRAS 471 (2017) no.2, 2370, e-Print: [arXiv:1607.03151](https://arxiv.org/abs/1607.03151) [astro-ph.CO], 8 *citations*
- **The clustering of galaxies in the SDSS-III Baryon Oscillation Spectroscopic Survey: modelling the clustering and halo occupation distribution of BOSS CMASS galaxies in the Final Data Release;** Sergio A. Rodríguez-Torres (MD) *et al.*, MNRAS 460 (2016) no.2, 1173, e-Print: [arXiv:1509.06404](https://arxiv.org/abs/1509.06404) [astro-ph.CO], 32 *citations*
- **The clustering of galaxies in the SDSS-III Baryon Oscillation Spectroscopic Survey: mock galaxy catalogues for the BOSS Final Data Release;** Francisco-Shu Kitaura (MD) *et al.*, MNRAS 456 (2016) no.4, 4156, e-Print: [arXiv:1509.06400](https://arxiv.org/abs/1509.06400) [astro-ph.CO], 42 *citations*
- **SDSS-IV eBOSS emission-line galaxy pilot survey;** eBOSS Collaboration (J. Comparat (MD) *et al.*), Astron. Astrophys. 592 (2016) A121, e-Print: [arXiv:1509.05045](https://arxiv.org/abs/1509.05045) [astro-ph.CO], 15 *citations*
- **Constraint on the time variation of the fine-structure constant with the SDSS-III/BOSS DR12 quasar sample;** Franco D. Albareti (MD) *et al.*, MNRAS 452 (2015) no.4, 4153-4168, e-Print: [arXiv:1501.00560](https://arxiv.org/abs/1501.00560) [astro-ph.CO], 4 *citations*
- **The clustering of galaxies in the SDSS-III Baryon Oscillation Spectroscopic Survey: single-probe measurements from CMASS anisotropic galaxy clustering;** Chia-Hsun Chuang (MD) *et al.*, MNRAS 461 (2016) no.4, 3781-3793, e-Print: [arXiv:1312.4889](https://arxiv.org/abs/1312.4889) [astro-ph.CO], 64 *citations*
- **The clustering of galaxies in the SDSS-III Baryon Oscillation Spectroscopic Survey: single-probe measurements and the strong power of normalized growth rate on constraining dark energy;** Chia-Hsun Chuang (MD) *et al.*, MNRAS 433 (2013) 3559, e-Print: [arXiv:1303.4486](https://arxiv.org/abs/1303.4486) [astro-ph.CO], 58 *citations*
- **The clustering of galaxies at z~0.5 in the SDSS-III Data Release 9 BOSS-CMASS sample: a test for the LCDM cosmology;** S.E. Nuza *et al.*, MNRAS 432 (2013) 743, e-Print: [arXiv:1202.6057](https://arxiv.org/abs/1202.6057) [astro-ph.CO], 77 *citations*

- **Dark Energy Spectroscopic Instrument (DESI),** <http://desi.lbl.gov/>

DESI is one of the world-leading projects to measure the effect of dark energy on the expansion of the Universe. It will be conducted on the Mayall 4-meter telescope at Kitt Peak National Observatory (USA) starting in 2018. **IAA** and **UAM/IFT** groups of MultiDark took active part in the Spanish involvement in the project, organizing several [meetings](#) in Spain with its responsible, Prof. D. Schlegel from LBNL (USA), and

contributing to several R+D activities. As a result, MultiDark has been leading the Granada-Madrid-Tenerife Participation Group in DESI.

- **Leibniz-Institut fur Astrophysik Postdam** (AIP), <http://www.aip.de/en>

MultiDark signed in September 2010 a MoU with the AIP to develop a new astrophysical and cosmological database, under the name “MultiDark”. **IAA** and **UAM/IFT** groups led this collaboration with AIP. The database was released on April 2011 and is available online, <http://www.multidark.org>. It contains the products of two state-of-the-art N-body simulations: Bolshoi and MultiDark, and provides halo/subhalo catalogs as well as, for the first time, access to raw dark matter particle and density/kinematic profiles for each halo/subhalo. Scientists around the world have free access and can use the data for their own projects. They have to include a mention to the MultiDark database in the acknowledgments of the resulting publications.

For presentations of the database, see the following articles:

- **Halo concentrations in the standard LCDM cosmology**; Prada, Klypin, Cuesta, Betancort-Rijo, Primack (2012), [MNRAS, 423, 3018](#)
- **The MultiDark Database: Release of the Bolshoi and MultiDark Cosmological Simulations**; Riebe, Partl, Enke, Forero-Romero, Gottlöber, Klypin, Lemson, Prada, Primack, Steinmetz, Turchaninov (2013), [AN, 334, 691](#)
- **MultiDark simulations: the story of dark matter halo concentrations and density profiles**; Klypin, Yepes, Gottlöber, Prada, Heß, (2016), [MNRAS 457, 4340](#)

Currently, the MultiDark database is part of the CosmoSim database, <https://www.cosmosim.org/>, which provides results from cosmological simulations performed within different projects: the [MultiDark and Bolshoi project](#), and the [CLUES project](#).

The **database status**, spring 2017, is the following:

- 45 Tb data + 19 Tb index
- 378 billion rows
- 295 active users (485 registrations)
- about 2.27 million successful queries
- currently 720 Gb in user tables
- 134 publications mentioning MultiDark simulations, which have received more than 4,500 citations

- **MUltidark SImulations of galaxy Clusters** (MUSIC),
<http://music.ft.uam.es/>

MultiDark has also contributed to the development of the Multi-Hydro database at UAM that host the MUSIC dataset and other hydro simulations. MUSIC is a collaboration between UAM (led by Gustavo Yepes), Sapienza and AIP. It constitutes one of the largest samples of hydrodynamically simulated galaxy clusters with more than 500 clusters and 2000 groups. MUSIC consists of two sets of re-simulated clusters extracted from the two large volume simulations: MareNostrum Universe and **MultiDark**.

For the presentation of the database, see the following article:

The MUSIC of Galaxy Clusters I: Baryon properties and Scaling Relations of the thermal Sunyaev-Zel'dovich Effect; F. Sembolini, G. Yepes, M. De Petris, S. Gottlöber, L. Lamagna, B. Comis, MNRAS, 429, 323-343, [arXiv:1207.4438 \[astro-ph.CO\]](https://arxiv.org/abs/1207.4438)

- **Cold Dark Matter Search (CDMS)**, <http://cdms.berkeley.edu>

CDMS, located at Soudan Mine in Minnesota, has been one of the world-leading experiments for the direct detection of dark matter. MultiDark signed in July 2011 a MoU with CDMS that enabled its participation as Member. **UAM/IFT** was the leading group of this participation, contributing to the development of Monte Carlo background estimations, data analysis and interpretation, together with theoretical developments in the field. SuperCDMS is the next phase of the experiment that will take place in SNOLAB, Canada. The new detector will contain approximately 40 kg of high-purity germanium crystals and 4 kg of silicon crystals and will be able to probe the WIMP dark matter paradigm for masses as low as 1 GeV with world-leading sensitivity. The experiment is expected to start operation in 2018.

During the project, MultiDark authors contributed to 13 referee papers with CDMS and SuperCDMS, with more than 1,600 citations so far. These works are listed in this [LINK](#)

- **COUPP/PICO**, <http://www.picoexperiment.com/>

These are the world-leading experiments to test proton-WIMP spin-dependent interactions. MultiDark signed in August 2011 a MoU that enabled its participation as Member in the *Chicagoland Observatory for Underground Particle Physics* (COUPP) experiment for the direct detection of dark matter, <http://www-coupp.fnal.gov>, and later in PICO (formed from the merger of PICASSO and COUPP). These experiments use the bubble chamber technique. This participation has been led by the **UPV group**, which contributed to the collaboration with its expertise on acoustic detection.

MultiDark authors contributed to 5 referee papers with COUPP and PICO with more than 340 citations so far. These works are listed in this [LINK](#)

- **Materia OSCura A Bolle** (MOSCAB)

MultiDark supported the collaboration of the **UPV group** with INFN, U. Milano-Biccoca & CTU Praga in MOSCAB, which aims to develop and operate a big geyser detector of dark matter in LNGS. For presentations of MOSCAB, see the following articles:

- **MOSCAB: direct dark matter search using the geyser technique;** MOSCAB Collaboration (M. Ardid *et al.*), Nucl. Part. Phys. Proc. 273-275 (2016) 2354, DOI: [10.1016/j.nuclphysbps.2015.09.389](https://doi.org/10.1016/j.nuclphysbps.2015.09.389)
- **MOSCAB (Materia OSCura A Bolle);** Antonio Pullia, J. Phys. Conf. Ser. 718 (2016) no.4, 042050, DOI: [10.1088/1742-6596/718/4/042050](https://doi.org/10.1088/1742-6596/718/4/042050)
- **MOSCAB: A geyser-concept bubble chamber to be used in a dark matter search;** MOSCAB Collaboration (A. Antonicci *et al.*), e-Print: [arXiv:1708.00101](https://arxiv.org/abs/1708.00101)
- **Cryogenic Underground Observatory for Rare Events** (CUORE), <http://crio.mib.infn.it/wigmi/pages/cuore.php>

MultiDark project signed in October 2013 an agreement with the CUORE experiment, to collaborate in the direct detection of dark matter. This provided support for missions of the **UZ group** (leading this collaboration with CUORE) to the site.

- **Helmholtz Alliance for Astroparticle Physics** (HAP), <http://www.hap-astroparticle.org>,

A Letter of Intent (LoI) between MultiDark and the German Network HAP, was signed in January 2012, expressing the desire to cooperate in their respective efforts to advance Astroparticle Physics in general, and the research into Dark Matter in particular. Several collaborations were established. The Munich group of HAP and the **UZ group** of MultiDark measured CaCO₃ and WO₃ samples at Canfranc Underground Laboratory for CRESST and EURECA. Also, researches and students of both projects were invited to participate in workshops and schools of HAP and MultiDark.

- **Gravitation Astroparticle Physics Amsterdam Institute** (GRAPPA) <https://iop.fnwi.uva.nl/grappa/>

A similar LoI between MultiDark and GRAPPA was signed in April 2012. In this framework, an international workshop was co-organized in 2013: “[GRAPPA Anisotropy Workshop](#)”, Univ. of Amsterdam.

- **Institute for Basic Science** (IBS), <http://www.ibs.re.kr/>

MultiDark co-organized several events with the IBS of South Korea. One of them also in collaboration with the [IPPP-Durham](#):

- [IBS-MultiDark Joint Focus Program on WIMPs and Axions](#), Daejeon, Sourt Korea, 10-21 October, 2014
- [IBS-MultiDark Joint Workshop on Dark Matter](#), IFT UAM-CSIC, Madrid, 23-28 Noviembre, 2015
- [IBS-MultiDark-IPPP Workshop on Dark Matter from aeV to ZeV](#), Lumley Castle, UK, 21-25 November, 2016

○ Reinforcement of Existing International Collaborations

One of the goals of the project was also to consolidate the role of MultiDark groups in the international collaborations where they were already participating (see the item [infrastructures](#) at <http://www.multidark.es>). These are listed and briefly explained below. See Section 5 of this report for specific details about their advances and profits obtained from MultiDark.

- **Major Atmospheric Gamma Imaging Cherenkov Telescopes** (MAGIC), <https://magic.mpp.mpg.de/>

MAGIC is the pioneering instrument for covering the electromagnetic spectrum in the energy range above 30 GeV. The two MAGIC telescopes are located in La Palma (Spain), and currently run by an international collaboration of about 165 astrophysicists from 24 institutions and consortia from 11 countries.

During the project, MultiDark authors from **IFAE**, **UCM-GAE** and **IAA** groups contributed to 55 refereed papers with MAGIC data, with more than 1,900 citations so far. These works are listed in this [LINK](#)

- **Cherenkov Telescope Array** (CTA), <https://www.cta-observatory.org/>

CTA is a collaboration of 1,350 scientists and engineers from 32 countries. It has been included in the 2016 Roadmap of the European Strategy Forum on Research Infrastructures (ESFRI). CTA is the next generation ground-based observatory for gamma-ray astronomy at very-high energies. With more than 100 telescopes located in the northern (La Palma, Spain) and southern (Chile) hemispheres, CTA will be the world's largest and most sensitive high-energy gamma-ray observatory.

During the project, MultiDark authors from **IFAE** and **UCM-GAE** groups contributed to 4 refereed papers about the CTA project, with more than 950 citations so far. These works are listed in this [LINK](#)

- **Astronomy with a Neutrino Telescope and Abyss environmental RESearch (ANTARES)**, <http://antares.in2p3.fr/>

The ANTARES Collaboration is operating since 2008 a large area water Cherenkov detector in the deep Mediterranean Sea, optimised for the detection of muons from high-energy astrophysical neutrinos. The observation of the latter is opening a new window on the Universe.

During the project, MultiDark authors from **IFIC-Exp** and **UPV** groups contributed to 38 refereed papers with ANTARES data, with about 1800 citations so far. These works are listed in this [LINK](#).

As already mentioned in Section 2, it is worth noticing in this context that MultiDark has allowed the **IFIC-Exp** and **UPV** groups to open a research line on dark matter, where they were not involved before the existence of the project. Actually, now IFIC-Exp member, J.D. Zornoza, is the Coordinator of the working group of *Dark Matter and Exotics* in ANTARES, carrying out the analyses of the most interesting sources (Sun and Galactic Centre). Along this time, members of IFIC-Exp and UPV groups have also been the corresponding authors of the 5 ANTARES papers, listed below:

- **Results from the search for dark matter in the Milky Way with 9 years of data of the ANTARES neutrino telescope;** ANTARES Collaboration (A. Albert *et al.*; Corresponding author: C.Tönnis (MD)), Phys.Lett. B769 (2017) 249, e-Print: [arXiv:1612.04595](https://arxiv.org/abs/1612.04595) [astro-ph.HE]
- **Limits on Dark Matter Annihilation in the Sun using the ANTARES Neutrino Telescope;** ANTARES Collaboration (S. Adrian-Martinez *et al.*; Corresponding author: C.Tönnis (MD)); Phys.Lett. B759 (2016) 69, e-Print: [arXiv:1603.02228](https://arxiv.org/abs/1603.02228) [astro-ph.HE]
- **A search for Secluded Dark Matter in the Sun with the ANTARES neutrino telescope;** ANTARES Collaboration (S. Adrián-Martínez *et al.*; Corresponding authors: S. Adrián-Martínez (MD) and M. Ardid (MD)), JCAP 05 (2016) 016, e-Print: [arXiv:1602.07000](https://arxiv.org/abs/1602.07000) [hep-ex]
- **Search of Dark Matter Annihilation in the Galactic Centre using the ANTARES Neutrino Telescope;** ANTARES Collaboration (S. Adrian-Martinez *et al.*; Corresponding author: G. Lambard (MD)), JCAP 10 (2015) 068; e-Print: [arXiv:1505.04866](https://arxiv.org/abs/1505.04866) [astro-ph.HE]
- **First results on dark matter annihilation in the Sun using the ANTARES neutrino telescope;** ANTARES Collaboration (S. Adrian-Martinez *et al.*; Corresponding author: G. Lambard (MD)), JCAP 11 (2013) 032, e-Print: [arXiv:1302.6516](https://arxiv.org/abs/1302.6516) [astro-ph.HE]

- **Cubic Kilometer Neutrino Telescope** (KM3NeT), <http://www.km3net.org/>

KM3NeT is a collaboration of more than 250 scientists and engineers from 51 institutions in 15 countries. The second phase of this project, KM3NeT 2.0, has been included in the 2016 Roadmap of ESFRI, the only new research infrastructures in the Physical Sciences and Engineering together with CTA and EST. KM3NeT houses the next generation neutrino telescopes, located in the deepest seas of the Mediterranean. With an instrumented volume of about five cubic kilometres, it will be distributed over three locations in France, Italy and Greece.

MultiDark authors contributed to 5 refereed papers about the KM3NeT project, with about 200 citations so far. These works are listed in this [LINK](#)

- **Extreme Universe Space Observatory (EUSO)-Balloon**,
http://jem-euso.roma2.infn.it/?page_id=153

EUSO-Balloon was a pathfinder for detecting UHECR's from the edge of space. MultiDark supported the participation of the U5 (**UAH**) group in this balloon-borne experiment, performed in collaboration with the French Space Agency CNES. During MultiDark, 25 papers on this subject were published, and are listed in this [LINK](#). The [EUSO-Balloon flight](#) took place on August 25, 2014. **UAH** built the infrared camera for the instrument installed on board a Gondola. For an account of the Spanish contribution, see the following article:

- **The Spanish Infrared Camera onboard the EUSO-Balloon (CNES) flight on August 24, 2014** ; M.R. Rodríguez Frias (MD) et al., [PoS ICRC2015 \(2016\) 687](#)

- **Pierre Auger Observatory** (AUGER), <https://www.auger.org/>

AUGER is a giant air shower array for detecting UHECR's with much greater collecting power than had ever been considered previously. MultiDark supported during 2015 the participation of the U5 (**UAH**) group in AUGER. During that period, MultiDark authors contributed to the 6 papers listed in this [LINK](#) with AUGER data, with more than 350 citations so far.

- **Laser interferometer Gravitational-Wave Observatory** (LIGO),
<https://www.ligo.caltech.edu/>

U5 (**UIB**) participates in the LIGO collaboration, which has made history detecting the first gravitational wave. MultiDark authors contributed to 40 refereed papers with LIGO data, with about 3,300 citations so far. These works are listed in this [LINK](#),

○ Collaborations established by MultiDark groups

In addition to the above new collaborations established by MultiDark with institutions or large international experiments, during the project the MultiDark groups have also established very fruitful collaborations with many other national and international groups:

Working Group on Direct Detection

- The **UZ** group, in the context of the ANAIS collaboration, has maintained contacts with the groups of KIMS (Korea) and DM-Ice (USA, UK) which have a similar 100 kg NaI experiment installed at Yang Yang underground laboratory (Korea), in order to share data in the future for a combined analysis that would improve dark matter detection sensitivity.

Working Group on Indirect Detection: gamma rays and cosmic rays

- **USAL** node has collaborated with the groups of Prof. J. Edsjo at the OKC, Albanova, Sweden, and Prof. E. Arriola at U. Granada (nuclear physics).
- Collaboration of the **USAL** node and UHU group with the group of J. Vergados of Ioannina (Greece), to study DM signals from gravitationally boosted neutralinos at the Galactic center.
- Miguel A. Sánchez-Conde, MultiDark member, has collaborated with the [AMEGO](#) team to launch a telescope in the MeV energy range, with Dr. Fabio Zandanel (GRAPPA, Amsterdam) on galaxy cluster halo concentrations, and with the [HAWC](#) collaboration on the search for TeV dark matter in the Andromeda galaxy.
- **UCM-GAE** group has collaborated with the [e-ASTROGAM](#) team to launch a telescope in the MeV energy range.

Working Group on Indirect Detection: neutrinos and high-energy cosmic rays

- **IFIC-Exp** group is collaborating with SKKU (South Korea) and ULB (Belgium) for a combined search for dark matter using data of ANTARES and IceCube. The preliminary results, shown at ICRC 2017, indicate that there is an improvement at WIMP masses about 300 GeV of almost a factor two.
- **UGR** and **USAL** nodes have established a collaboration with a supernova group in Valencia (Aloy, Obergaulinger, Rembiasz) to study the impact on supernova explosions of long-lived massive neutrinos with relatively large magnetic dipole moment and electromagnetic decays ($\nu_h \rightarrow \nu \gamma$). They have finished the numerical simulations and are currently analysing the results.

Working Group on LHC, particle physics and dark matter

- Colaboration of the **UHU** and **IFIC-AHEP** groups with J. Ellis (CERN) and S. Lola (Patras) to study the correspondence of LHC signals with possible Dark Matter scenarios.
- The SUSY fit collaboration (MasterCode) was extended to include indirect Dark Matter detection. In a similar way, results of this Working Group will now be included into the full MasterCode framework.

Working Group on Cosmology

- **IFIC-AHEP** group is collaborating with the Cosmology Group of Prof. Julien Lesgourges at Institute for Theoretical Particle Physics and Cosmology, RWTH Univ Aachen (Germany)
- **IAA** and UAM&IFT nodes, in collaboration with the Biochemistry Department at UAM, were awarded in 2014 with a MINECO "EXPLORA TECNOLOGÍA" grant to use the robotic technologies developed for DESI to micro-inject DNA into the mitochondria.
- **UAM&IFT** node was collaborating with the Astrophysics group of Prof. Gustavo Yepes at Theoretical Physics Department-UAM for the creation of the cosmological database MUSIC.

○ **MultiDark members from foreign institutions**

- Reputed senior experts in dark matter research from foreign institutions, participated in MultiDark complementing the project in specific areas:

Astrophysics

S. Gottlober - Leibniz-Institut für Astrophysik Postdam, Germany
A. Klypin - New Mexico State University, USA

Theory

G. Bertone - GRAPPA/University of Amsterdam, The Netherlands
K. Choi - Korea Advanced Institute of Science and Technology, South Korea
N. Fornengo - University of Torino & INFN, Italy
Y. Mambrini - LPT-CNRS/Universite Paris Sud 11, France
J.D. Vergados - University of Ioannina, Greece

Experiments

M. Casolino - INFN/Roma Tor Vergata, Italy
A. Morselli - INFN/Roma Tor Vergata, Italy
M. Ricci - INFN/Laboratory Nazionali di Frascati, Italy
J. Collar - KICP/University of Chicago, USA

- Postdoctoral researchers working in foreign institutions were also participating in MultiDark, sharing their expertise in relevant areas of the project:

| | |
|--------------------|---|
| A. Domínguez | - University of California Riverside, USA |
| M. Fornasa | - Nottingham University, UK |
| S. Hess | - Leibniz-Institut für Astrophysik Postdam, Germany |
| F. Kitaura | - Leibniz-Institut für Astrophysik Postdam, Germany |
| S. Nuza | - Leibniz-Institut für Astrophysik Postdam, Germany |
| A. Partl | - Leibniz-Institut für Astrophysik Postdam, Germany |
| K. Riebe | - Leibniz-Institut für Astrophysik Postdam, Germany |
| D. López-Fogliani | - University of Buenos Aires & IFIBA, Argentina |
| M.A. Sánchez-Conde | - KIPAC/Stanford University, USA & Stockholm Univ. |
| V. Vitale | - INFN/Roma Tor Vergata, Italy |
| F. Zandanel | - GRAPPA/University of Amsterdam, The Netherlands |

8.-Relate the collaborations with companies or other socioeconomic sectors and the added value for the project, the knowledge transference or other results

Several instrumentation and technology developments, as well as transfer activities, were carried out during the project, even though MultiDark was focused on basic research. Actually, as an example of our interest in developing these areas, let us mention that no later than the first year of the project, during the 4th MultiDark Consolider Workshop in April 2011, we organized the session “[Contacts with industry](#)” with representatives of 10 companies. These included Photon Lines, AVS, LIDAX Space Engineering, Fractal, INDUSTA, Maser Micro, Tecnibus, Soldaduras Planells, Trinos Vacuum Projects, and Hamamatsu Photonics. Inspired by this activity, Alvaro de la Cruz Dombriz from **UCM-Th** group is organizing a similar session for the 29th International Texas Symposium on Relativistic Astrophysics in December this year, in Cape Town (South Africa). It is also worth mentioning the organization in collaboration with the EPFL (Switzerland) of a stand at the sixth edition of the [Robotics Festival](#) in Laussane, 2013.

Below we list and briefly explain the collaborations of MultiDark groups with companies.

❖ Development of instrumentation for different projects:

Working Group on Direct Detection

- ANAIS, ROSEBUD and EURECA experiments where the **UZ** group participates. Concerning [ANAIS](#), the UZ group that leads the experiment still continues its collaboration with the company [Alpha Spectra](#) (US) for an extensive R&D process to obtain high quality (from the point of view of radiopurity of the crystals and light collection of the modules) NaI(Tl) detectors. They also collaborate with [Hamamatsu Photonics](#).

Working Group on Cosmology

- [DESI](#) experiment where **IAA & UAM&IFT** nodes participate. They collaborated closely with the companies Added Value Solutions ([AVS](#)) and High Technology Solutions (HTS).

Working Group on Indirect Detection: neutrinos and high-energy cosmic rays

- [EUSO-Balloon](#) experiment where the **UAH** node participates. This node collaborated in this project with the company [Orbital Critical Systems](#).

❖ Technology transfer:

Working Group on Indirect Detection: neutrinos and high-energy cosmic rays

- **IFIC-Exp** group was granted in 2011 an [INNPACTO](#) project (INNPACTO was a program to promote cooperation between industry and research entities, now

replaced by "Retos-Colaboración"). The project was led by the company [INDUSTA](#) and aimed to develop a large, movable milling machine for, among others, the shipping industry. IFIC-Exp contributed to the positioning and pattern recognition dynamical system. The project was highly ranked by MINECO on its final evaluation in 2014.

- **IFIC-Exp** group continues its collaboration with the company [Seven Solutions](#) (Granada, Spain), which provides switches with White Rabbit technology. In addition to this, they have also been hired by KM3NeT to develop firmware specific for our experiment in those switches.
- **UPV** group has been collaborating with the company Mediterráneo de Señales Marítimas SLL ([MSM](#)) for the technology transfer of the maritime acoustic systems developed at UPV. Thanks to this, the company was invited and won the INFN international tender for the supply of the acoustic emitters of the positioning system of KM3NeT- Phase I. An R&D contract between the UPV group and the company was signed in 2014 for the development and production of these beacons, which were supplied in 2015.
- **UAH** node had one contract with Orbital, which allowed to build the infrared camera for the [EUSO-Balloon flight](#).

Working Group on Cosmology

- **IAA** node had two contracts with AVS to develop the fiber robot positioner of the DESI instrument, and also collaborated with HTS for the focal plate. More details about possible future developments related to technology inspired in the work for DESI are available in this video: <http://bit.ly/1K4jGua>

Working Group on Indirect Detection: gamma rays and cosmic rays

- **USAL** node collaborates with [Fundación Centro de Supercomputación de Castilla y León](#) on efficient computation codes.

9.-National and international Program visibility

After 7.5 years of work, MultiDark is a very well-known project in the national and international community.

As mentioned in Section 7 of this report, as result of the many initiatives carried out by the project, several **international collaborations** were established. In particular, with Fermi-LAT concerning the indirect detection of dark matter, with CDMS, COUPP/PICO, MOSCAB and CUORE concerning the direct detection, with SDSS-III/BOSS and DESI for cosmological surveys, and with AIP and MUSIC to create astrophysical and cosmological databases. MultiDark also collaborated with the German network HAP and the Dutch and Korean institutions GRAPPA and IBS in several activities and efforts to advance in the search for dark matter. During the course of the project, MultiDark groups also established very fruitful new collaborations with many national and international groups. Needless to say, all these initiatives boosted the international role of MultiDark. In addition, groups of MultiDark were already participating in relevant international collaborations like MAGIC, CTA, ANTARES, KM3NeT, JEM-EUSO, AUGER, LIGO, contributing therefore also to the visibility of the project.

In this international framework, it is worth remarking that the goal of the Spanish experiment ANAIS, co-funded by MultiDark, is the confirmation/refutation of the DAMA/LIBRA annual modulation positive signal. The results of ANAIS will be very relevant in the international context, as far as only one similar experimental effort is pursuing such a goal. Both, confirmation or refutation of this modulation would have strong impact in the dark matter search field.

Besides, scientists around the world are using the databases created by MultiDark (2,27 million queries so far), making them very well known tools in the international community, where the name of MultiDark will remain in the future.

MultiDark organized several international **Training Schools**. In particular, related to Fermi an international school on [Fermi Science Tools](#) was organized at UAM in 2010 with 18 participants. Another international school on [Dark Matter tools and Hands-on Fermi analysis](#) was organized at IFIC in 2013 with 30 participants. Besides, MultiDark co-organized in 2014 in Corfu with the European Institute for Sciences and their Application (EISA) an international [School on Dark Energy and Galaxy Redshift Surveys](#).

The **Seminars** organized by MultiDark also contributed to the visibility of the project. This activity started with eighth seminars given in Spanish research centres during December 2010 as part of the organization in Spain of the "[Dark Matter Awareness Week](#)", a worldwide effort for disseminating specific information about the dark matter enigma. During these 7.5 years, the MultiDark groups organized a huge number of seminars on dark matter at their own institutions.

Many **Workshops and Meetings** were also organized by MultiDark. In total were held, 14 [MultiDark Consolider Workshops](#) organized by the groups of the project in their own institutions, and 7 [Meetings](#) organized by the Working Groups. MultiDark

also co-organized in 2014 in Korea with the Institute for Basic Science (IBS) an international [IBS-MultiDark Joint Focus Program on WIMPs and Axions](#), and in 2015 in Madrid an international [IBS-MultiDark Joint Workshop on Dark Matter](#). In 2016, the British institute IPPP joined the organization and the [IBS-MultiDark-IPPP Workshop on Dark Matter from aeV to ZeV](#) took place in Durham (UK).

MultiDark implemented a **Sponsorship** program to support National and International [Events](#) organized by its groups and related to dark matter. During the project, 29 international conferences, 2 international schools, 3 national schools, and 1 national outreach activity were co-funded.

Important contributions for the visibility of MultiDark were the **International Calls** of the project. In particular, for [Postdoctoral positions](#) opened in January and October 2010, and December 2011, with the result of 212 applications from all over the world, and for [PhD positions](#) opened in July 2010, which received 70 applications. The visibility increased also with the 7 Calls for [Summer students](#) between 2010 and 2016, in order to promote awareness of the dark matter research among undergraduate and MSc students, which received 225 applications.

The members of MultiDark carried out **Presentations of Results** of the project in numerous seminars at national and international scientific institutions, as well as in talks at international conferences (more than 800 talks in total). Many of the latter were published in proceedings (134 in total), boosting even more the visibility of MultiDark. In all the presentations, the logo of MultiDark was used.

For dissemination purposes, a poster of the project was made at the beginning of the activities, and later a video summarizing the activities and collaborations carried out during these years was produced. The video can be seen on the web site <http://bit.ly/1tZfLzt>, having received more than 3,000 visualizations (and 1,300 the mobile version).



In all articles written by the members of the groups, MultiDark is mentioned in the **Acknowledgments**. Besides, thanks to the agreements and international collaborations established, MultiDark is mentioned explicitly in the acknowledgments of ANTARES, KM3NeT, MAGIC, CDMS, PICO and JEM-EUSO experiments. Likewise, the SDSS-III collaboration acknowledges the Spanish participation group, in which MultiDark was included. Scientists using the MultiDark database have to include a mention to it in the acknowledgments of the resulting publications (134 so far which have received more than 4,500 citations).

The public perception of science cannot be neglected, and thus a **Dissemination Program** of scientific knowledge was implemented. [Press releases](#) concerning the activities of MultiDark were produced, and its members participated in public talks and interviews in written and audio-visual [media](#) (more than 140). In this context, it is worth

noticing the huge national impact of the UIB group led by MultiDark member, Alicia Sintes, after the first detection of gravitational wave signals at the beginning of 2016. Part of the media coverage is documented at <http://grg.uib.es/ligo/index.php/en-los-medios/>. International media like [Nature](#) have also followed the competition where ANAIS is involved to test the DAMA/LIBRA results. Let us finally mention that MultiDark groups in Facebook, <http://www.facebook.com/multidark/>, and Twitter, <http://twitter.com/multidark/>, were also created for dissemination of the activities of the project.

More details about all the above activities related to the visibility of the project, can be found at the web page of MultiDark <http://www.multidark.es>.

10.- Problems and suggestions

We consider that the Consolider Program of the Spanish Government has been very successful. In that context, the MultiDark project has been highly productive, and numerous activities relevant for the dark matter research have been carried out. We are convinced that the main goal of the project has been fully achieved: to reinforce the existing Spanish dark matter groups fostering synergies among them in order to attack the dark matter challenges from a multidisciplinary perspective. Given that the Consolider program has ended, our objective for the future is to keep alive all these connections among groups as much as possible. For that goal, we will apply this year for a Consolider Network.

Date: 14-09-2017

Annex

Additional project information

DIFFUSION OF THE RESULTS OF THE PROJECT

Summary of the results listed below:

- Scientific and technical publications (with peer-reviews) derived from the project: 318
- Other scientific and technical publications (with peer-reviews) derived from collaborations maintained during the execution of the project and that could be relevant for it: 549
- Dissemination of results – articles in conference proceedings and books derived from the Project: 44
- Dissemination of results – articles in conference proceedings and books derived from collaborations maintained during the execution of the project and that could be relevant for it: 90
- Dissemination of results - conferences in international congresses and institutions, outreach talks, etc.: 880
- PhD dissertations finalized related to the project: 42
- PhD theses in progress related to the project: 25
- Participations established through MultiDark in international projects: 12

| Scientific and technical publications (with peer-reviews) derived from the project: <u>318</u> | | | | |
|--|--|---|-----------------------|---|
| | Reference (ePrint) http://arxiv.org/ | Title | Type of publication | Authors |
| 1 | 10123458 | Complementarity of Dark Matter Direct Detection Targets | International journal | M. Pato, L. Baudis, G. Bertone, R. Ruiz de Austri, L.E. Strigari, R. Trotta |
| 2 | 10116108 | Scheme for the extraction of WIMP-nucleon scattering cross sections from total event rates | International journal | M. Cannoni, J. D. Vergados, M. E. Gomez |
| 3 | 10114743 | Discussing direct search of dark matter particles in the Minimal Supersymmetric ex-tension of the Standard Model with light neutralinos | International journal | N. Fornengo, S. Scopel, A. Bottino |
| 4 | 10113063 | Impact of the spectral hardening of TeV cosmic rays on the prediction of the secondary positron flux | International journal | J. Lavalle |
| 5 | 10111411 | A new viable region of the inert doublet model | International journal | L. Lopez Honorez, Carlos E. Yaguna |
| 6 | 10111371 | Neutrino phenomenology and stable dark matter with A4 | International journal | D.Meloni, S.Morisi, E.Peinado |
| 7 | 10106000 | Supersymmetric type-III seesaw: lepton flavour violating decays and dark matter | International journal | J.N. Esteves, M. Hirsch, W. Porod, J.C. Romao, F. Staub |
| 8 | 10105670 | The luminosities of backsplash galaxies in constrained simulations of the Local Group | International journal | Alexander Knebe (UAM), Noam I Libeskind (AIP), Steffen R. Knollmann (UAM), Luis A. Martinez-Vaquero (UAM), Gustavo Yepes (UAM), Stefan Gottloeber (AIP), Yehuda Hoffman (Hebrew University) |
| 9 | 10102023 | Global fits of the Minimal Universal Extra Dimensions scenario | International journal | G. Bertone, K. Kong, R. Ruiz de Austri, R. Trotta |
| 10 | 10101531 | The preferred direction of infalling satellite galaxies in the Local Group | International journal | Noam I Libeskind, Alexander Knebe, Yehuda Hoffman, Stefan Gottloeber, Gustavo Yepes, Matthias Steinmetz |

| | | | | |
|----|----------|--|-----------------------|--|
| 11 | 10094936 | Photon spectra from WIMP annihilation | International journal | J. A. R. Cembranos, A. de la Cruz-Dombriz, A. Dobado, R. A. Lineros, A. L. Maroto |
| 12 | 10073469 | Dark Matter decay and annihilation in the Local Universe: CLUES from Fermi | International journal | A.J. Cuesta, T.E. Jeltema, F. Zandanel, S. Profumo, F. Prada, G. Yepes, A. Klypin, Y. Hoffman , S. Gottloeber, J. Primack, M.A. Sanchez-Conde, C. Pfrommer |
| 13 | 10071728 | Indirect detection of gravitino dark matter including its three-body decays | International journal | K-Y Choi, D. Restrepo, C. Yaguna, O. Zapata |
| 14 | 10070898 | A4-based neutrino masses with Majoron decaying dark matter | International journal | J.N. Esteves, F.R. Joaquim, A.S. Joshipura, J.C. Romao, M.A. Tortola, J.W.F. Valle |
| 15 | 10070871 | Discrete dark matter | International journal | M. Hirsch, S. Morisi, E. Peinado, J.W.F.Valle |
| 16 | 10063318 | The Kinetic dark-mixing in the light of CoGENT and XENON100 | International journal | Yann Mambrini |
| 17 | 10055711 | Effect of low mass dark matter particles on the Sun | International journal | Marco Taoso, Fabio Iocco, Georges Meynet, Gianfranco Bertone, Patrick Eggenberger |
| 18 | 10054280 | Identification of Dark Matter particles with LHC and direct detection data | International journal | G. Bertone, D.G. Cerdeno, M. Fornasa, R. Ruiz de Austri and R. Trotta |
| 19 | 10035164 | Impact of internal bremsstrahlung on the detection of gamma-rays from neutralinos | International journal | M.Cannoni, M.E.Gomez, M.A.Sanchez-Conde, F. Prada and O. Panella |
| 20 | 10033401 | New decay modes of gravitino dark matter. | International journal | Ki-Young Choi; Carlos E. Yaguna |
| 21 | 10033125 | The inert doublet model of dark matter revisited. | International journal | Laura Lopez; Carlos E. Yaguna |
| 22 | 10032730 | Large contributions to dark matter annihilation from three-body final states. | International journal | Carlos E. Yaguna |
| 23 | 10021912 | Direct Detection of WIMPs | International journal | D.G. Cerdeno and A.M. Green |
| 24 | 10021910 | Galactic electrons and positrons at the Earth: new estimate of the primary and secondary fluxes | International journal | T. Delahaye, J. Lavalle, R. Lineros, F. Donato and N. Fornengo |
| 25 | 09124421 | Thermal Relics in Modified Cosmologies: Bounds on Evolution Histories of the Early Universe and Cosmological Boosts for PAMELA | International journal | R. Catena, N. Fornengo, M. Pato, L. Pieri and A. Masiero |
| 26 | 09124025 | Relic neutralinos and the two dark matter candidate events of the CDMS II experiment | International journal | A. Bottino, F. Donato, N. Fornengo and S. Scopel |

| | | | | |
|----|---|---|-----------------------|--|
| 27 | 09071262 | Calculable inverse-seesaw neutrino masses in supersymmetry | International journal | F. Bazzocchi, D.G. Cerdeno, C. Munoz, J.W.F. Valle |
| 28 | 09063681 | Gamma-ray detection from gravitino dark matter decay in the munuSSM | International journal | K.Y. Choi, D.E. Lopez-Fogliani, C. Munoz and R. Ruiz de Austri |
| 29 | | Dark matter in satellite galaxies: Will future imaging Air Cherenkov Telescopes play a role? | International journal | M. Fornasa |
| 30 | | Energy partition in sapphire and BGO scintillating bolometers | International journal | Y. Ortigoza, N. Coron, C. Cuesta, E. García, C. Ginestra, J. Gironnet, P. de Marcillac, M. Martínez, C. Pobes, J. Puimedón, T. Redon, M.L. Sarsa, L. Torres, J.A. Villar |
| 31 | Exper. Astron. Vol 32, 2011, pag. 193-316 | Design concepts for the Cherenkov Telescope Array CTA: An advanced facility for ground-based high-energy gamma-ray astronomy | International journal | Actis et al. |
| 32 | 11124771 | Impact of the recent results by the CMS and ATLAS Collaborations at the CERN Large Hadron Collider on an effective Minimal Supersymmetric extension of the Standard Model | International journal | C. Arbel ez, M. Hirsch, L. Reichert |
| 33 | 11124517 | Cosmological Radio Emission induced by WIMP Dark Matter | International journal | N. Fornengo, R. Lineros, M. Regis, M. Taoso |
| 34 | 11124192 | Updated global fits of the cMSSM including the latest LHC SUSY and Higgs searches and XENON100 data | International journal | C. Strege; G. Bertone; D.G. Cerdeno; M. Fornasa; R. Ruiz de Austri; R. Trotta |
| 35 | 11123299 | Implications of LHC searches for Higgs--portal dark matter | International journal | Abdelhak Djouadi, Oleg Lebedev, Yann Mambrini, Jeremie Quevillon |
| 36 | 11120760 | Chargino Decays in the Complex MSSM: A Full One-Loop Analysis | International journal | S. Heinemeyer, F. v.d. Pahlen, C. Schappacher |
| 37 | 11117257 | Dark Matter haloes as probes of modified gravity | International journal | Wojciech A. Hellwing, Steffen Knollmann, Alexander Knebe, Roman Juszkiewicz |
| 38 | 11114482 | Vector Higgs-portal dark matter and the invisible Higgs | International journal | Oleg Lebedev, Hyun Min Lee , Yann Mambrini |

| | | | | |
|----|----------|--|-----------------------|---|
| 39 | 11114448 | Detection of branon dark matter with gamma ray telescopes | International journal | J.A.R. Cembranos, A. de la Cruz-Dombriz, V. Gammaldi and A.L. Maroto |
| 40 | 11112607 | Complementarity of Indirect and Accelerator Dark Matter Searches | International journal | G. Bertone, D.G. Cerdeno, M. Fornasa, L. Pieri, R.Ruiz de Austri, R. Trotta |
| 41 | 11112275 | Dark matter seeding and the kinematics and rotation of neutron stars | International journal | M. Angeles Perez-Garcia, Joseph Silk |
| 42 | 11104337 | Galactic synchrotron emission from WIMPs at radio frequencies | International journal | N. Fornengo, R. A. Lineros, M. Regis, M. Taoso |
| 43 | 11103305 | CLUES on Fermi-LAT prospects for the extragalactic detection of muonSSM gravitino dark matter | International journal | G.A. Gomez-Vargas, M. Fornasa, F.Zandanel, A.J.Cuesta, C. Munoz, F. Prada, G. Yepes |
| 44 | 11090512 | Gravitino dark matter and neutrino masses with bilinear R-parity violation | International journal | D. Restrepo, M. Taoso, J.W.F. Valle, O. Zapata |
| 45 | 11092671 | The Dynamical State of Dark Matter Haloes in Cosmological Simulations I: Correlations with Mass Assembly History | International journal | Chris Power, Alexander Knebe, Steffen R. Knollmann |
| 46 | 11090003 | The MultiDark Database: Release of the Bolshoi and MultiDark Cosmological Simulations | International journal | K. Riebe et al. |
| 47 | 11084337 | Formalism and upper limits for spin-dependent cross sections in dark matter elastic scattering with nuclei | International journal | M. Cannoni |
| 48 | 11081128 | Cosmic-ray antiproton constraints on light singlino-like dark matter candidates | International journal | D.G. Cerdeno, T. Delahaye, J. Lavalle |
| 49 | 11080978 | Very light right-handed sneutrino dark matter in the NMSSM | International journal | D.G. Cerdeno, J.H. Huh, M. Peiro, O. Seto |
| 50 | 11080671 | Higgs searches and singlet scalar dark matter: Combined constraints from XENON 100 and the LHC | International journal | Yann Mambrini |
| 51 | 11080569 | Possibility of a dark matter interpretation for the excess in isotropic radio emission reported by ARCADE | International journal | N. Fornengo, R. Lineros, M. Regis, M. Taoso |

| | | | | |
|----|----------|---|-----------------------|---|
| 52 | 11075813 | Dark Matter Searches: The Nightmare Scenario | International journal | G. Bertone, D. Cumberbatch, R. Ruiz de Austri, R. Trotta |
| 53 | 11075045 | Too small to succeed? Lighting up massive dark matter subhaloes of the Milky Way | International journal | Arianna Di Cintio (UAM), Alexander Knebe (UAM), Noam I. Libeskind (AIP), Gustavo Yepes (UAM), Stefan Gottloeber (AIP), Yehuda Hoffman (Hebrew University) |
| 54 | 11074366 | Disentangling the dark matter halo from the stellar halo | International journal | Noam I Libeskind, Alexander Knebe, Yehuda Hoffman, Stefan Gottlöber, Gustavo Yepes |
| 55 | 11074366 | Renegade Subhaloes in the Local Group | International journal | Noam I Libeskind, Alexander Knebe, Yehuda Hoffman, Stefan Gottlöber, Gustavo Yepes |
| 56 | 11071715 | Global fits of the cMSSM including the first LHC and XENON100 data | International journal | G. Bertone, D.G. Cerdeno, M. Fornasa, R. Ruiz de Austri, C. Strege, R. Trotta |
| 57 | 11071604 | Is light neutralino as dark matter still viable? | International journal | D.T. Cumberbatch, D.E. Lopez-Fogliani, L. Roszkowski, R. Ruiz de Austri, Y.-L. S. Tsai |
| 58 | 11064821 | Radio data and synchrotron emission in consistent cosmic ray models | International journal | T. Bringmann, F. Donato, R.A. Lineros |
| 59 | 11064819 | When LEP and Tevatron combined with WMAP and XENON100 shed light on the nature of Dark Matter | International journal | Y. Mambrini, B. Zaldivar |
| 60 | 11063368 | Direct and indirect singlet scalar dark matter detection in the lepton-specific two-Higgs-doublet model | International journal | M.S. Boucenna, S. Profumo |
| 61 | 11062529 | Supersymmetry and Dark Matter in Light of LHC 2010 and Xenon100 Data | International journal | O. Buchmueller, S. Heinemeyer et al. |
| 62 | 11062452 | Effective interactions of axion supermultiplet and thermal production of axino dark matter | International journal | Kyu Jung Bae, Kiwoon Choi, Sang Hui Im |
| 63 | 11054230 | Conservative upper limits on WIMP annihilation cross section from Fermi-LAT gamma-rays | International journal | F. Calore, V. De Romeri, F. Donato |
| 64 | 11045676 | Quark mixing in the discrete dark matter model | International journal | R. de Adelhart Toorop, F. Bazzocchi, S. Morisi |
| 65 | 11045130 | Halo concentrations in the standard LCDM cosmology | International journal | Francisco Prada, Anatoly A. Klypin, Antonio J. Cuesta, Juan E. Betancort-Rijo, Joel Primack |

| | | | | |
|----|----------|--|-----------------------|--|
| 66 | 11044799 | The ZZ' kinetic mixing in the light of the recent direct and indirect dark matter searches | International journal | Yann Mambrini |
| 67 | 11043530 | Dark matter searches with Cherenkov telescopes: nearby dwarf galaxies or local galaxy clusters? | International journal | M.A. Sanchez-Conde, M. Cannoni, F. Zandanel, M.E. Gomez, F. Prada |
| 68 | 11040949 | Haloes gone MAD: The Halo-Finder Comparison Project | International journal | Alexander Knebe et al. |
| 69 | 11040178 | Stability of dark matter from the D4xZ2 flavor group | International journal | D. Meloni, S. Morisi, E. Peinado |
| 70 | 11034861 | A cross-correlation study of the Fermi-LAT γ -ray diffuse extragalactic signal | International journal | Jun-Qing Xia, Alessandro Cuoco, Enzo Branchini, Mattia Fornasa, Matteo Viel |
| 71 | 11030477 | Searches for Dark Matter annihilation signatures in the Segue 1 satellite galaxy with the MAGIC-I telescope | International journal | J. Aleksic et al (MAGIC collaboration) |
| 72 | 11012874 | Phenomenology of Dark Matter from A4 Flavor Symmetry | International journal | M.S. Boucenna, M. Hirsch, S. Morisi, E. Peinado, M. Taoso, J.W.F. Valle |
| 73 | 11011559 | The Eighth Data Release of the Sloan Digital Sky Survey: First Data from SDSS-III | International journal | SDSS-III collaboration |
| 74 | 11011529 | SDSS-III: Massive Spectroscopic Surveys of the Distant Universe, the Milky Way Galaxy, and Extra-Solar Planetary Systems | International journal | Daniel J. Eisenstein et al. |
| 75 | 12125018 | A novel approach in the WIMP quest: Cross-correlation of gamma-ray anisotropies and cosmic shear | International journal | S. Camera, M. Fornasa, N. Fornengo and M. Regis, |
| 76 | 12122636 | Global Fits of the cMSSM and NUHM including the LHC Higgs discovery and new XENON100 constraints | International journal | C. Strege, G. Bertone, F. Feroz, M. Fornasa, R. Ruiz de Austri and R. Trotta |
| 77 | 12116050 | Reanalysis of nuclear spin matrix elements for dark matter spin-dependent scattering | International journal | M. Cannoni |

| | | | | |
|----|----------|--|-----------------------|---|
| 78 | 12102578 | Galaxies going MAD: The Galaxy-Finder Comparison Project | International journal | Alexander Knebe, Noam I. Libeskind, Frazer Pearce, Peter Behroozi, Javier Casado, Klaus Dolag, Rosa Dominguez-Tenreiro, Pascal Elahi, Hanni Lux, Stuart I. Muldrew, Julian Onions |
| 79 | 12095589 | Optimized analysis method for indirect dark matter searches with Imaging Air Cherenkov Telescopes | International journal | J. Aleksic, J. Rico and M. Martinez |
| 80 | 12093891 | Sneutrino Dark Matter in Low-scale Seesaw Scenarios | International journal | V. De Romeri, M. Hirsch |
| 81 | 12086426 | Nuclear uncertainties in the spin-dependent structure functions for direct dark matter detection | International journal | D.G. Cerdeno, M. Fornasa, J.-H. Huh, M. Peiro |
| 82 | 12085356 | Dark Matter and Fundamental Physics with the Cherenkov Telescope Array | International journal | CTA Collaboration |
| 83 | 12084106 | Neutralino Decays in the Complex MSSM at One-Loop: a Comparison of On-Shell Renormalization Schemes | International journal | A. Bharucha, S. Heinemeyer, F. v.d. Pahlen, C. Schappacher |
| 84 | 12081693 | The dark knight falters | International journal | Nestor Mirabal |
| 85 | 12077315 | The CMSSM and NUHM1 in Light of 7 TeV LHC, B_s to mu+mu- and XENON100 Data | International journal | O. Buchmueller, S. Heinemeyer et al. |
| 86 | 12074438 | The MUSIC of Galaxy Clusters I: Baryon properties and Scaling Relations of the thermal Sunyaev-Zel'dovich Effect | International journal | F. Sembolini, G. Yepes, M. De Petris, S. Gottloeber, L. Lamagna, B. Comis |
| 87 | 12070502 | Characterization of Dark-Matter-induced anisotropies in the diffuse gamma-ray background | International journal | M. Fornasa, J. Zavala, M. A. Sanchez Conde, J. Siegal-Gaskins, T. Delahaye, F. Prada, M. Vogelsberger, F. Zandanel and C. Frenk |
| 88 | 12065759 | Probing dark matter and CMSSM with same-sign dilepton searches at the LHC | International journal | M. Cannoni, O. Panella, M. Pioppi, M. Santoni |
| 89 | 12054825 | Fermi's Sibyl: mining the gamma-ray sky for dark matter subhaloes | International journal | N. Mirabal, V. Frias-Martinez, T. Hassan, E. Frias-Martinez |
| 90 | 12053442 | Accidental stability of dark matter | International journal | L. Lavoura, S. Morisi, J.W.F. Valle |

| | | | | |
|-----|----------|--|-----------------------|--|
| 91 | 12051709 | New gamma ray signal from gravitationally boosted neutralinos at the Galactic Center | International journal | M. Cannoni, M. E. Gomez, M. A. Perez-garcia, J. D. Vergados |
| 92 | 12051695 | N-body simulations with a cosmic vector for dark energy | International journal | Edoardo Carlesi, Alexander Knebe, Gustavo Yepes, Stefan Gottloeber, Jose Beltran Jimenez, Antonio L. Maroto |
| 93 | 12044733 | Predictive Discrete Dark Matter Model | International journal | M.S. Boucenna, S. Morisi, E. Peinado, Y. Shimizu, J.W.F. Valle |
| 94 | 12043532 | Halo abundances and shear in void models | International journal | David Alonso, Juan García-Bellido, Troels Haugboelle, Alexander Knebe |
| 95 | 12042576 | Planck-scale effects on WIMP dark matter | International journal | M. S. Boucenna, R. A. Lineros, J.W.F Valle |
| 96 | 12040655 | Possible dark matter origin of the gamma ray emission from the Galactic Center observed by HESS | International journal | J. A. R. Cembranos, V. Gammaldi and A. L. Maroto |
| 97 | 12040515 | Size matters: the non-universal density profile of subhaloes in SPH simulations and implications for the Milky Way's dSphs | International journal | Arianna Di Cintio (UAM), Alexander Knebe (UAM), Noam I. Libeskind (AIP), Chris Brook (UAM), Gustavo Yepes (UAM), Stefan Gottloeber (AIP), Yehuda Hoffman (Hebrew University) |
| 98 | 12040005 | Applying scale-free mass estimators to the Local Group in Constrained Local Universe Simulations | International journal | Arianna Di Cintio (UAM), Alexander Knebe (UAM), Noam I. Libeskind (AIP), Yehuda Hoffman (Hebrew University), Gustavo Yepes (UAM), Stefan Gottloeber (AIP) |
| 99 | 12036594 | The clustering of galaxies in the SDSS-III Baryon Oscillation Spectroscopic Survey: Baryon Acoustic Oscillations in the Data Release 9 Spectroscopic Galaxy Sample | International journal | Anderson et al. |
| 100 | 12036407 | Quantifying the coherent outflows of galaxies around voids in the SDSS DR7 | International journal | Santiago G. Patiri, Juan Betancort-Rijo, Francisco Prada |
| 101 | 12036221 | Isotropy theorem for cosmological vector fields | International journal | J. A. R. Cembranos, A. L. Maroto and S. J. Núñez Jareño |

| | | | | |
|-----|----------|---|-----------------------|---|
| 102 | 12033695 | SubHaloes going Notts: The SubHalo-Finder Comparison Project | International journal | Julian Onions, Alexander Knebe, Frazer R. Pearce, Stuart I. Muldrew, Hanni Lux, Steffen R. Knollmann, Yago Ascasibar, Peter Behroozi, Pascal Elahi, Jiaxin Han, Michal Maciejewski, Manuel E. Merchán, Mark Neyrinck, Andrés N. Ruiz, Mario A. Sgró, Volker Springel, Dylan Tweed |
| 103 | 12022856 | Anisotropies in the diffuse gamma-ray background measured by the Fermi LAT | International journal | the Fermi LAT Collaboration (Multidarkians: G. A. Gomez-Vargas and A. Morselli) |
| 104 | 12016189 | Split neutrinos, two Majorana and one Dirac, and implications for leptogenesis, dark matter, and inflation | International journal | A. Mazumdar, S. Morisi |
| 105 | 12015387 | Main sequence stars with asymmetric dark matter | International journal | F. Iocco, M. Taoso, F. Leclercq, G. Meynet |
| 106 | 12013367 | A kinematic classification of the cosmic web | International journal | Y. Hoffman, O. Metuki, G. Yepes, S. Gottlöber, J. E. Forero-Romero, N. I. Libeskind, A. Knebe |
| 107 | 13124889 | The clustering of galaxies in the SDSS-III Baryon Oscillation Spectroscopic Survey: single-probe measurements from CMASS and LOWZ anisotropic galaxy clustering | International journal | Chia-Hsun Chuang et al. |
| 108 | 13124877 | The clustering of galaxies in the SDSS-III Baryon Oscillation Spectroscopic Survey: Baryon Acoustic Oscillations in the Data Release 10 and 11 galaxy samples | International journal | Lauren Anderson et al. |
| 109 | 13124835 | Particle dark matter searches in the anisotropic sky | International journal | Nicolao Fornengo, Marco Regis |
| 110 | 13123579 | Constraints on particle dark matter from cosmic-ray antiprotons | International journal | N. Fornengo, L. Maccione, A. Vittino |
| 111 | 13121729 | The flattening of the concentration-mass relation towards low halo masses and its implications for the annihilation signal boost | International journal | Miguel A. Sanchez-Conde & Francisco Prada |

| | | | | |
|-----|----------|--|-----------------------|---|
| 112 | 13121535 | Optimized dark matter searches in deep observations of Segue 1 with MAGIC | International journal | MAGIC Collaboration: J. Aleksić et al. |
| 113 | 13117260 | Displaced vertices and long-lived charged particles in the NMSSM with right-handed sneutrinos | International journal | D.G. Cerdeno, V. Martin, O. Seto |
| 114 | 13114793 | A phenomenological model for the intracluster medium that matches X-ray and Sunyaev-Zel'dovich observations | International journal | Zandanel, Pfrommer & Prada |
| 115 | 13108230 | Cosmic Rays from Heavy Dark Matter from the Galactic Center | International journal | Jose A. R. Cembranos, Viviana Gammaldi, Antonio L. Maroto |
| 116 | 13101904 | Theories relating baryon asymmetry and dark matter | International journal | S.M. Boucenna, S. Morisi |
| 117 | 13100828 | Dark Matter Constraints from Observations of 25 Milky Way Satellite Galaxies with the Fermi Large Area Telescope | International journal | The Fermi-LAT Collaboration (with A. Morselli and G. A. Gómez Vargas) |
| 118 | 13100825 | Subhaloes gone Notts: the clustering properties of subhaloes | International journal | Pujol, Arnau; Gaztañaga, Enrique; Giocoli, Carlo; Knebe, Alexander; Pearce, Frazer R.; Skibba, Ramin A.; Ascasibar, Yago; Behroozi, Peter; Elahi, Pascal; Han, Jiaxin; Lux, Hanni; Muldrew, Stuart I.; Neyrinck, Mark; Onions, Julian; Potter, Doug; Tweed, Dylan |
| 119 | 13094630 | Radio constraints on Galactic WIMP dark matter | International journal | R. A. Lineros |
| 120 | 13093259 | CDMSlite: A Search for Low-Mass WIMPs using Voltage-Assisted Calorimetric Ionization Detection in the SuperCDMS Experiment | International journal | CDMS Collaboration, Agnese et al. |
| 121 | 13093259 | CDMSlite: A Search for Low-Mass WIMPs using Voltage-Assisted Calorimetric Ionization Detection in the SuperCDMS Experiment | International journal | SuperCDMS Collaboration: Agnese et al. |
| 122 | 13083515 | Constraints on WIMP Annihilation for Contracted Dark Matter in the Inner Galaxy with the Fermi-LAT | International journal | German A. Gomez-Vargas, Miguel A. Sanchez-Conde, Ji-Haeng Huh, Miguel Peiro, Francisco Prada, Aldo Morselli, Anatoly Klypin, David G. Cerdeno, Yann Mambrini, Carlos Munoz |

| | | | | |
|-----|----------|--|-----------------------|--|
| 123 | 13083478 | Preliminary results of ANAIS-25 | International journal | J. Amaré, S. Cebrián, C. Cuesta, E. García, C. Ginestra, M. Martínez, M.A. Oliván, Y. Ortigoza, A. Ortiz de Solórzano, C. Pobes, J. Puimedón, M.L. Sarsa, J.A. Villar, P. Villar |
| 124 | 13080011 | Contamination of dark matter experiments from atmospheric magnetic dipoles | International journal | A. Bueno, M. Masip, P. Sanchez-Lucas, N. Setzer |
| 125 | 13078134 | WIMP dark matter as radiative neutrino mass messenger | International journal | M. Hirsch, R.A. Lineros, S. Morisi, J. Palacio, N. Rojas, J.W.F. Valle |
| 126 | 13077601 | Collider signatures of a light NMSSM pseudoscalar in neutralino decays in the light of LHC results | International journal | David G. Cerdeno, Pradipta Ghosh, Chan Beom Park, Miguel Peiro |
| 127 | 13076668 | Impact of nucleon matrix element uncertainties on the interpretation of direct and indirect dark matter search results | International journal | R. Ruiz de Austri, C. Perez de los Heros |
| 128 | 13074237 | Direct Chargino-Neutralino Production at the LHC: Interpreting the Exclusion Limits in the Complex MSSM | International journal | A. Bharucha, S. Heinemeyer, F. v.d. Pahlen |
| 129 | 13070005 | Extra U(1), effective operators, anomalies and dark matter | International journal | Emilian Dudas, Lucien Heurtier, Yann Mambrini, Bryan Zaldivar |
| 130 | 13064900 | Brane-Worlds at the LHC: Branons and KK-gravitons | International journal | Jose A. R. Cembranos, Rafael L. Delgado, Antonio Dobado |
| 131 | 13064677 | Thermal and non-thermal production of dark matter via Z'-portal(s) | International journal | Xiaoyong Chu, Yann Mambrini, Jérémie Quevillon, Bryan Zaldivar. |
| 132 | 13064171 | Dark matter searches with cosmic antideuterons: status and perspectives | International journal | N. Fornengo, L. Maccione, A. Vittino |
| 133 | 13060898 | The dependence of dark matter profiles on the stellar-to-halo mass ratio: a prediction for cusps versus cores | International journal | Di Cintio, Arianna; Brook, Chris B.; Macciò, Andrea V.; Stinson, Greg S.; Knebe, Alexander; Dutton, Aaron A.; Wadsley, James |
| 134 | 13056815 | More on the Hypercharge Portal into the Dark Sector | International journal | Florian Domingo, Oleg Lebedev (DESY), Yann Mambrini, Jérémie Quevillon (Orsay, LPT), Andreas Ringwald (DESY). |

| | | | | |
|-----|----------|--|-----------------------|---|
| 135 | 13055597 | Search for Gamma-ray Spectral Lines with the Fermi Large Area Telescope and Dark Matter Implications | International journal | Fermi LAT Collaboration (G. A. Gómez-Vargas, A. Morselli, M. Sánchez-Conde) |
| 136 | 13055557 | Cold versus Warm Dark Matter Simulations of a Galaxy Group | International journal | Authors: Libeskind, Noam I.; Di Cintio, Arianna; Knebe, Alexander; Yepes, Gustavo; Gottlöber, Stefan; Steinmetz, Matthias; Hoffman, Yehuda; Martinez-Vaquero, Luis A. |
| 137 | 13054710 | Closing in on the Fermi Line with a New Observation Strategy | International journal | C. Weniger, M. Su, D. P. Finkbeiner, T. Bringmann, N. Mirabal |
| 138 | 13052124 | Reliability of Monte Carlo event generators for gamma-ray dark matter searches | International journal | J.A.R. Cembranos, A. de la Cruz-Dombriz, V. Gammaldi, R.A. Lineros, A.L. Maroto |
| 139 | 13046183 | Halo-independent analysis of direct detection data for light WIMPs | International journal | E. Del Nobile, G. B. Gelmini, P. Gondolo, J.-H. Huh |
| 140 | 13045353 | Embedding the 125 GeV Higgs boson measured at the LHC in an effective MSSM: possible implications for neutralino dark matter | International journal | S. Scopel, N. Fornengo, A. Bottino |
| 141 | 13044279 | Dark Matter Search Results Using the Silicon Detectors of CDMS II | International journal | CDMS Collaboration, Agnese et al. |
| 142 | 13043706 | Silicon Detector Results from the First Five-Tower Run of CDMS II | International journal | CDMS Collaboration, Agnese et al. |
| 143 | 13043679 | Asymmetric dark matter annihilation as a test of non-standard cosmologies | International journal | G. B. Gelmini, J.-H. Huh, T. Rehagen |
| 144 | 13041758 | Complementarity of dark matter direct detection: the role of bolometric targets | International journal | D.G. Cerdeno, C. Cuesta, M. Fornasa, E. Garcia, C. Ginestra, J.-H. Huh, M. Martinez, Y. Ortigoza, M. Peiro, J. Puimedon, L. Robledo, M.L. Sarsa |
| 145 | 13034685 | Updated CMB, X- and gamma-ray constraints on majoron dark matter | International journal | M. Lattanzi, S. Riemer-Sorensen, M.A. Tortola, J.W.F. Valle |
| 146 | 13032697 | Short GRBs and dark matter seeding in neutron stars | International journal | M. Angeles Perez-Garcia, F. Daigne, J. Silk |

| | | | | |
|-----|----------|---|-----------------------|---|
| 147 | 13032154 | Dark Matter implications of Fermi-LAT measurement of anisotropies in the diffuse gamma-ray background | International journal | G.A. Gomez-Vargas, A. Cuoco, T. Linden, M.A. Sanchez-Conde, J.M. Siegal-Gaskins, for the Fermi-LAT Collaboration, T. Delahaye, M. Fornasa, E. Komatsu, F. Prada, J. Zavala |
| 148 | 13031776 | Probing interactions within the dark matter sector via extra radiation contributions | International journal | U. Franca, R.A. Lineros, J. Palacio, S. Pastor |
| 149 | 13026871 | Spectral Study of the HESS J1745-290 Gamma-Ray Source as Dark Matter Signal | International journal | J.A.R. Cembranos, V. Gammaldi, A.L. Maroto |
| 150 | 13026516 | First results on dark matter annihilation in the Sun using the ANTARES neutrino telescope | International journal | S. Adrián-Martínez et al. (ANTARES Collaboration) |
| 151 | 13024438 | Gauge Coupling Unification and Non-Equilibrium Thermal Dark Matter | International journal | Yann Mambrini, Keith A. Olive, Jeremie Quevillon, Bryan Zaldivar |
| 152 | 14127729 | nIFTy Cosmology: Galaxy/halo mock catalogue comparison project on clustering statistics | International journal | C.-H. Chuang, C. Zhao, F. Prada, et al. |
| 153 | 14123110 | Vast Planes of Satellites in a High-resolution Simulation of the Local Group: Comparison to Andromeda | International journal | Gillet, N.; Ocvirk, P.; Aubert, D.; Knebe, A.; Libeskind, N.; Yepes, G.; Gottlöber, S.; Hoffman, Y. |
| 154 | 14114001 | MultiDark simulations: the story of dark matter halo concentrations and density profiles | International journal | A. Klypin, G. Yepes, S. Gottlober, F. Prada, S. Hess |
| 155 | 14110106 | Cosmogenic radionuclide production in NaI(Tl) crystals | International journal | J. Amare, S. Cebrian, C. Cuesta, E. García, C. Ginestra, M. Martínez, M.A. Olivan, Y. Ortigoza, A. Ortiz de Solorzano, C. Pobes, J. Puimedon, M.L. Sarsa, J.A. Villar and P. Villar |
| 156 | 14108051 | Probing WIMP particle physics and astrophysics with direct detection and neutrino telescope data | International journal | B. J. Kavanagh, M. Fornasa, A. M. Green |
| 157 | 14107720 | Recent results of the ANTARES neutrino telescope | International journal | J.J. Hernández-Rey |
| 158 | 14106689 | Antiproton signatures from astrophysical and dark matter sources at the galactic center | International journal | J.A.R. Cembranos, V. Gammaldi, A.L. Maroto |
| 159 | 14104722 | An 8-mm diameter Fiber Robot Positioner for Massive Spectroscopy Surveys | International journal | N. Fahim, F. Prada, J. P. Kneib, et al. |

| | | | | |
|-----|----------|--|-----------------------|---|
| 160 | 14101241 | Sussing merger trees: the impact of halo merger trees on galaxy properties in a semi-analytic model | International journal | Lee, Jaehyun; Yi, Sukyoung K.; Elahi, Pascal J.; Thomas, Peter A.; Pearce, Frazer R.; Behroozi, Peter; Han, Jiaxin; Helly, John; Jung, Intae; Knebe, Alexander; Mao, Yao-Yuan; Onions, Julian; Rodriguez-Gomez, Vicente; Schneider, Aurel; Srisawat, Chaichalit; Tweed, Dylan |
| 161 | 14101003 | Maximum Likelihood Analysis of Low Energy CDMS II Germanium Data | International journal | SuperCDMS Collaboration (with D.G. Cerdeno, L. Esteban and E. Lopez Asamar) |
| 162 | 14100997 | Developing micro DC-brushless motor driver and position control for fiber positioners | International journal | Jenni, Laurent; Hörler, Philipp; Makarem, Laleh; Kneib, Jean-Paul; Gillet, Denis; Bleuler, Hannes; Bouri, Mohamed; Prada, Francisco; De Rivera, Guillermo; Sanchez, Justo |
| 163 | 14098285 | The Reionization of Galactic Satellite Populations | International journal | Ocvirk, P.; Gillet, N.; Aubert, D.; Knebe, A.; Libeskind, N.; Chardin, J.; Gottlöber, S.; Yepes, G.; Hoffman, Y. |
| 164 | 14093270 | First direct limits on Lightly Ionizing Particles with electric charge less than e/6 | International journal | SuperCDMS Collaboration (with D.G. Cerdeno, L. Esteban, and E. López Asamar) |
| 165 | 14091124 | EZmocks: extending the Zel'dovich approximation to generate mock galaxy catalogues with accurate clustering statistics | International journal | Chuang, Chia-Hsun; Kitaura, Francisco-Shu; Prada, Francisco; Zhao, Cheng; Yepes, Gustavo |
| 166 | 14085435 | Tests of redshift-space distortions models in configuration space for the analysis of the BOSS final data release | International journal | White, Martin; Reid, Beth; Chuang, Chia-Hsun; Tinker, Jeremy L.; McBride, Cameron K.; Prada, Francisco; Samushia, Lado |
| 167 | 14075999 | Inert scalar dark matter in an extra dimension inspired model | International journal | R.A. Lineros, F.A. Pereira dos Santos |
| 168 | 14075125 | Bulk NaI(Tl) scintillation low energy events selection with the ANAIS-0 module | International journal | C. Cuesta, J. Amaré, S. Cebrián, E. García, C. Ginestra, M. Martínez, M.A. Oliván, Y. Ortigoza, A. Ortiz de Solórzano, C. Pobes, J. Puimedón, M.L. Sarsa, J.A. Villar, P. Villar |

| | | | | |
|-----|----------|--|-----------------------|--|
| 169 | 14063430 | Search for 100 MeV to 10 GeV gamma-ray lines in the Fermi-LAT data and implications for gravitino dark matter in the \$\mu\nu\$SSM | International journal | Andrea Albert, German A. Gomez-Vargas, Michael Grefe, Carlos Munoz, Christoph Weniger, Elliott D. Bloom, Eric Charles, Mario N. Mazziotta, Aldo Morselli |
| 170 | 14060004 | Connecting neutrino physics with dark matter | International journal | M. Lattanzi, R.A. Lineros, M. Taoso |
| 171 | 14053552 | The Jubilee ISW Project - II. Observed and simulated imprints of voids and superclusters on the cosmic microwave background | International journal | Hotchkiss, S.; Nadathur, S.; Gottlöber, S.; Iliev, I. T.; Knebe, A.; Watson, W. A.; Yepes, G. |
| 172 | 14051030 | Searching for Dark Matter Annihilation in the Smith High-Velocity Cloud | International journal | Alex Drlica-Wagner, German A. Gomez-Vargas, John W. Hewitt, Tim Linden, Luigi Tibaldo |
| 173 | 14045959 | A mass-dependent density profile for dark matter haloes including the influence of galaxy formation | International journal | Cintio, Arianna Di; Brook, Chris B.; Dutton, Aaron A.; Macciò, Andrea V.; Stinson, Greg S.; Knebe, Alexander |
| 174 | 14045946 | Vacuum energy as dark matter | International journal | F.D. Albareti, J.A.R. Cembranos, A.L. Maroto |
| 175 | 14043198 | Inflation and majoron dark matter in the neutrino seesaw mechanism | International journal | S.M. Boucenna, S. Morisi, Q. Shafi, J.W.F. Valle |
| 176 | 14042067 | Gamma-ray and neutrino fluxes from Heavy Dark Matter in the Galactic Center | International journal | V. Gammaldi, J.A.R. Cembranos, A. de la Cruz-Dombriz, R.A. Lineros, A.L. Maroto |
| 177 | 14041927 | Generating X-ray lines from annihilating dark matter | International journal | E. Dudas, L. Heurtier, Y. Mambrini |
| 178 | 14041384 | The MUSIC of CLASH: Predictions on the Concentration-Mass Relation | International journal | Meneghetti, M.; Rasia, E.; Vega, J.; Merten, J.; Postman, M.; Yepes, G.; Sembolini, F.; Donahue, M.; Ettori, S.; Umetsu, K.; Balestra, I.; Bartelmann, M.; Benítez, N.; Biviano, A.; Bouwens, R.; Bradley, L.; Broadhurst, T.; Coe, D.; Czakon, N.; De Petris, M.; Ford, H.; Giocoli, C.; Gottlöber, S.; G |
| 179 | 14040148 | Results and prospects of dark matter searches with ANTARES | International journal | J.D. Zornoza and G. Lambard |
| 180 | 14036434 | Dark Matter versus h into gamma gamma and h into gamma Z with supersymmetric triplets | International journal | Chiara Arina, Victor Martin-Lozano and Germano Nardini |

| | | | | |
|-----|----------|--|-----------------------|---|
| 181 | 14036111 | Constraining decaying dark matter with neutron stars | International journal | M. Angeles Perez-Garcia, J. Silk |
| 182 | 14036018 | Neutrino fluxes from Dark Matter in the HESS J1745-290 source at the Galactic Center | International journal | J.A.R. Cembranos, V. Gammaldi, A.L. Maroto |
| 183 | 14035372 | Inferred cosmic-ray spectrum from \${it Fermi}\$-LAT \$\gamma\$-ray observations of the Earth's limb | International journal | Fermi-LAT Collaboration (including G. Gomez-Vargas and A. Morselli) |
| 184 | 14034837 | Axial Dark Matter: the case for an invisible Z' | International journal | O. Lebedev and Y. Mambrini |
| 185 | 14033580 | Analysis of the 40K contamination in NaI(Tl) crystals from different providers in the frame of the ANAIS project | International journal | C. Cuesta, J. Amaré, S. Cebrián, E. García, C. Ginestra, M. Martínez, M. A. Oliván, Y. Ortigoza, A. Ortiz De Solórzano, C. Pobes, J. Puimedón, M. L. Sarsa, J. A. Villar and P. Villar |
| 186 | 14033539 | Scintillating bolometers: a key for determining WIMP parameters | International journal | D.G. Cerdeno, C. Cuesta, M. Fornasa, E. Garcia, C. Ginestra, C. Marcos, M. Martinez, Y. Ortigoza, M. Peiro, J. Puimedon M.L. Sarsa |
| 187 | 14033279 | Report on Deep Underground/Under-water/Under-ice experiments: results and prospects | International journal | J.D. Zornoza |
| 188 | 14027137 | Search for Low-Mass WIMPs with SuperCDMS | International journal | CDMS Collaboration, Agnese et al. |
| 189 | 14022381 | SUSSING MERGER TREES: the influence of the halo finder | International journal | Avila, Santiago; Knebe, Alexander; Pearce, Frazer R.; Schneider, Aurel; Srisawat, Chaichalit; Thomas, Peter A.; Behroozi, Peter; Elahi, Pascal J.; Han, Jiaxin; Mao, Yao-Yuan; Onions, Julian; Rodriguez-Gomez, Vicente; Tweed, Dylan |
| 190 | 14022218 | The isotropic radio background revisited | International journal | N. Fornengo, R.A. Lineros, M. Regis, M. Taoso |
| 191 | 14020321 | Interpretation of AMS-02 electrons and positrons data | International journal | M. Di Mauro, F. Donato, N. Fornengo, R. Lineros, A. Vittino |
| 192 | 14014017 | Anti-helium from Dark Matter annihilations | International journal | Marco Cirelli, Nicolao Fornengo, Marco Taoso, Andrea Vittino |
| 193 | 14013644 | Can Dark Matter explain the Braking Index of Neutron Stars? | International journal | C. Kouvaris, M. A. Pérez-García |

| | | | | |
|-----|-----------|--|-----------------------|---|
| 194 | 14013118 | Study of scintillation in natural and synthetic quartz and methacrylate | International journal | J. Amaré, S. Borjabad, S. Cebrián, C. Cuesta, D. Fortuño, E. García, C. Ginestra, H. Gómez, D.C. Herrera, M. Martínez, M.A. Oliván, Y. Ortigoza, A. Ortiz de Solórzano, C. Pobes, J. Puimedón, M.L. Sarsa, J.A. Villar, P. Villar |
| 195 | 14012992 | The MUSIC of galaxy clusters - II. X-ray global properties and scaling relations | International journal | Biffi, V.; Sembolini, F.; De Petris, M.; Valdarnini, R.; Yepes, G.; Gottlöber, S. |
| 196 | 14012060 | Subhaloes gone Notts: subhaloes as tracers of the dark matter halo shape | International journal | Hoffmann, Kai; Planelles, Susana; Gaztañaga, Enrique; Knebe, Alexander; Pearce, Frazer R.; Lux, Hanni; Onions, Julian; Muldrew, Stuart I.; Elahi, Pascal; Behroozi, Peter; Ascasibar, Yago; Han, Jiaxin; Maciejewski, Michal; Merchan, Manuel E.; Neyrinck, Mark; Ruiz, Andrés N.; Sgro, Mario A. |
| 197 | 14010221 | Invisible Z' and dark matter: LHC vs LUX constraints | International journal | G. Arcadi, Y. Mambrini, M. H. G. Tytgat and B. Zaldívar |
| 198 | 151206831 | On the EFT of Large Scale Structures in Redshift Space | International journal | Matthew Lewandowski, Leonardo Senatore, Francisco Prada, Cheng Zhao, Chia-Hsun Chuang |
| 199 | 151206124 | The Gamma-ray Afterglows of Tidal Disruption Events | International journal | Xian Chen (PUC), German Gomez-Vargas (PUC), James Guillochon (Harvard) |
| 200 | 151204913 | The LHC diphoton resonance and dark matter | International journal | Yann Mambrini, Giorgio Arcadi, Abdelhak Djouadi |
| 201 | 151203432 | The XMM Cluster Survey: The Halo Occupation Number of BOSS galaxies in X-ray clusters | International journal | Nicola Mehrtens, A. Kathy Romer, et al |
| 202 | 151201253 | How does our choice of observable influence our estimation of the centre of a galaxy cluster? Insights from cosmological simulations | International journal | Cui, Weiguang; Power, Chris; Biffi, Veronica; Borgani, Stefano; Murante, Giuseppe; Fabjan, Dunja; Knebe, Alexander; Lewis, Geraint F.; Poole, Greg B. |

| | | | | |
|-----|-----------|--|-----------------------|---|
| 203 | 151108255 | nIFTY galaxy cluster simulations - III. The similarity and diversity of galaxies and subhaloes | International journal | Elahi, Pascal J.; Knebe, Alexander; Pearce, Frazer R.; Power, Chris; Yepes, Gustavo; Cui, Weiguang; Cunnama, Daniel; Kay, Scott T.; Sembolini, Federico; Beck, Alexander M.; Davé, Romeel; February, Sean; Huang, Shuiyao; Katz, Neal; McCarthy, Ian G.; Murante, Giuseppe; Perret, Valentin; Puchwein, Ewa |
| 204 | 151108211 | MultiDarkLens Simulations: weak lensing light-cones and data base presentation | International journal | Carlo Giocoli (LAM), Eric Jullo, R. Benton Metcalf, Sylvain de la Torre, Gustavo Yepes, Francisco Prada, Johan Comparat, Stefan Goettlober, Anatoly Klypin, Jean-Paul Kneib, Margarita Petkova, HuanYuan Shan, Nicolas Tessore |
| 205 | 151103731 | nIFTy galaxy cluster simulations II: radiative models | International journal | Federico Sembolini, Pascal Jahan Elahi, Frazer R. Pearce, Chris Power, Alexander Knebe, et al |
| 206 | 151102524 | Dark Matter from the vector of SO(10) | International journal | Sofiane M. Boucenna, Martin B. Krauss, Enrico Nardi. |
| 207 | 151100011 | Cosmic Dawn (CoDa): the First Radiation-Hydrodynamics Simulation of Reionization and Galaxy Formation in the Local Universe | International journal | Pierre Ocvirk, Nicolas Gillet, Paul R. Shapiro, et al |
| 208 | 151008216 | The extended Baryon Oscillation Spectroscopic Survey (eBOSS): a cosmological forecast | International journal | Johan Comparat, Timothée Delubac, Pengyuan Gao, Alireza Hojjati, Kazuya Koyama, Cameron K. McBride, Andrés Meza, Jeffrey A. Newman, Nathalie Palanque-Delabrouille, Levon Pogosian, Francisco Prada, et al |
| 209 | 151001561 | The prototype detection unit of the KM3NeT detector | International journal | S. Adrián-Martínez et al. (KM3NeT Collaboration) |
| 210 | 150906529 | SDSS-III Baryon Oscillation Spectroscopic Survey Data Release 12: galaxy target selection and large scale structure catalogues | International journal | Beth Reid, Shirley Ho, Nikhil Padmanabhan, Will J. Percival, et al |

| | | | | |
|-----|-----------|---|-----------------------|---|
| 211 | 150906404 | The clustering of galaxies in the SDSS-III Baryon Oscillation Spectroscopic Survey: Modeling the clustering and halo occupation distribution of BOSS-CMASS galaxies in the Final Data Release | International journal | Sergio A. Rodríguez-Torres, Chia-Hsun Chuang, Francisco Prada, et al |
| 212 | 150906400 | The clustering of galaxies in the SDSS-III Baryon Oscillation Spectroscopic Survey: mock galaxy catalogues for the BOSS Final Data Release | International journal | Francisco-Shu Kitaura, Sergio Rodriguez-Torres, Chia-Hsun Chuang, Cheng Zhao, Francisco Prada, et al |
| 213 | 150906386 | The clustering of galaxies in the SDSS-III Baryon Oscillation Spectroscopic Survey: RSD measurement from the LOS-dependent power spectrum of DR12 BOSS galaxies | International journal | Héctor Gil-Marín, Will J. Percival, Joel R. Brownstein, et al |
| 214 | 150906373 | The clustering of galaxies in the SDSS-III Baryon Oscillation Spectroscopic Survey: BAO measurement from the LOS-dependent power spectrum of DR12 BOSS galaxies | International journal | Héctor Gil-Marín, Will J. Percival, Antonio J. Cuesta, et al |
| 215 | 150902448 | WIMP-Search Results from the Second CDMSlite Run | International journal | SuperCDMS Collaboration: R. Agnese, et al |
| 216 | 150807012 | Modelling Galaxy Clustering: Halo Occupation Distribution versus Subhalo Matching | International journal | Hong Guo, Zheng Zheng, Peter S. Behroozi, Idit Zehavi, Chia-Hsun Chuang, Johan Comparat, Ginevra Favole, Stefan Gottloeber, Anatoly Klypin, Francisco Prada, Sergio A. Rodriguez-Torres, David H. Weinberg, Gustavo Yepes |
| 217 | 150804478 | The SDSS-IV extended Baryonic Oscillation Spectroscopic Survey: Luminous Red Galaxy Target Selection | International journal | Abhishek Prakash, Timothy C. Licquia, et al |
| 218 | 150804473 | The SDSS-IV extended Baryon Oscillation Spectroscopic Survey: Overview and Early Data | International journal | Kyle S. Dawson, Jean-Paul Kneib, et al |
| 219 | 150801173 | Supersymmetric Dark Matter after LHC Run 1 | International journal | E. Bagnaschi, S. Heinemeyer et al. |

| | | | | |
|-----|-----------|---|-----------------------|---|
| 220 | 150708724 | Bayesian redshift-space distortions correction from galaxy redshift surveys | International journal | Francisco-Shu Kitaura, Metin Ata, Raul E. Angulo, Chia-Hsun Chuang, Sergio Rodriguez-Torres, Carlos Hernandez Monteagudo, Francisco Prada, Gustavo Yepes |
| 221 | 150708625 | On the importance of direct detection combined limits for spin independent and spin dependent dark matter interactions | International journal | C. Marcos, M. Peiro, S. Robles |
| 222 | 150707008 | Global analysis of the pMSSM in light of the Fermi GeV excess: prospects for the LHC Run-II and astroparticle experiments | International journal | Gianfranco Bertone (GRAPPA/Amsterdam), Francesca Calore (GRAPPA/Amsterdam), Sascha Caron (IMAPP/Amsterdam), Roberto Ruiz de Austri (IFIC/Valencia), Jong Soo Kim (UAM/Madrid), Roberto Trotta (ICIC/Imperial), Christoph Weniger (GRAPPA/Amsterdam) |
| 223 | 150704356 | Clustering properties of g-selected galaxies at z~0.8 | International journal | Ginevra Favole, Johan Comparat, Francisco Prada, et al |
| 224 | 150701000 | Decaying Leptophilic Dark Matter at IceCube | International journal | Sofiane M. Boucenna, Marco Chianese, Gianpiero Mangano, Gennaro Miele, Stefano Morisi, Ofelia Pisanti, Edoardo Vitagliano |
| 225 | 150605877 | Hidden from view: coupled dark sector physics and small scales | International journal | Elahi, Pascal J.; Lewis, Geraint F.; Power, Chris; Carlesi, Edoardo; Knebe, Alexander |
| 226 | 150602044 | Building a Better Understanding of the High Redshift BOSS Galaxies as Tools for Cosmology | International journal | Ginevra Favole, Cameron K. McBride, Daniel J. Eisenstein, Francisco Prada, Molly E. Swanson, Chia-Hsun Chuang, Donald P. Schneider |
| 227 | 150602032 | X-ray lines and self-interacting dark matter | International journal | Yann Mambrini, Takashi Toma |
| 228 | 150601405 | Major mergers going Notts: challenges for modern halo finders | International journal | Behroozi, Peter; Knebe, Alexander; Pearce, Frazer R.; Elahi, Pascal; Han, Jiaxin; Lux, Hanni; Mao, Yao-Yuan; Muldrew, Stuart I.; Potter, Doug; Srisawat, Chaichalit |

| | | | | |
|-----|-----------|---|-----------------------|---|
| 229 | 150507861 | Redshift-Space Clustering of SDSS Galaxies --- Luminosity Dependence, Halo Occupation Distribution, and Velocity Bias | International journal | Hong Guo, Zheng Zheng, Idit Zehavi, Peter S. Behroozi, Chia-Hsun Chuang, Johan Comparat, Ginevra Favole, Stefan Gottloeber, Anatoly Klypin, Francisco Prada, David H. Weinberg, Gustavo Yepes |
| 230 | 150507829 | The role of the eROSITA all-sky survey in searches for sterile neutrino dark matter | International journal | Zandanel, Fabio; Weniger, Christoph; Ando, Shin'ichiro |
| 231 | 150507480 | Non-Abelian gauge fields as dark matter | International journal | Christian Gross, Oleg Lebedev, Yann Mambrini |
| 232 | 150504866 | Search of dark matter annihilation in the galactic centre using the ANTARES neutrino telescope | International journal | Adrián-Martínez et al. (ANTARES Collaboration) |
| 233 | 150504607 | nIFTy Cosmology: Comparison of Galaxy Formation Models | International journal | Knebe, Alexander; Pearce, Frazer R.; Thomas, Peter A.; Benson, Andrew; Blaizot, Jeremy; Bower, Richard; Carretero, Jorge; Castander, Francisco J.; Cattaneo, Andrea; Cora, Sofia A.; Croton, Darren J.; Cui, Weiguang; Cunnamma, Daniel; De Lucia, Gabriella; Devriendt, Julien E.; Elahi, Pascal J.; Font, A |
| 234 | 150405871 | Improved WIMP-search reach of the CDMS II germanium data | International journal | R. Agnese, A.J. Anderson, et al |
| 235 | 150403317 | The dark matter profile of the Milky Way: a non-parametric reconstruction | International journal | Miguel Pato, Fabio Iocco |
| 236 | 150306065 | nIFTy galaxy cluster simulations - I. Dark matter and non-radiative models | International journal | Sembolini, Federico; Yepes, Gustavo; Pearce, Frazer R.; Knebe, Alexander; Kay, Scott T.; Power, Chris; Cui, Weiguang; Beck, Alexander M.; Borgani, Stefano; Dalla Vecchia, Claudio; Davé, Romeel; Elahi, Pascal Jahan; February, Sean; Huang, Shuiyao; Hobbs, Alex; Katz, Neal; Lau, Erwin; McCarthy, Ian G |
| 237 | 150303379 | Dark matter effective field theory scattering in direct detection experiments | International journal | K. Schneck, B. Cabrera, D.G. Cerdeno, et al |
| 238 | 150302996 | Higgs Decays into Charginos and Neutralinos in the Complex MSSM: A Full One-Loop Analysis | International journal | S. Heinemeyer, C. Schappacher |

| | | | | |
|-----|-----------|---|-----------------------|---|
| 239 | 150301780 | Isospin violating dark matter in Stückelberg portal scenarios | International journal | Victor Martin-Lozano, Miguel Peiro, Pablo Soler |
| 240 | 150301119 | Minimal asymmetric dark matter | International journal | S.M. Boucenna, M.B. Krauss, E. Nardi |
| 241 | 150300599 | Indirect and direct detection prospect for TeV dark matter in the nine parameter MSSM | International journal | Cabrera-Catalan, Maria Eugenia; Ando, Shin'ichiro; Weniger, Christoph; Zandanel, Fabio |
| 242 | 150300008 | Dark Matter Search Results from the PICO-2L C3F8 Bubble Chamber | International journal | M. Ardid, |
| 243 | 150206929 | Dark Matter and Gauge Coupling Unification in Non-supersymmetric SO(10) Grand Unified Models | International journal | Yann Mambrini, Natsumi Nagata, Keith A. Olive, Jeremie Quevillon, Jiaming Zheng |
| 244 | 150205703 | A description of the Galactic Center excess in the Minimal Supersymmetric Standard Model | International journal | A. Achterberg, S. Amoroso, S. Caron, L. Hendriks, R. Ruiz de Austri, C. Weniger |
| 245 | 150203821 | Evidence for dark matter in the inner Milky Way | International journal | F. Iocco, M. Pato, G. Bertone |
| 246 | 150202866 | The nature of the Diffuse Gamma-Ray Background | International journal | M. Fornasa, M. A. Sanchez-Conde |
| 247 | 150105932 | Confronting recent AMS-02 positron fraction and Fermi-LAT Extragalactic Gamma-Ray Background measurements with gravitino dark matter | International journal | Edson Carquin, Marco A. Diaz, German A. Gomez-Vargas, Boris Panes, Nicolas Viaux |
| 248 | 150105520 | Halo mass distribution reconstruction across the cosmic web | International journal | Cheng Zhao, Francisco-Shu Kitaura, Chia-Hsun Chuang, Francisco Prada, Gustavo Yepes, Charling Tao |
| 249 | 150101296 | Fits to the Fermi-LAT GeV excess with RH sneutrino dark matter: implications for direct and indirect dark matter searches and the LHC | International journal | D.G. Cerdeno, M. Peiro, S. Robles |
| 250 | 150100963 | The Eleventh and Twelfth Data Releases of the Sloan Digital Sky Survey: Final Data from SDSS-III | International journal | Shadab Alam, Franco D. Albareti, et al |
| 251 | 161206918 | Clustering of quasars in the First Year of the SDSS-IV eBOSS survey: Interpretation and halo occupation distribution | International journal | Sergio A. Rodríguez-Torres, Johan Comparat, Francisco Prada, Gustavo Yepes, et al. |

| | | | | |
|-----|-----------|--|-----------------------|--|
| 252 | 161206792 | Search for Dark Matter Annihilation in the Earth using the ANTARES Neutrino Telescope | International journal | A. Albert et al. (ANTARES Collaboration) |
| 253 | 161204595 | Results from the search for dark matter in the Milky Way with 9 years of data of the ANTARES neutrino telescope | International journal | A. Albert et al. (ANTARES Collaboration) |
| 254 | 161106934 | The SDSS-IV eBOSS: emission line galaxy catalogues at z=0.8 and study of systematic errors in the angular clustering | International journal | T. Delubac, A. Raichoor, J. Comparat, et al. |
| 255 | 161103184 | Searching for Dark Matter Annihilation in Recently Discovered Milky Way Satellites with Fermi-Lat | International journal | A. Albert et al. (the Fermi LAT and DES collaborations) |
| 256 | 161000006 | Projected Sensitivity of the SuperCDMS SNOLAB experiment | International journal | R. Agnese et al (SuperCDMS Collaboration) |
| 257 | 160907311 | nIFTy galaxy cluster simulations - V. Investigation of the cluster infall region | International journal | Arthur, Jake; Pearce, Frazer R.; Gray, Meghan E.; Elahi, Pascal J.; Knebe, Alexander; Beck, Alexander M.; Cui, Weiguang; Cunnamra, Daniel; Davé, Romeel; February, Sean; Huang, Shuiyao; Katz, Neal; Kay, Scott T.; McCarthy, Ian G.; Murante, Giuseppe; Perret, Valentin; Power, Chris; Puchwein, Ewald; Sa |
| 258 | 160808640 | Search for sharp and smooth spectral signatures of munuSSM gravitino dark matter with Fermi-LAT | International journal | G.A. Gomez-Vargas, D.E. López-Fogliani, C. Muñoz, A.D. Pérez, R. Ruiz de Austri |
| 259 | 160807289 | The angular power spectrum of the diffuse gamma-ray emission as measured by the Fermi Large Area Telescope and constraints on its Dark Matter interpretation | International journal | Mattia Fornasa, Alessandro Cuoco, Jesus Zavala, Jennifer M. Gaskins, Miguel A. Sanchez-Conde, German Gomez-Vargas, Eiichiro Komatsu, Tim Linden, Francisco Prada, Fabio Zandanel, Aldo Morselli |
| 260 | 160807111 | Dwarf spheroidal J-factors without priors: A likelihood-based analysis for indirect dark matter searches | International journal | Chiappo, A.; Cohen-Tanugi, J.; Conrad, J.; Strigari, L. E.; Anderson, B.; Sánchez-Conde, M. A. |

| | | | | |
|-----|-----------|--|-----------------------|---|
| 261 | 160706815 | Light dark matter scattering in outer neutron star crusts | International journal | M. Cermeño, M. A. Pérez García |
| 262 | 160706098 | Constraining the Baryon-Dark Matter Relative Velocity with the Large-Scale 3-Point Correlation Function of the SDSS BOSS DR12 CMASS Galaxies | International journal | Zachary Slepian, Daniel J. Eisenstein, Jonathan A. Blazek, Joel R. Brownstein, Chia-Hsun Chuang, et al. |
| 263 | 160703931 | Two-loop Dirac neutrino mass and WIMP dark matter | International journal | C. Bonilla, E. Ma, E. Peinado, J.W.F. Valle |
| 264 | 160703153 | The clustering of galaxies in the completed SDSS-III Baryon Oscillation Spectroscopic Survey: tomographic BAO analysis of DR12 combined sample in Fourier space | International journal | Gong-Bo Zhao, Yuting Wang, Shun Saito, Dandan Wang, Ashley J. Ross, Florian Beutler, Jan Niklas Grieb, Chia-Hsun Chuang, Francisco-Shu Kitaura, Sergio Rodriguez-Torres, Will J. Percival, Joel R. Brownstein, Antonio J. Cuesta, Daniel J. Eisenstein, Héctor Gil-Marín, Jean-Paul Kneib, et al. |
| 265 | 160703152 | The clustering of galaxies in the completed SDSS-III Baryon Oscillation Spectroscopic Survey: double-probe measurements from BOSS galaxy clustering \& Planck data -- towards an analysis without informative priors | International journal | Marcos Pellejero-Ibanez, Chia-Hsun Chuang, J. A. Rubiño-Martín, Antonio J. Cuesta, Yuting Wang, Gong-bo Zhao, Ashley J. Ross, Sergio Rodríguez-Torres, Francisco Prada, et al. |
| 266 | 160703148 | BOSS DR12 combined galaxy sample: The clustering of galaxies in the completed SDSS-III Baryon Oscillation Spectroscopic Survey: On the measurement of growth rate using galaxy correlation functions | International journal | Siddharth Satpathy, Shadab Alam, Shirley Ho, Martin White, Neta A. Bahcall, Florian Beutler, Joel R. Brownstein, Chia-Hsun Chuang, Daniel J. Eisenstein, Jan Niklas Grieb, Francisco Kitaura, et al. |
| 267 | 160606904 | CP violation from flavor symmetry in a lepton quarticity dark matter model | International journal | S. Centelles Chuliá, R. Srivastava, J.W.F. Valle |
| 268 | 160604543 | Dirac neutrinos and dark matter stability from lepton quarticity | International journal | S. Centelles Chuliá, E. Ma, R. Srivastava, J.W.F. Valle |
| 269 | 160505185 | How to calculate dark matter direct detection exclusion limits that are consistent with gamma rays from annihilation in the Milky Way halo | International journal | David G. Cerdeno, Mattia Fornasa, Anne M. Green, Miguel Peiro |

| | | | | |
|-----|-----------|--|-----------------------|---|
| 270 | 160502016 | Sensitivity projections for dark matter searches with the Fermi large area telescope | International journal | Charles, E.; Sánchez-Conde, M.; et al. |
| 271 | 160500711 | 3FGL Demographics Outside the Galactic Plane using Supervised Machine Learning: Pulsar and Dark Matter Subhalo Interpretations | International journal | Mirabal, N.; Charles, E.; Ferrara, E. C.; Gonthier, P. L.; Harding, A. K.; Sánchez-Conde, M. A.; Thompson, D. J. |
| 272 | 160405587 | Assessment of backgrounds of the ANAIS experiment for dark matter direct detection. | International journal | J. Amaré, S. Cebrián, C. Cuesta, E. García, M. Martínez, M.A. Oliván, Y. Ortigoza, A. Ortiz de Solórzano, J. Puimedón, M.L. Sarsa, J.A. Villar, P. Villar |
| 273 | 160402102 | Naturalness of MSSM dark matter | International journal | M.E. Cabrera, J.A. Casas, A. Delgado, S. Robles, R. Ruiz de Austri |
| 274 | 160401025 | Physics from solar neutrinos in dark matter direct detection experiments | International journal | David G. Cerdeno, Malcolm Fairbairn, et al. |
| 275 | 160305994 | Effective field theory of dark matter: a global analysis | International journal | S. Liem, G. Bertone, F. Calore, R. Ruiz de Austri, T.M.P. Tait, R. Trotta, C. Weniger |
| 276 | 160305685 | Consistency of WIMP Dark Matter as radiative neutrino mass messenger | International journal | A. Merle, M. Platscher, N. Rojas, J.W.F. Valle, A. Vicente |
| 277 | 160305601 | Re-opening dark matter windows compatible with a diphoton excess | International journal | Giorgio Arcadi, Pradipta Ghosh, Yann Mambrini, Mathias Pierre |
| 278 | 160304479 | Confronting dark matter with the diphoton excess from a parent resonance decay | International journal | V. De Romeri, J.S. Kim, V. Martin-Lozano, K. Rolbiecki, R. Ruiz de Austri |
| 279 | 160304057 | Characterization of subhalo structural properties and implications for dark matter annihilation signals | International journal | Moliné, Ángeles; Sánchez-Conde, Miguel A.; Palomares-Ruiz, Sergio; Prada, Francisco |
| 280 | 160302228 | Limits on Dark Matter Annihilation in the Sun using the ANTARES Neutrino Telescope | International journal | Adrián-Martínez et al. (ANTARES Collaboration) |
| 281 | 160207000 | Results of the search for Secluded Dark Matter in the Sun with the ANTARES neutrino telescope | International journal | S. Adrián-Martínez et al., (ANTARES Collaboration) |

| | | | | |
|-----|-----------|---|-----------------------|---|
| 282 | 160206668 | nIFTy galaxy cluster simulations - IV. Quantifying the influence of baryons on halo properties | International journal | Cui, Weiguang; Power, Chris; Knebe, Alexander; Kay, Scott T.; Sembolini, Federico; Elahi, Pascal J.; Yepes, Gustavo; Pearce, Frazer; Cunnamma, Daniel; Beck, Alexander M.; and 14 coauthors |
| 283 | 160205583 | Vacuum Stability and Radiative Electroweak Symmetry Breaking in an SO(10) Dark Matter Model | International journal | Yann Mambrini, Natsumi Nagata, Keith A. Olive, Jiaming Zheng |
| 284 | 160204816 | A White Paper on keV Sterile Neutrino Dark Matter | International journal | R. Adhikari et al. |
| 285 | 160203919 | Constrained Local UniversE Simulations: a Local Group factory | International journal | Carlesi, Edoardo; Sorce, Jenny G.; Hoffman, Yehuda; Gottlöber, Stefan; Yepes, Gustavo; Libeskind, Noam I.; Pilipenko, Sergey V.; Knebe, Alexander; Courtois, Hélène; Tully, R. Brent; Steinmetz, Matthias |
| 286 | 160200590 | The case for 100 GeV bino dark matter: a dedicated LHC tri-lepton search | International journal | M. van Beekveld, W. Beenakker, S. Caron, R. Ruiz de Austri |
| 287 | 160106590 | Limits to dark matter annihilation cross-section from a combined analysis of MAGIC and Fermi-LAT observations of dwarf satellite galaxies | International journal | M. L. Ahnen et al. (the MAGIC Collaboration) |
| 288 | 160106554 | Radiative neutrino mass generation from WIMP dark matter | International journal | Roberto A. Lineros |
| 289 | 160105798 | Neutrino propagation in the Galactic dark matter halo | International journal | P.F. de Salas, R.A. Lineros, M. Tortola |
| 290 | 160105051 | A realistic model for Dark Matter interactions in the neutrino portal paradigm | International journal | V. González-Macías, J.I. Illana, J. Wudka |
| 291 | 160104347 | Scalar dark matter in an extra dimension inspired model | International journal | Roberto Lineros, Fabio Pereira dos Santos |
| 292 | 160104336 | Dark Radiative Inverse Seesaw | International journal | Amine Ahriche, Sofiane M. Boucenna, Salah Nasri |
| 293 | 160103729 | Improved dark matter search results from PICO-2L Run 2 | International journal | C. Amole, M. ardid, M. Bou-Cabo, J. I. Collar, I. Felis et al. |

| | | | | |
|-----|-----------|--|-----------------------|--|
| 294 | 160101184 | The ANAIS Dark Matter Project: Status and Prospects | International journal | J. Amaré, S. Cebrián, C. Cuesta, E. García, M. Martínez, M.A. Oliván, Y. Ortigoza, A. Ortiz de Solórzano, C. Pobes, J. Puimedón, M.L. Sarsa, J.A. Villar, P. Villar |
| 295 | | Acoustic Sensor Design for Dark Matter Bubble Chambers Detectors | International journal | Ivan Felis, Juan Antonio Martínez-Mora and Miguel Ardid |
| 296 | 170605818 | Cosmogenic production of tritium in dark matter detectors | International journal | J. Amaré, J. Castel, S. Cebrián, I. Coarasa, C. Cuesta, T. Dafni, J. Galán, E. García, J.G. Garza, F.J. Iguaz, I.G. Irastorza, G. Luzón, M. Martínez, H. Mirallas, M.A. Oliván, Y. Ortigoza, A. Ortiz de Solórzano, J. Puimedón, E. Ruiz-Chóliz, M.L. Sarsa, J.A. Villar, P. Villar. |
| 297 | 170604198 | Z' portal to Chern-Simons Dark Matter | International journal | Giorgio Arcadi, Pradipta Ghosh, Yann Mambrini, Mathias Pierre, Farinaldo S. Queiroz |
| 298 | 170601843 | Prospects for dark matter detection in dwarf irregular galaxies with gamma rays | International journal | V. Gammaldi, E. V. Karukes, P. Salucci |
| 299 | 170503021 | Tracing the cosmic web | International journal | Noam I Libeskind, Rien van de Weygaert, Marius Cautun, et al. |
| 300 | 170503012 | Enhanced stellar neutrino emissivities in annihilating Coy Dark Matter | International journal | M. Cermeño, M. A. Pérez-García, R. A. Lineros |
| 301 | 170406861 | Annual modulation of dark matter: the ANAIS-112 case | International journal | I. Coarasa, J. Amaré, S. Cebrián, C. Cuesta, E. García, M. Martínez, M.A. Oliván, Y. Ortigoza, A. Ortiz de Solórzano, J. Puimedón, M.L. Sarsa, J.A. Villar, P. Villar |
| 302 | 170402328 | GUT Models at Current and Future Hadron Colliders and Implications to Dark Matter Searches | International journal | Giorgio Arcadi, Manfred Lindner, Yann Mambrini, Mathias Pierre, Farinaldo S. Queiroz |
| 303 | 170308148 | Fermionic triplet dark matter in an SO(10)-inspired left right model | International journal | C. Arbelaez, M. Hirsch, D. Restrepo |
| 304 | 170307364 | The Waning of the WIMP? A Review of Models, Searches, and Constraints | International journal | Giorgio Arcadi, Maíra Dutra, Pradipta Ghosh, Manfred Lindner, Yann Mambrini, et al. |

| | | | | |
|-----|-----------|--|-----------------------|---|
| 305 | 170303416 | Majoron dark matter from a spontaneous inverse seesaw model | International journal | N. Rojas, R. A. Lineros, F. Gonzalez-Canales |
| 306 | 170301262 | Light yield determination in large sodium iodide detectors applied in the search for dark matter | International journal | M.A. Oliván, J. Amaré, S. Cebrián, C. Cuesta, E. García, M. Martínez, Y. Ortigoza, A. Ortiz de Solórzano, C. Pobes, J. Puimedón, M.L. Sarsa, J.A. Villar, P. Villar |
| 307 | 170208602 | Observations of M31 and M33 with the Fermi Large Area Telescope: A Galactic Center Excess in Andromeda? | International journal | M. Ackermann et al. (Fermi LAT collaboration) |
| 308 | 170207666 | Dark Matter Search Results from the PICO-60 C3F8 Bubble Chamber | International journal | C. Amole, M. ardid, M. Bou-Cabo, J. I. Collar, I. Felis et al. |
| 309 | 170202620 | nIFTy Cosmology: the clustering consistency of galaxy formation models | International journal | Arnaud Pujol, Ramin A. Skibba, Enrique Gaztañaga, et al. |
| 310 | 170201628 | Accurate mass and velocity functions of dark matter halos | International journal | Johan Comparat, Francisco Prada, Gustavo Yepes, Anatoly Klypin |
| 311 | 170108863 | Constraining Secluded Dark Matter models with the public data from the 79-string IceCube search for dark matter in the Sun | International journal | M. Ardid, I. Felis, A. Herrero and J.A. Martínez-Mora |
| 312 | 170108134 | Reopening the Higgs portal for Singlet Scalar Dark Matter | International journal | J. Alberto Casas, David G. Cerdeño, Jesus M. Moreno, Javier Quilis |
| 313 | 170106988 | Astrophysical interpretation of the anisotropies in the unresolved gamma-ray background | International journal | Shin'ichiro Ando, Mattia Fornasa, Nicolao Fornengo, Marco Regis, Hannes-S. Zechlin |
| 314 | 170106574 | A Minimal Model of Gravitino Dark Matter | International journal | Karim Benakli, Yifan Chen, Emilian Dudas, Yann Mambrini |
| 315 | 170701348 | Faint objects in motion or the new astrometry frontier | International journal | The Theia Collaboration |
| 316 | 170702471 | Searching for left sneutrino LSP at the LHC | International journal | Pradipta Ghosh, Inaki Lara, Daniel E. Lopez-Fogliani, Carlos Munoz, Roberto Ruiz de Austri |
| 317 | 170700250 | Cherenkov telescope array extragalactic survey discovery potential and the impact of axion-like particles and secondary gamma rays | International journal | De Franco, Andrea; Inoue, Yoshiyuki; Sánchez-Conde, Miguel A.; Cotter, Garret |

| | | | | |
|-----|-----------|--|-----------------------|--|
| 318 | 170601505 | Sensitivity of the Cherenkov Telescope Array to the Detection of a Dark Matter Signal in comparison to Direct Detection and Collider Experiments | International journal | Balázs, Csaba; Conrad, Jan; Farmer, Ben; Jacques, Thomas; Li, Tong; Meyer, Manuel; Queiroz, Farinaldo S.; Sánchez-Conde, Miguel A. |
|-----|-----------|--|-----------------------|--|

Other scientific and technical publications (with peer-reviews) derived from collaborations maintained during the execution of the project and that could be relevant for it: 549

| | Reference (ePrint) http://arxiv.org/ | Title | Type of publication | Authors |
|----|--|---|-----------------------|---|
| 1 | 10125007 | BSM Higgs Physics in the Exclusive Forward Proton Mode at the LHC | International journal | S. Heinemeyer, V.A. Khoze, M.G. Ryskin, M. Tasevsky, G. Weiglein |
| 2 | 10122879 | Tracking the precession of compact binaries from their gravitational-wave signal | International journal | Patricia Schmidt, Mark Hannam, Sascha Husa, P. Ajith |
| 3 | 10122204 | Time Calibration of the ANTARES Neutrino Telescope | International journal | J.A. Aguilar et al. (ANTARES Collaboration) |
| 4 | 10122200 | Spectral Energy Distribution of Markarian 501: Quiescent State vs. Extreme Outburst | International journal | Acciari et al. (VERITAS and MAGIC collaborations) |
| 5 | 10120908 | Sensitivity Studies for Third-Generation Gravitational Wave Observatories | International journal | S. Hild et al. (including S. Husa & A. Sintes) |
| 6 | 10116118 | Frequentist Analysis of the Parameter Space of Minimal Supergravity | International journal | O. Buchmueller, S. Heinemeyer et al. |
| 7 | 10115935 | Quantifying the tension between the Higgs mass and $(g-2)_\mu$ in the CMSSM | International journal | M.E. Cabrera, J. A. Casas, R. Ruiz de Austri, R. Trotta |
| 8 | 10115304 | Probing the Higgs Sector of High-Scale SUSY-Breaking Models at the Tevatron | International journal | Authors: Marcela Carena, Patrick Draper, Sven Heinemeyer, Tao Liu, Carlos E.M. Wagner, Georg Weiglein |
| 9 | 10115260 | Insights Into the High-Energy Gamma-ray Emission of Markarian 501 from Extensive Multifrequency Observations in the Fermi Era | International journal | Abdo et al. (the LAT and the MAGIC collaborations) |
| 10 | 10114306 | A Coverage Study of the CMSSM Based on ATLAS Sensitivity Using Fast Neural Networks Techniques | International journal | M. Bridges, K. Cranmer, F. Feroz, M. Hobson, R. Ruiz de Austri, R. Trotta |
| 11 | 10113772 | Search for a diffuse flux of high-energy $v\mu$ with the ANTARES neutrino telescope | International journal | J.A. Aguilar et al. (ANTARES Collaboration) |
| 12 | 10111821 | Minimal Flipped SO(10) \times U(1) Supersymmetric Higgs Model | International journal | S. Bertolini, L. Di Luzio, M. Malinsky |

| | | | | |
|----|----------|--|-----------------------|---|
| 13 | 10110916 | Constraining the cosmic radiation density due to lepton number with Big Bang Nucleosynthesis | International journal | G. Mangano, G. Miele, S. Pastor, O. Pisanti, S. Sarikas |
| 14 | 10110348 | LHC and lepton flavour violation phenomenology of a left-right extension of the MSSM | International journal | J.N. Esteves, M. Hirsch, W. Porod, J.C. Romao, F. Staub, A. Vicente |
| 15 | 10105751 | Fair scans of the seesaw. Consequences for predictions on LFV processes | International journal | J. A. Casas, J. M. Moreno, N. Rius, R. Ruiz de Austri, B. Zaldivar |
| 16 | 10105084 | Atmospheric muon and neutrino fluxes at very high energy | International journal | J.I. Illana, P. Lipari, M. Masip, D. Meloni |
| 17 | 10104915 | The clustering of massive galaxies at z~0.5 from the first semester of BOSS data | International journal | White, Martin; Blanton, M.; Bolton, A.; Schlegel, D.; Tinker, J.; Berlind, A.; da Costa, L.; Kazin, E.; Lin, Y. -T.; Maia, M.; McBride, C.; Padmanabhan, N.; Parejko, J.; Percival, W.; Prada, F.; et al. |
| 18 | 10104706 | Swift observation of Segue 1: constraints on sterile neutrino parameters in the darkest galaxy | International journal | N. Mirabal |
| 19 | 10104513 | Dark energy, non-minimal couplings and the origin of cosmic magnetic fields | International journal | J. Beltrán Jiménez and Antonio L. Maroto |
| 20 | 10103960 | Cosmological magnetic fields from inflation in extended electromagnetism | International journal | J. Beltrán Jiménez and Antonio L. Maroto |
| 21 | 10103701 | CP-violating Supersymmetric Higgs at the Tevatron and LHC | International journal | S.P. Das, M. Drees |
| 22 | 10100894 | Propagation in the atmosphere of ultrahigh energy charmed hadrons | International journal | R. Barcelo, J.I. Illana, M. Jenkins, M. Masip |
| 23 | 1010050 | Observations of the Blazar 3C 66A with the MAGIC Telescopes in Stereoscopic Mode | International journal | J. Aleksic et al. (MAGIC Collaboration) |
| 24 | 10095998 | Accuracy and effectualness of closed-form, frequency-domain waveforms for non-spinning black hole binaries | International journal | T. Damour, M. Trias, A. Nagar |
| 25 | 10095998 | Accuracy and effectualness of closed-form, frequency-domain waveforms for nonspinning black hole binaries | International journal | Thibault Damour, Alessandro Nagar and Miquel Trias |

| | | | | |
|----|----------|--|-----------------------|--|
| 26 | 10094179 | AMADEUS—The acoustic neutrino detection test system of the ANTARES deep-sea neutrino telescope | International journal | J.A. Aguilar et al. (ANTARES Collaboration) |
| 27 | 10092155 | Detection of very high energy gamma-ray emission from the Perseus cluster head-tail galaxy IC310 by the MAGIC telescopes | International journal | J. Aleksic et al. (MAGIC Collaboration) |
| 28 | 10084813 | Flavour structure of supersymmetric SO(10) GUTs with extended matter sector | International journal | M. Heinze, M. Malinsky |
| 29 | 10082961 | Length requirements for numerical-relativity waveforms | International journal | Mark Hannam, Sascha Husa, Frank Ohme, P. Ajith |
| 30 | 10081541 | SuperB Progress Reports -- Physics | International journal | SuperB collaboration (S. Heinemeyer et al.) |
| 31 | 10080762 | Flavour Les Houches Accord: Interfacing Flavour related Codes | International journal | N. Mahmoudi, S. Heinemeyer et al. |
| 32 | 10075512 | # # Higgs Boson Masses in the MSSM with Heavy Majorana Neutrinos | International journal | S. Heinemeyer, M. Herrero, S. Penaranda, A. Rodriguez |
| 33 | 10075232 | Top, GigaZ, MegaW | International journal | S. Heinemeyer, G. Weiglein |
| 34 | 10074789 | Black-hole binaries with non-precessing spins | International journal | Mark Hannam, Sascha Husa, Frank Ohme, Doreen Muller, Bernd Bruegmann |
| 35 | 10072549 | Performance of the front-end electronics of the ANTARES Neutrino Telescope | International journal | J.A. Aguilar et al. (ANTARES Collaboration) |
| 36 | 10071777 | Zenith distribution and flux of atmospheric muons measured with the 5-line ANTARES detector | International journal | J.A. Aguilar et al. (ANTARES Collaboration) |
| 37 | 10071459 | Extragalactic background light inferred from AEGIS galaxy-SED-type fractions | International journal | Domínguez, A.; Primack, J. R.; Rosario, D. J.; Prada, F.; et al. |
| 38 | 10070956 | FeynHiggs 2.7 | International journal | T. Hahn, S. Heinemeyer, W. Hollik, H. Rzehak, G. Weiglein |
| 39 | 10070689 | Proposals for Bottom Quark/Squark Renormalization in the Complex MSSM | International journal | S. Heinemeyer, H. Rzehak, C. Schappacher |
| 40 | 10070006 | Energy dependent neutrino flavor ratios from cosmic accelerators on the Hillas plot. | International journal | S. Hummer, M. Maltoni, W. Winter, C. Yaguna |

| | | | | |
|----|----------|---|-----------------------|--|
| 41 | 10065075 | Probing neutrino oscillations in supersymmetric models at the Large Hadron Collider | International journal | F. de Campos, O.J.P. Eboli, M. Hirsch, M.B. Magro, W. Porod, D. Restrepo, J.W.F. Valle |
| 42 | 10064098 | Finite Temperature Solitons in Non-Local Field Theories from p-Adic Strings | International journal | Tirthabir Biswas, Jose A.R. Cembranos, Joseph I. Kapusta |
| 43 | 10062346 | Cosmic magnetic lenses | International journal | E. Battaner, J. Castellano, M. Masip |
| 44 | 10062343 | Effects of biasing on the matter power spectrum at large scales | International journal | Jose Beltrán Jiménez and Ruth Durrer |
| 45 | 10061113 | Combined analysis of KamLAND and Borexino neutrino signals from Th and U decays in the Earth's interior | International journal | G.L. Fogli, E. Lisi, A. Palazzo, A.M. Rotunno |
| 46 | 10053482 | Fritzsch neutrino mass matrix from S3 symmetry | International journal | D. Meloni, S. Morisi, E. Peinado |
| 47 | 10050430 | Thermodynamics and Cosmological Constant of Non-Local Field Theories from p-Adic Strings | International journal | Tirthabir Biswas, Jose A.R. Cembranos and Joseph I. Kapusta |
| 48 | 10045052 | Some cosmological and astrophysical aspects of modified gravity theories | International journal | Álvaro de la Cruz-Dombriz |
| 49 | 10013099 | Weak lensing effects in the measurement of the dark energy equation of state with LISA | International journal | C. Van Den Broeck, M. Trias, B. S. Sathyaprakash and A. M. Sintes |
| 50 | 10012265 | S4 model for quarks and leptons with maximal atmospheric angle | International journal | S. Morisi, E. Peinado |
| 51 | | Acoustic and optical variations during rapid downward motion episodes in the deep North Western Mediterranean | International journal | H. van Haren et al. (ANTARES Collaboration) |
| 52 | | Search for point-like sources with the ANTARES neutrino telescope | International journal | F. Salesa |
| 53 | 11123917 | Detection of very-high energy γ -ray emission from NGC 1275 by the MAGIC telescopes | International journal | MAGIC Collaboration: J. Aleksić et al. |
| 54 | 11123564 | Higgs and Supersymmetry | International journal | O. Buchmueller, S. Heinemeyer et al. |
| 55 | 11123026 | Interpreting the LHC Higgs Search Results in the MSSM | International journal | S. Heinemeyer, O. Stal, G. Weiglein |
| 56 | 11122830 | Gluino Decays in the Complex MSSM: A Full One-Loop Analysis | International journal | S. Heinemeyer, C. Schappacher |

| | | | | |
|----|----------|--|-----------------------|--|
| 57 | 11122535 | Development of a compact transmitter array for the acoustic neutrino detection calibration | International journal | S. Adrián-Martínez, M. Ardid, M.Bou-Cabo , G. Larosa, C.D. Llorens, J.A. Martínez-Mora |
| 58 | 11121106 | The dark magnetism of the universe | International journal | J. Beltrán Jiménez, A.L. Maroto |
| 59 | 11117289 | Heavy Scalar Top Quark Decays in the Complex MSSM: A Full One-Loop Analysis | International journal | T. Fritzsche, S. Heinemeyer, H. Rzehak, C. Schappacher |
| 60 | 11115544 | Constraining Cosmic Rays and Magnetic Fields in the Perseus Galaxy Cluster with TeV observations by the MAGIC telescopes | International journal | MAGIC Collaboration: J. Aleksić et al. |
| 61 | 11115341 | The 2010 very high energy gamma-ray flare & 10 years of multi-wavelength observations of M 87 | International journal | H.E.S.S. Collaboration: A. Abramowski et al. |
| 62 | 11113473 | Search for Neutrino Emission from Gamma-Ray Flaring Blazars with the ANTARES Telescope | International journal | S. Adrián-Martínez et al (ANTARES Collaboration) |
| 63 | 11112889 | Measuring equality horizon with the zero-crossing of the galaxy correlation function | International journal | F. Prada, A. Klypin, G. Yepes, S. E. Nuza, S. Gottloeber |
| 64 | 11112836 | The munuSSM with an extra U(1) | International journal | J. Fidalgo, C. Muñoz |
| 65 | 11111465 | Supersymmetry Breaking due to Moduli Stabilization in String Theory | International journal | Andrei Linde, Yann Mambrini, Keith A. Olive |
| 66 | 11105914 | Single Vectorlike Quark Production at the LHC | International journal | R. Barcelo, A. Carmona, M. Chala, M. Masip, J. Santiago |
| 67 | 11105400 | Heavy Sterile Neutrinos in Tau Decays and the MiniBooNE Anomaly | International journal | C. Dib, J.C. Helo, M. Hirsch, S. Kovalenko, I. Schmidt |
| 68 | 11105184 | Measurement of the Group Velocity of Light in Sea Water at the ANTARES Site | International journal | S. Adrián-Martínez et al (ANTARES Collaboration) |
| 69 | 11104335 | Updated BBN bounds on the cosmological lepton asymmetry for non-zero theta13 | International journal | G. Mangano, G. Miele, S. Pastor, O. Pisanti, S. Sarikas |
| 70 | 11103568 | Supersymmetry in Light of 1/fb of LHC Data | International journal | O. Buchmueller, S. Heinemeyer et al. |
| 71 | 11103037 | Hefty MSSM-like light Higgs in extended gauge models | International journal | M. Hirsch, M. Malinsky, L. Reichert, W. Porod, F. Staub |

| | | | | |
|----|----------|--|-----------------------|---|
| 72 | 11102656 | Search for Relativistic Magnetic Monopoles with the ANTARES Neutrino Telescope | International journal | S. Adrián-Martínez et al (ANTARES Collaboration) |
| 73 | 11096478 | Dark matter and LHC phenomenology in a left-right supersymmetric model | International journal | J.N. Esteves, M. Hirsch, W. Porod, J.C. Romao, F. Staub, A. Vicente |
| 74 | 11096232 | Higgs Boson masses and B-Physics Constraints in Non-Minimal Flavor Violating SUSY scenarios | International journal | M. Arana, S. Heinemeyer, M. Herrero, S. Penaranda |
| 75 | 11096124 | Phase-resolved energy spectra of the Crab Pulsar in the range of 50-400 GeV measured with the MAGIC Telescopes | International journal | J. Aleksic et al (MAGIC collaboration) |
| 76 | 11094337 | Propagation of B mesons in the atmosphere | International journal | A. Bueno, A. Gascon, J.I. Illana, M. Masip |
| 77 | 11093859 | Benchmark Models, Planes, Lines and Points for Future SUSY Searches at the LHC | International journal | A. AbdusSalam, S. Heinemeyer et al. |
| 78 | 11093759 | Histogram comparison as a powerful tool for the search of new physics at LHC. Application to CMSSM | International journal | M.E. Cabrera, J.A. Casas, V.A. Mitsou, R. Ruiz de Austri, J. Terron |
| 79 | 11093393 | The reactor mixing angle and CP violation with two texture zeros in the light of T2K | International journal | P.O. Ludl, S. Morisi, E. Peinado |
| 80 | 11090228 | Modelling the fraction of Lyman Break Galaxies with strong Lyman alpha emission at $5 < 7$ | International journal | J.E. Forero-Romero, G. Yepes, S. Gottloeber, F. Prada |
| 81 | 11085391 | Observations of the Crab pulsar between 25 GeV and 100 GeV with the MAGIC I telescope | International journal | J. Aleksic et al (MAGIC collaboration) |
| 82 | 11084661 | Long-Range Forces in Direct Dark Matter Searches | International journal | N. Fornengo, P. Panci, M. Regis |
| 83 | 11084173 | Vector dark energy and high-z massive clusters | International journal | E. Carlesi, A. Knebe, G. Yepes, S. Gottloeber, A. Maroto, J. B. Jimenez |
| 84 | 11083484 | Symmetrical Parametrizations of the Lepton Mixing Matrix | International journal | W. Rodejohann, J.W.F. Valle |
| 85 | 11082630 | Downward-going tau neutrinos as a new prospect of detecting dark matter | International journal | N. Fornengo, V. Niro |
| 86 | 11082190 | Search at the CERN LHC for a light neutralino of cosmological interest | International journal | Choi, S. Scopel, N. Fornengo, A. Bottino |

| | | | | |
|----|----------|--|-----------------------|---|
| 87 | 11081477 | Performance of the MAGIC stereo system obtained with Crab Nebula data | International journal | J. Aleksic et al (MAGIC collaboration) |
| 88 | 11081376 | Where we are on theta_13: addendum to "Global neutrino data and recent reactor fluxes: status of three-flavour oscillation parameters" | International journal | T. Schwetz, M.A. Tortola, J.W.F. Valle |
| 89 | 11080292 | First search for point sources of high energy cosmic neutrinos with the ANTARES neutrino telescope | International journal | S. Adrián-Martínez et al (ANTARES Collaboration) |
| 90 | 11076009 | Lepton flavor violation and non-unitary lepton mixing in low-scale type-I seesaw | International journal | D.V. Forero, S. Morisi, M.A. Tortola, J.W.F. Valle |
| 91 | 11075909 | Standard Model Higgs-Boson Branching Ratios with Uncertainties | International journal | A. Denner, S. Heinemeyer, I. Puljak, D. Rebuzzi, M. Spira |
| 92 | 11074614 | The Higgs sector of the muonSSM and collider physics | International journal | J. Fidalgo, D.E. Lopez-Fogliani, C. Munoz, R. Ruiz de Austri |
| 93 | 11074248 | Semileptonic B and B_s decays into orbitally excited charmed mesons | International journal | J. Segovia, C. Albertus, D. R. Entem, F. Fernández, E. Hernández, M. A. Pérez-García |
| 94 | 11073412 | Soft masses in SUSY SO(10) GUTs with low intermediate scales | International journal | V. de Romeri, M. Hirsch, M. Malinsky |
| 95 | 11072670 | Running soft parameters in SUSY models with multiple U (1) gauge factors | International journal | R. Fonseca, M. Malinsky, W. Porod, F. Staub |
| 96 | 11070996 | Reliability of complete gravitational waveform models for compact binary coalescences | International journal | Frank Ohme, Mark Hannam, Sascha Husa |
| 97 | 11070854 | Black-hole hair loss: learning about binary progenitors from ringdown signals. | International journal | Ioannis Kamaretsos, Mark Hannam, Sascha Husa, B.S. Sathyaprakash |
| 98 | 11070696 | Model for T2K indication with maximal atmospheric angle and tri-maximal solar angle | International journal | S. Morisi, K.M. Patel, E. Peinado |
| 99 | 11064903 | Searches for Lepton Flavour Violation at a Linear Collider. | International journal | Searches for Lepton Flavour Violation at a Linear Collider. E. Carquin, J. Ellis, M.E. Gomez, S. Lola |

| | | | | |
|-----|----------|--|-----------------------|---|
| 100 | 11064667 | Observations of annual modulation in direct detection of relic particles and light neutralinos | International journal | P. Belli, R. Bernabei, A. Bottino, F. Cappella, R. Cerulli, N. Fornengo , S. Scopel |
| 101 | 11064054 | Stealth gluons at hadron colliders | International journal | R. Barcelo, A. Carmona, M. Masip, J. Santiago |
| 102 | 11061860 | Axion-like particle imprint in cosmological very-high-energy sources | International journal | A. Dominguez, M.A. Sanchez-Conde, F. Prada |
| 103 | 11061589 | Mrk 421 active state in 2008: the MAGIC view, simultaneous multi-wavelength observations and SSC model constrained | International journal | J. Aleksic et al (MAGIC collaboration) |
| 104 | 11060426 | A method for detection of muon induced electromagnetic showers with the ANTARES detector | International journal | J.A. Aguilar et al. (ANTARES Collaboration) |
| 105 | 11055580 | Non-standard antineutrino interactions at Daya Bay | International journal | R. Leitner, M. Malinsky, B. Roskovec, H. Zhang |
| 106 | 11054116 | A Fast Algorithm for Muon Track Reconstruction and its Application to the ANTARES Neutrino Telescope | International journal | J.A. Aguilar et al. (ANTARES Collaboration) |
| 107 | 11053333 | Gluon excitations in t tbar production at hadron colliders | International journal | R. Barcelo, A. Carmona, M. Masip, J. Santiago |
| 108 | 11052320 | Ameliorating Systematic Uncertainties in the Angular Clustering of Galaxies: A Study using SDSS-III | International journal | Ashley J. Ross et al. |
| 109 | 11051195 | Next-to-minimal supersymmetric model Higgs scenarios for partially universal GUT scale boundary conditions | International journal | J.F. Gunion, D.E. Lopez-Fogliani, L. Roszkowski, R. Ruiz de Austri, T.A. Varley |
| 110 | 11045586 | CLARA's view on the escape fraction of Lyman-Alpha photons in high redshift galaxies | International journal | J.E. Forero-Romero, G. Yepes, S. Gottloeber, S.R. Knollmann, A.J. Cuesta, F. Prad |
| 111 | 11044961 | Admixture of quasi-Dirac and Majorana neutrinos with tri-bimaximal mixing | International journal | S. Morisi, E. Peinado |
| 112 | 11043106 | Chern-Simons anomaly as polarization effect | International journal | V.B. Semikoz, J.W.F. Valle |
| 113 | 11041633 | Relating quarks and leptons without grand-unification | International journal | S. Morisi, E. Peinado, Y. Shimizu, J.W.F. Valle |
| 114 | 11041607 | ANTARES : The first undersea neutrino telescope | International journal | M. Ageron et al. (ANTARES Collaboration) |

| | | | | |
|-----|----------|---|-----------------------|---|
| 115 | 11035677 | A search for Very High Energy gamma-ray emission from Scorpius X-1 with the MAGIC telescopes | International journal | J. Aleksic et al (MAGIC collaboration) |
| 116 | 11034477 | The ANTARES Telescope Neutrino Alert System | International journal | M. Ageron et al. (ANTARES Collaboration) |
| 117 | 11031366 | Global constraints on muon-neutrino non-standard interactions | International journal | F.J. Escrivuela, O.G. Miranda, M.A. Tortola, J.W.F. Valle |
| 118 | 11030734 | Global neutrino data and recent reactor fluxes: the status of three-flavour oscillation parameters | International journal | T. Schwetz, M.A. Tortola, J.W.F. Valle |
| 119 | 11030689 | Heavy-neutrino decays at neutrino telescopes | International journal | M. Masip, P. Masjuan |
| 120 | 11024585 | Implications of Initial LHC Searches for Supersymmetry | International journal | O. Buchmueller, S. Heinemeyer et al. |
| 121 | 11024033 | Impact of the recent results by the CMS and ATLAS Collaborations at the CERN Large Hadron Collider on an effective Minimal Supersymmetric extension of the Standard Model | International journal | S. Scopel, S. Choi, N. Fornengo, A. Bottino |
| 122 | 11021989 | HiggsBounds 2.0.0: Confronting Neutral and Charged Higgs Sector Predictions with Exclusion Bounds from LEP and the Tevatron | International journal | Philip Bechtle, Oliver Brein, Sven Heinemeyer, Georg Weiglein, Karina E. Williams |
| 123 | 11014645 | MAGIC discovery of VHE Emission from the FSRQ PKS 1222+21 | International journal | J. Aleksić et al (the MAGIC collaboration) |
| 124 | 11012764 | PG 1553+113: five years of observations with MAGIC | International journal | J. Aleksic et al (MAGIC collaboration) |
| 125 | 11012522 | MAGIC observations and multiwavelength properties of the quasar 3C279 in 2007 and 2009 | International journal | J. Aleksić et al (the MAGIC collaboration) |
| 126 | 11012140 | Supersymmetric mass spectra and the seesaw scale | International journal | M. Hirsch, L. Reichert, W. Porod |
| 127 | 11011656 | Landau parameters for asymmetric nuclear matter with a strong magnetic field | International journal | M. A. Perez-Garcia, C. Providencia, A. Rabhi |
| 128 | 11010582 | Neutrino Telescopes | International journal | J.J Hernandez-Rey |
| 129 | 12126154 | Neutrino Mass from Cosmology | International journal | J. Lesgourges, S. Pastor |
| 130 | 12125266 | Cosmology with a Continuous Tower of Scalar Fields. | International journal | Jose Beltrán Jiménez, David F. Mota, Paulo Santos |

| | | | | |
|-----|----------|--|-----------------------|--|
| 131 | 12124858 | Discovering Minimal Universal Extra Dimensions (MUED) at the LHC | International journal | A. Belyaev, M. Brown, J. Moreno, C. Papineau |
| 132 | 12124808 | The NMSSM with F-theory unified boundary conditions | International journal | L. Aparicio, P.G. Camara, D.G. Cerdeno, L.E. Ibanez, I. Valenzuela |
| 133 | 12124781 | On the non-attractive character of gravity in $f(R)$ theories. | International journal | F.D. Albareti, J.A.R. Cembranos, A. de la Cruz-Dombriz, A. Dobado |
| 134 | 12123201 | Isotropy theorem for cosmological Yang-Mills theories | International journal | J. A. R. Cembranos, A. L. Maroto and S. J. Núñez Jareño |
| 135 | 12123045 | Systematic decomposition of the neutrinoless double beta decay operator | International journal | F. Bonnet, M. Hirsch, T. Ota, W. Winter |
| 136 | 12121923 | Screening Vector Field Modifications of General Relativity. | International journal | Jose Beltran Jimenez, Andre Luis Delvas Froes, David F. Mota |
| 137 | 12116506 | Bilarge neutrino mixing and Abelian flavor symmetry | International journal | G.-J. Ding, S. Morisi, J.W.F. Valle |
| 138 | 12113177 | Displaced multileptons at the LHC - probing a 125 GeV new boson in munuSSM | International journal | P. Ghosh, D.E. Lopez-Fogliani, V. Mitsou, C. Munoz, R. Ruiz de Austri |
| 139 | 12111955 | MSSM Interpretations of the LHC Discovery: Light or Heavy Higgs? | International journal | S. Heinemeyer et al. |
| 140 | 12110441 | A longitudinal gauge degree of freedom and the Pais Uhlenbeck field | International journal | Jose Beltrán Jiménez, Enea Di Dio and Ruth Durrer |
| 141 | 12110289 | Supersymmetric type-III seesaw: lepton flavour violation and LHC phenomenology | International journal | M. Hirsch, W. Porod, F. Staub, C. Weiss |
| 142 | 12107936 | Development of an acoustic transceiver for the KM3NeT positioning system | International journal | G. Larosa, M. Ardid, C.D. Llorens, M. Bou-Cabo, J.A. Martínez-Mora, S. Adrián-Martínez |
| 143 | 12107761 | A compact acoustic calibrator for ultra-high energy neutrino detection | International journal | S. Adrián-Martínez, M. Ardid, M. Bou-Cabo, G. Larosa, C.D Llorens, J. A. Martínez-Mora |
| 144 | 12107072 | Production and propagation of heavy hadrons in air-shower simulators | International journal | C.A. Garcia Canal, J.I. Illana, M. Masip, S.J. Sciutto |
| 145 | 12101519 | Heavy neutrino decays at MiniBooNE | International journal | M. Masip, P. Masjuan, D. Meloni |

| | | | | |
|-----|----------|--|-----------------------|---|
| 146 | 12084201 | Focusing of geodesic congruences in an accelerated expanding Universe. | International journal | F.D. Albareti, J.A.R. Cembranos (Madrid U.), A. de la Cruz-Dombriz (Cape Town U., ACGC & Cape Town U., Dept. Math.) |
| 147 | 12081226 | Detection potential of the KM3NeT detector for high-energy neutrinos from the Fermi Bubbles | International journal | S. Adrián-Martínez et al. (KM3NeT Collaboration) |
| 148 | 12080727 | Neutrinoless double-beta decay and physics beyond the Standard Model | International journal | F.F. Deppisch, M. Hirsch, H. Päs |
| 149 | 12077137 | The Ninth Data Release of the Sloan Digital Sky Survey: First Spectroscopic Data from the SDSS-III Baryon Oscillation Spectroscopic Survey | International journal | Ahn et al. |
| 150 | 12076641 | Neutrino masses from R-parity violation with a Z_3 symmetry | International journal | E. Peinado, A. Vicente |
| 151 | 12076635 | Constrained SUSY seesaws with a 125 GeV Higgs | International journal | M. Hirsch, F.R. Joaquim, A. Vicente |
| 152 | 12076515 | Testing 3+1 and 3+2 neutrino mass models with cosmology and short baseline experiments | International journal | M. Archidiacono, N. Fornengo, C. Giunti, A. Melchiorri |
| 153 | 12076410 | On the Physics of Radio Halos in Galaxy Clusters: Scaling Relations and Luminosity Functions | International journal | Zandanel, Pfrommer & Prada |
| 154 | 12073105 | Search for cosmic neutrino point sources with four year data of the ANTARES telescope | International journal | S. Adrián-Martínez et al. (ANTARES Collaboration) |
| 155 | 12073088 | Towards models of gravitational waveforms from generic binaries: A simple approximate mapping between precessing and non-precessing inspiral signals | International journal | Patricia Schmidt, Mark Hannam, Sascha Husa |
| 156 | 12072663 | Black holes, cosmological solutions, future singularities, and their thermodynamical properties in modified gravity theories | International journal | Alvaro de la Cruz-Dombriz and Diego Saez-Gomez |
| 157 | 12072259 | Vorticity and entropy production in tilted Szekeres spacetimes | International journal | L. Herrera, A. Di Prisco, J. Ibanez, J. Carot |
| 158 | 12072147 | MAGIC observations of the giant radio galaxy M87 in a low-emission state between 2005 and 2007 | International journal | J. Aleksic et al (MAGIC collaboration) |

| | | | | |
|-----|----------|--|-----------------------|--|
| 159 | 12071634 | High zenith angle observations of PKS 2155-304 with the MAGIC-I telescope | International journal | J. Aleksic et al (MAGIC collaboration) |
| 160 | 12071096 | Confronting the MSSM and the NMSSM with the Discovery of a Signal in the two Photon Channel at the LHC | International journal | S. Heinemeyer et al. |
| 161 | 12066508 | A classification of spherically symmetric spacetimes | International journal | Brian O.J. Tupper , Aidan J. Keane, Jaume Carot |
| 162 | 12065570 | The Halo Shape and Evolution of Polar Disc Galaxies | International journal | O. N. Snaith, B. K. Gibson, C. B. Brook, A. Knebe, R. J. Thacker, T. R. Quinn, F. Governato, P. B. Tissera |
| 163 | 12065570 | The Halo Shape and Evolution of Polar Disc Galaxies | International journal | O. N. Snaith, B. K. Gibson, C. B. Brook, A. Knebe, R. J. Thacker, T. R. Quinn, F. Governato, P. B. Tissera |
| 164 | 12065108 | Supersymmetry with long-lived staus at the LHC | International journal | R. Barcelo, J.I. Illana, M. Masip, A. Prado, P. Sanchez-Puertas |
| 165 | 12063605 | Probing neutralino properties in minimal supergravity with bilinear R-parity violation | International journal | F. de Campos, O.J.P. Eboli, M.B. Magro, W. Porod, D. Restrepo, S.P. Das, M. Hirsch, J.W.F. Valle |
| 166 | 12063516 | Phenomenology of a supersymmetric $U(1)_{\{B-L\}} \times U(1)_R$ extension of standard model with inverse seesaw mechanism | International journal | M. Hirsch, W. Porod, L. Reichert, F. Staub |
| 167 | 12062555 | Bi-large neutrino mixing and the Cabibbo angle | International journal | S.M. Boucenna, S. Morisi, M.A. Tortola, J.W.F. Valle |
| 168 | 12060645 | Measurement of atmospheric neutrino oscillations with the ANTARES neutrino telescope | International journal | S. Adrián-Martínez et al. (ANTARES Collaboration) |
| 169 | 12060256 | Heavy neutrinos and lepton flavor violation in left-right symmetric models at the LHC | International journal | S.P. Das, F.F. Deppisch, O. Kittel, J.W.F. Valle |
| 170 | 12060183 | Exclusive Production of the MSSM Higgs Bosons at the LHC | International journal | S. Heinemeyer, V. Khoze, M. Tasevsky, G. Weiglein |

| | | | | |
|-----|----------|---|-----------------------|--|
| 171 | 12054018 | Global status of neutrino oscillation parameters after Neutrino-2012 | International journal | D.V. Forero, M. Tortola, J.W.F. Valle |
| 172 | 12045862 | Systematic study of the d=5 Weinberg operator at one-loop order | International journal | F. Bonnet, M. Hirsch, T. Ota, W. Winter |
| 173 | 12044001 | Heavy Scalar Tau Decays in the Complex MSSM: A Full One-Loop Analysis | International journal | S. heinemeyer, C. Schappacher |
| 174 | 12042510 | Cosmological lepton asymmetry with a nonzero mixing angle theta13 | International journal | E. Castorina, U. Franca, M. Lattanzi, J. Lesgourgues, G. Mangano, A. Melchiorri, S. Pastor |
| 175 | 12041000 | Lower Limits on $\mu \rightarrow e \gamma$ from new Measurements on U_{e3} | International journal | Joydeep Chakrabortty, Pradipta Ghosh, Werner Rodejohann |
| 176 | 12040900 | Development of an acoustic transceiver for positioning systems in Underwater Neutrino Telescopes | International journal | Giuseppina Larosa, Miguel Ardid, Carlos D. Llorens, Manuel Bou-Cabo, Juan A. Martínez-Mora, Silvia Adrián-Martínez |
| 177 | 12040809 | Acoustic Transmitters for Underwater Neutrino Telescopes | International journal | Miguel Ardid, Juan A. Martínez-Mora, Manuel Bou-Cabo, Giuseppina Larosa, Silvia Adrián-Martínez, Carlos D. Llorens |
| 178 | 12036616 | The clustering of galaxies in the SDSS-III Baryon Oscillation Spectroscopic Survey: cosmological implications of the large-scale two-point correlation function | International journal | Sanchez et al. |
| 179 | 12036499 | The clustering of galaxies in the SDSS-III Baryon Oscillation Spectroscopic Survey: Analysis of potential systematics | International journal | Ross et al. |
| 180 | 12035998 | Flavour in heavy neutrino searches at the LHC | International journal | J.A. Aguilar-Saavedra, F. Deppisch, O. Kittel, J.W.F. Valle |
| 181 | 12034258 | An efficient iterative method to reduce eccentricity in numerical-relativity simulations of compact binary inspiral | International journal | Michael Pürrer, Sascha Husa, Mark Hannam |

| | | | | |
|-----|----------|---|-----------------------|---|
| 182 | 12033365 | Linear Collider Test of a Neutrinoless Double Beta Decay Mechanism in left-right Symmetric Theories | International journal | J. Barry, L. Dorame, W. Rodejohann |
| 183 | 12032867 | Detection of VHE γ -rays from HESS J0632+057 during the 2011 February X-ray outburst with the MAGIC Telescopes | International journal | Aleksic et al. |
| 184 | 12032535 | Predicting leptonic CP violation in the light of the Daya Bay result on theta13 | International journal | D. Meloni, S. Morisi, E. Peinado |
| 185 | 12032489 | Searches for New Physics: Les Houches Recommendations for the Presentation of LHC Results | International journal | S. Kraml, S. Heinemeyer et al. |
| 186 | 12030490 | Discovery of VHE gamma-rays from the blazar 1ES 1215+303 with the MAGIC Telescopes and simultaneous multi-wavelength observations | International journal | Aleksic et al. |
| 187 | 12030399 | Probing unification scenarios with neutron stars | International journal | M. A. Perez-Garcia, C. J. A. P. Martins |
| 188 | 12030155 | New neutrino mass sum rule from the inverse seesaw mechanism | International journal | L. Dorame, S. Morisi, E. Peinado, A.D. Rojas, J.W.F. Valle |
| 189 | 12026661 | Search for a correlation between ANTARES neutrinos and Pierre Auger Observatory UHECRs arrival directions | International journal | S. Adrián-Martínez et al (ANTARES Collaboration) |
| 190 | 12026057 | The clustering of galaxies at z~0.5 in the SDSS-III Data Release 9 BOSS-CMASS sample: a test for the LCDM cosmology | International journal | S. E. Nuza et al. |
| 191 | 12023894 | The positioning system of the ANTARES neutrino telescope | International journal | S. Adrián-Martínez et al (ANTARES Collaboration) |
| 192 | 12021529 | Bilinear R-parity violation with flavor symmetry | International journal | F. Bazzocchi, S. Morisi, E. Peinado, J.W.F. Valle, A. Vicente |
| 193 | 12020822 | 119-125 GeV Higgs from a string derived slice of the CMSSM | International journal | L. Aparicio, D.G. Cerdeno, L.E. Ibanez |
| 194 | 12020807 | Seesaw Scale in the Minimal Renormalizable SO(10) Grand Unification | International journal | S. Bertolini, L. Di Luzio, M. Malinsky |

| | | | | |
|-----|----------|--|-----------------------|---|
| 195 | 12020488 | Neutralinos from Chargino Decays in the Complex MSSM | International journal | S. Heinemeyer, F. v.d. Pahlen, C. Schappacher |
| 196 | 12015319 | The NINJA-2 catalog of hybrid post-Newtonian/numerical-relativity waveforms for non-precessing black-hole binaries | International journal | P. Ajith, Michael Boyle, Duncan A. Brown, Bernd Brügmann, Luisa T. Buchman et al. (Including S. Husa) |
| 197 | 12014074 | Morphological and spectral properties of the W51 region measured with the MAGIC telescopes | International journal | Aleksic et al. |
| 198 | 12014018 | The Bimetric variational principle for General Relativity. | International journal | Jose Beltrán Jiménez, Alexey Golovnev, Mindaugas Karciauskas and Tomi S. Koivisto |
| 199 | 12013084 | Handbook of LHC Higgs Cross Sections: 2. Differential Distributions. | International journal | S. Dittmaier, S. Heinemeyer et al. |
| 200 | 12012634 | Discovery of VHE gamma-ray emission from the BL Lac object B3 2247+381 with the MAGIC telescopes | International journal | Aleksic et al. |
| 201 | 12012172 | Acoustic scale from the angular power spectra of SDSS-III DR8 photometric luminous galaxies | International journal | Seo et al. |
| 202 | 12012137 | Clustering of Sloan Digital Sky Survey III Photometric Luminous Galaxies: The Measurement, Systematics and Cosmological Implications | International journal | Ho et al. |
| 203 | 12011556 | Exploring novel correlations in trilepton channels at the LHC for the minimal supersymmetric inverse seesaw model | International journal | S. Mondal, S. Biswas, P. Ghosh, S. Roy |
| 204 | 12011184 | The Sound Emission Board of the KM3NeT Acoustic Positioning System | International journal | C. D. Llorens, M. Ardid, T. Sogorb, M. Bou-Cabo, J. A. Martínez-Mora, G. Larosa, S. Adrián-Martínez |
| 205 | 14035684 | Cylindrically symmetric static solutions of the Einstein field equations for elastic matter | International journal | I. Brito, J. Carot, F. C. Mena, and E. G. L. R. Vaz |
| 206 | | The Atmospheric Monitoring System of the JEM-EUSO Space Mission. | International journal | M. D. Rodríguez Frías for the JEM-EUSO Collaboration. |

| | | | | |
|-----|----------|--|-----------------------|--|
| 207 | 13125680 | Backreaction mechanism in multifluid and extended cosmologies | International journal | Jose Beltran Jimenez, A. de la Cruz-Dombriz, P.K.S. Dunsby, D. Saez-Gomez. |
| 208 | 13125250 | The CMSSM and NUHM1 after LHC Run 1 | International journal | O. Buchmueller, S. Heinemeyer et al. |
| 209 | 13125233 | Implications of Improved Higgs Mass Calculations for Supersymmetric Models | International journal | O. Buchmueller, S. Heinemeyer et al. |
| 210 | 13124937 | High-precision predictions for the light CP-even Higgs Boson Mass of the MSSM | International journal | T. Hahn, S. Heinemeyer, W. Hollik, H. Rzezhak, G. Weiglein |
| 211 | 13122022 | Tidal forces in f(R) theories of gravity | International journal | Alvaro de la Cruz-Dombriz, Peter K. S. Dunsby, Vinicius C. Busti, Sulona Kandhai |
| 212 | 13121644 | Collision Avoidance in Next-generation Fiber Positioner Robotic System for Large Survey Spectrograph | International journal | Laleh Makarem et al. |
| 213 | 13121493 | Constraints on diffuse gamma-ray emission from structure formation processes in the Coma cluster | International journal | Zandanel & Ando |
| 214 | 13120276 | Cosmic variance of the local Hubble flow in large-scale cosmological simulations | International journal | Wojtak, Radosław; Knebe, Alexander; Watson, William A.; Iliev, Ilian T.; Heß, Steffen; Rapetti, David; Yepes, Gustavo; Gottlöber, Stefan |
| 215 | 13115492 | The Stellar-to-halo Mass Relation for Local Group Galaxies | International journal | Brook, C. B.; Di Cintio, A.; Knebe, A.; Gottlöber, S.; Hoffman, Y.; Yepes, G.; Garrison-Kimmel, S. |
| 216 | 13114795 | On the Physics of Radio Halos in Galaxy Clusters: Scaling Relations and Luminosity Functions | International journal | Zandanel, Pfrommer & Prada |
| 217 | 13113637 | MAGIC upper limits on the GRB 090102 afterglow | International journal | MAGIC Collaboration: J. Aleksić et al. |
| 218 | 13113228 | LHC-scale left-right symmetry and unification | International journal | C. Arbelaez, M. Hirsch, M. Malinsky, J.C. Romao |
| 219 | 13111663 | Implications of LHC search results on the W boson mass prediction in the MSSM | International journal | W. Hollik, S. Heinemeyer, G. Weiglein, L. Zeune |
| 220 | 13111402 | Isotropy theorem for arbitrary-spin cosmological fields | International journal | J.A.R. Cembranos, A.L. Maroto, S.J. Núñez Jareño |

| | | | | |
|-----|----------|---|-----------------------|---|
| 221 | 13110055 | HiggsBounds-4: Improved Tests of Extended Higgs Sectors against Exclusion Bounds from LEP, the Tevatron and the LHC | International journal | P. Bechtle, S. Heinemeyer et al. |
| 222 | 13108361 | Higgs Working Group Report of the Snowmass 2013 Community Planning Study | International journal | S. Dawson, S. Heinemeyer et al. |
| 223 | 13106708 | Study of Electroweak Interactions at the Energy Frontier | International journal | S. Heinemeyer et al. |
| 224 | 13103740 | Halo Abundance Matching: accuracy and conditions for numerical convergence | International journal | Anatoly Klypin et al. |
| 225 | 13101238 | A few cosmological implications of tensor nonlocalities | International journal | Pedro G. Ferreira, Antonio L. Maroto |
| 226 | 13100009 | High-resolution Simulations of the Reionization of an Isolated Milky Way-M31 Galaxy Pair | International journal | Ocvirk, P.; Aubert, D.; Chardin, J.; Knebe, A.; Libeskind, N.; Gottlöber, S.; Yepes, G.; Hoffman, Y. |
| 227 | 13097447 | Solution to the Isotropy Problem for Cosmological Hidden Vector Models | International journal | J.A.R. Cembranos, A.L. Maroto, S. J. Nunez Jareno |
| 228 | 13096743 | Witten's mechanism in the flipped SU(5) unification | International journal | C. Arbelaez, H. Kolesova, M. Malinsky |
| 229 | 13091852 | Anisotropy in Cosmic rays from internal transitions in neutron stars | International journal | M. Angeles Perez-Garcia, K. Kotera, J. Silk |
| 230 | 13091692 | The Implementation of the Renormalized Complex MSSM in FeynArts and FormCalc | International journal | S. Heinemeyer et al. |
| 231 | 13086789 | Is charged lepton flavor violation a high energy phenomenon? | International journal | F.F. Deppisch, N. Desai, J.W.F. Valle |
| 232 | 13085260 | A Search for Neutrino Emission from the Fermi Bubbles with the ANTARES Telescope | International journal | S. Adrián-Martínez et al. (ANTARES Collaboration) |
| 233 | 13083271 | Twist and shout: A simple model of complete precessing black-hole-binary gravitational waveforms | International journal | Mark Hannam, Patricia Schmidt, Alejandro Bohé, Leila Haegel, Sascha Husa, Frank Ohme, Geraint Pratten, Michael Pürrer |
| 234 | 13081867 | Stability of Horndeski vector-tensor interactions | International journal | Jose Beltrán Jiménez, Ruth Durrer, Lavinia Heisenberg and Mikkel Thorsrud |

| | | | | |
|-----|----------|---|-----------------------|---|
| 235 | 13081599 | Measurement of the atmospheric nu_mu energy spectrum from 100 GeV to 200 TeV with the ANTARES telescope | International journal | S. Adrián-Martínez et al. (ANTARES Collaboration) |
| 236 | 13081510 | Whitepaper on Super-weakly Interacting Massive Particles for Snowmass 2013 | International journal | Jose A. R. Cembranos, Manoj Kaplinghat |
| 237 | 13077735 | The Tenth Data Release of the Sloan Digital Sky Survey: First Spectroscopic Data from the SDSS-III Apache Point Observatory Galactic Evolution Experiment | International journal | Christopher P. Ahn et al. |
| 238 | 13074849 | Short-range mechanisms of neutrinoless double beta decay at the LHC | International journal | J.C. Helo, M. Hirsch, H. Päs, S.G. Kovalenko |
| 239 | 13073962 | Exploring Quantum Physics at the ILC | International journal | S. Heinemeyer et al. |
| 240 | 13073577 | Sussing Merger Trees: The Merger Trees Comparison Project | International journal | Srisawat, Chaichalit; Knebe, Alexander; Pearce, Frazer R.; Schneider, Aurel; Thomas, Peter A.; Behroozi, Peter; Dolag, Klaus; Elahi, Pascal J.; Han, Jiaxin; Helly, John; Jing, Yipeng; Jung, Intae; Lee, Jaehyun; Mao, Yao-Yuan; Onions, Julian; Rodriguez-Gomez, Vicente; Tweed, Dylan; Yi, Sukyoung K. |
| 241 | 13073553 | Dirac neutrinos from flavor symmetry | International journal | A. Aranda, C. Bonilla, S. Morisi, E. Peinado, J.W.F. Valle |
| 242 | 13073285 | Modelling Baryon Acoustic Oscillations with Perturbation Theory and Stochastic Halo Biasing | International journal | Francisco-Shu Kitaura, Gustavo Yepes, Francisco Prada |
| 243 | 13072263 | Topological solutions in ungauged Supergravity | International journal | A. de la Cruz-Dombriz, M. Montero, C.S. Shahbazi |
| 244 | 13071712 | The Jubilee ISW project - I. Simulated ISW and weak lensing maps and initial power spectra results | International journal | Watson, W. A.; Diego, J. M.; Gottlöber, S.; Iliev, I. T.; Knebe, A.; Martínez-González, E.; Yepes, G.; Barreiro, R. B.; González-Nuevo, J.; Hotchkiss, S.; Marcos-Caballero, A.; Nadathur, S.; Vielva, P. |

| | | | | |
|-----|----------|---|-----------------------|--|
| 245 | 13071398 | Slow scintillation time constants in NaI(Tl) for different interacting particles | International journal | C. Cuesta, M.A. Oliván, J. Amaré, S. Cebrián, E. García, C. Ginestra, M. Martínez, Y. Ortigoza, A. Ortiz de Solórzano, C. Pobes, J. Puimedón, M.L. Sarsa, J.A. Villar, P. Villar |
| 246 | 13071347 | Handbook of LHC Higgs Cross Sections: 3. Higgs Properties | International journal | S. Heinemeyer et al. |
| 247 | 13070521 | Complete density perturbations in the Jordan-Fierz-Brans-Dicke theory | International journal | J.A.R. Cembranos, A. de la Cruz Dombriz L. Olano Garcia |
| 248 | 13070304 | Search for muon neutrinos from gamma-ray bursts with the ANTARES neutrino telescope using 2008 to 2011 data | International journal | S. Adrián-Martínez et al. (ANTARES Collaboration) |
| 249 | 13062320 | Testing the validity of the single-spin approximation in inspiral-merger-ringdown waveforms | International journal | Michael Pürrer, Mark Hannam, P. Ajith, Sascha Husa |
| 250 | 13061321 | $U(1)_{\{B_1+B_2-2L_1\}}$ mediation for the natural SUSY and the anomalous muon $g-2$ | International journal | Ji-Haeng Huh, Bumseok Kyae |
| 251 | 13061156 | The Charged Higgs Boson Mass of the MSSM in the Feynman-Diagrammatic Approach | International journal | S. Heinemeyer et al. |
| 252 | 13060572 | A handbook of vector-like quarks: mixing and single production | International journal | S. Heinemeyer et al. |
| 253 | 13060148 | Deconfinement of quark content in neutron stars due to cosmic external agents | International journal | M. Angeles Perez-Garcia |
| 254 | 13057439 | Improving photon-hadron discrimination based on cosmic ray surface detector data | International journal | G. Ros, A. D. Supanitsky, G. A. Medina-Tanco, L. del Peral, M. D. Rodriguez-Frias |
| 255 | 13056774 | Neutrino mixing with revamped A4 flavour symmetry | International journal | S. Morisi, D.V. Forero, J.C. Romao, J.W.F. Valle |
| 256 | 13055073 | Finite Theories Before and After the Discovery of a Higgs Boson at the LHC | International journal | S. Heinemeyer, M. Mondragon, G. Zoupanos |
| 257 | 13052478 | An evaluation of the exposure in nadir observation of the JEM-EUSO mission | International journal | N. Pacheco, M.D. Rodriguez Frias et al. |

| | | | | |
|-----|----------|---|-----------------------|--|
| 258 | 13052448 | Streams going Notts: the tidal debris finder comparison project | International journal | Elahi, Pascal J.; Han, Jiaxin; Lux, Hanni; Ascasibar, Yago; Behroozi, Peter; Knebe, Alexander; Muldrew, Stuart I.; Onions, Julian; Pearce, Frazer |
| 259 | 13052405 | Demonstration of Surface Electron Rejection with Interleaved Germanium Detectors for Dark Matter Search | International journal | CDMS Collaboration, Agnese et al. |
| 260 | 13052163 | Measurement of the Expansion Rate of the Universe from γ -Ray Attenuation | International journal | Domínguez, Alberto; Prada, Francisco |
| 261 | 13052162 | Detection of the Cosmic γ -Ray Horizon from Multiwavelength Observations of Blazars | International journal | Domínguez, A.; Finke, J. D.; Prada, F.; Primack, J. R.; Kitaura, F. S.; Siana, B.; Paneque, D. |
| 262 | 13051976 | Statistics of extreme objects in the Juropa Hubble Volume simulation | International journal | Watson, William A.; Iliev, Ilian T.; Diego, Jose M.; Gottlöber, Stefan; Knebe, Alexander; Martínez-González, Enrique; Yepes, Gustavo |
| 263 | 13051933 | HiggsSignals: Confronting arbitrary Higgs sectors with measurements at the Tevatron and the LHC | International journal | S. Heinemeyer et al. |
| 264 | 13048116 | Pulsar scintillation patterns and strangelets | International journal | M. Angeles Perez-Garcia, Joseph Silk, Ue-Li Pen |
| 265 | 13042783 | New Constraints on General Slepton Flavor Mixing | International journal | M. Arana, S. Heinemeyer, M. Herrero |
| 266 | 13040585 | Structure finding in cosmological simulations: the state of affairs | International journal | Knebe, Alexander; Pearce, Frazer R.; Lux, Hanni; Ascasibar, Yago; Behroozi, Peter; Casado, Javier; Moran, Christine Corbett; Diemand, Juerg; Dolag, Klaus; Dominguez-Tenreiro, Rosa; Elahi, Pascal; Falck, Bridget; Gottlöber, Stefan; Han, Jiaxin; Klypin, Anatoly; Lukic, Zarija; Maciejewski, Michal; M |
| 267 | 13035699 | The minimal adjoint-SU(5)xZ4 GUT model | International journal | D. Emmanuel-Costa, C. Simoes, M.A. Tortola |

| | | | | |
|-----|----------|---|-----------------------|--|
| 268 | 13034891 | Invisible decays of ultra-high energy neutrinos | International journal | L. Dorame, O.G. Miranda, J.W.F. Valle |
| 269 | 13034666 | The clustering of galaxies in the SDSS-III Baryon Oscillation Spectroscopic Survey: Measuring D_A and H at z=0.57 from the Baryon Acoustic Peak in the Data Release 9 Spectroscopic Galaxy Sample | International journal | Lauren Anderson et al. |
| 270 | 13034486 | The clustering of galaxies in the SDSS-III Baryon Oscillation Spectroscopic Survey: single-probe measurements and the strong power of $f(z)\sigma_8(z)$ on constraining dark energy | International journal | Chuang, Prada et al. |
| 271 | 13034396 | The clustering of galaxies in the SDSS-III Baryon Oscillation Spectroscopic Survey: cosmological constraints from the full shape of the clustering wedges | International journal | Sánchez et al. |
| 272 | 13034394 | Quark-lepton mass relation and CKM mixing in an A4 extension of the minimal supersymmetric standard model | International journal | S. Morisi, M. Nebot, K.M. Patel, E. Peinado, J.W.F. Valle |
| 273 | 13034391 | The clustering of galaxies in the SDSS-III Baryon Oscillation Spectroscopic Survey: measuring H(z) and DA(z) at z = 0.57 with clustering wedges | International journal | Kazin et al. |
| 274 | 13031186 | Strangelets and the TeV-PeV cosmic-ray anisotropies | International journal | K. Kotera, M. A. Perez Garcia, J. Silk |
| 275 | 13030899 | Neutrinoless double beta decay and lepton number violation at the LHC | International journal | J.C. Helo, M. Hirsch, S.G. Kovalenko, H. Päs |
| 276 | 13027033 | MSSM Higgs Boson Searches at the LHC: Benchmark Scenarios after the Discovery of a Higgs-like Particle | International journal | S. Heinemeyer et al. |
| 277 | 13026750 | First search for neutrinos in correlation with gamma-ray bursts with the ANTARES neutrino Telescope | International journal | S. Adrián-Martínez et al. (ANTARES Collaboration) |
| 278 | 13026720 | Sterile Neutrinos: Cosmology vs Short-BaseLine Experiments | International journal | M. Archidiacono, N. Fornengo, C. Giunti, S. Hannestad, A. Melchiorri |
| 279 | 13026111 | Towards degeneracy problem breaking by large scale structures methods | International journal | A. de la Cruz-Dombriz |

| | | | | |
|-----|----------|---|-----------------------|---|
| 280 | 13025655 | Stochastic bias of colour-selected BAO tracers by joint clustering-weak lensing analysis | International journal | Comparat et al. |
| 281 | 13023401 | Light color octet scalars in the minimal SO(10) grand unification | International journal | Stefano Bertolini, Luca Di Luzio, Michal Malinsky |
| 282 | 13021866 | Dynamics of scalar perturbations in f(R,T) gravity | International journal | A. de la Cruz-Dombriz et al. |
| 283 | 13017197 | Higgs/Electroweak in the SM and the MSSM | International journal | S. Heinemeyer |
| 284 | 13017065 | Quark-Lepton Mass Relation in a Realistic A4 Extension of the Standard Model | International journal | S F. King, S. Morisi, E. Peinado, J.W.F. Valle |
| 285 | 13016085 | Supersymmetric SO(10) GUTs with sliding scales | International journal | C. Arbelaez, R.M. Fonseca, M. Hirsch, J.C. Romao |
| 286 | 13016065 | Search for Charged Higgs bosons: Combined Results Using LEP Data | International journal | S. Heinemeyer et al. |
| 287 | 13016002 | Neutrino textures and charged lepton flavour violation in light of \$ heta_13\$, MEG and LHC data, | International journal | M. Cannoni, J. Ellis, M. E. Gomez and S. Lola, |
| 288 | 13012345 | Recent Developments in HiggsBounds and a Preview of HiggsSignals | International journal | S. Heinemeyer et al. |
| 289 | 13011325 | Probing the two light Higgs scenario in the NMSSM with a low-mass pseudoscalar | International journal | David G. Cerdeno, Pradipta Ghosh, Chan Beom Park |
| 290 | 14124936 | Black hole lightning due to particle acceleration at subhorizon scales | International journal | Aleksić et al. (MAGIC collaboration) |
| 291 | 14124801 | Unconstrained hyperboloidal evolution of black holes in spherical symmetry with GBSSN and Z4c | International journal | Alex Vañó-Viñuales, Sascha Husa |
| 292 | 14123827 | Spherical symmetry as a test case for unconstrained hyperboloidal evolution | International journal | Alex Vano-Vinuales, Sascha Husa, David Hilditch |
| 293 | 14117155 | Reduction of couplings and its application in particle physics, Finite theories, Higgs and top mass predictions 1 | International journal | S. Heinemeyer et al. |
| 294 | 14116526 | Charged Higgs Bosons in the LHCHXSWG | International journal | S. Heinemeyer |
| 295 | 14114883 | Relating quarks and leptons with the T7 flavour group | International journal | C. Bonilla, S. Morisi, E. Peinado, J.W.F. Valle |

| | | | | |
|-----|----------|--|-----------------------|--|
| 296 | 14111074 | Cosmological implications of baryon acoustic oscillation (BAO) measurements | International journal | É. Aubourg, S. Bailey, et al. |
| 297 | 14110566 | Small neutrino masses and gauge coupling unification | International journal | S. M. Boucenna, R. M. Fonseca, F. Gonzalez-Canales, J. W. F. Valle |
| 298 | 14105854 | The Redshift Evolution of the High-Mass End of the Red Sequence Luminosity Function from the SDSS-III/BOSS CMASS Sample | International journal | A. D. Montero-Dorta, A. S. Bolton, J. R. Brownstein, M. Swanson, K. Dawson, F. Prada, et al. |
| 299 | 14104684 | Hunting down systematics in baryon acoustic oscillations after cosmic high noon | International journal | F. Prada, C. G. Scoccola, C.-H. Chuang, G. Yepes, A. Klypin, F.-Shu Kitaura, S. Gottlober, C. Zhao |
| 300 | 14103208 | A new physics interpretation of the IceCube data | International journal | J.I. Illana, M. Masip, D. Meloni |
| 301 | 14102787 | Heavy Higgs Decays into Sfermions in the Complex MSSM: A Full One-Loop Analysis | International journal | S. Heinemeyer et al. |
| 302 | 14102070 | Probing the muonSSM with light scalars, pseudoscalars and neutralinos from the decay of a SM-like Higgs boson at the LHC | International journal | P. Ghosh, D.E. Lopez-Fogliani, V. Mitsou, C. Munoz, R. Ruiz de Austri |
| 303 | 14100302 | Higgs effective potential in a perturbed Robertson-Walker background | International journal | A.L. Maroto, F. Prada |
| 304 | 14093389 | First broadband characterization and redshift determination of the VHE blazar MAGIC J2001+439 | International journal | Aleksić et al. (MAGIC collaboration) |
| 305 | 14092349 | Gravitational-wave observations of binary black holes: Effect of non-quadrupole modes | International journal | Vijay Varma, Parameswaran Ajith, Sascha Husa, Juan Calderon Bustillo, Mark Hannam, Michael Puerrer |
| 306 | 14084060 | The NUHM2 after LHC Run 1 | International journal | S. Heinemeyer et al. |
| 307 | 14081523 | The 0.1 z 1.65 evolution of the bright end of the (OII) luminosity function | International journal | J. Comparat, J. Richard, J.-P. Kneib, et al |
| 308 | 14080663 | Higgs masses and Electroweak Precision Observables in the Lepton-Flavor-Violating MSSM | International journal | M. Gomez, S. Heinemeyer, M. Rehman |

| | | | | |
|-----|----------|---|-----------------------|--|
| 309 | 14078525 | Constraining the neutrino emission of gravitationally lensed Flat-Spectrum Radio Quasars with ANTARES data | International journal | S. Adrián-Martínez et al. (ANTARES Collaboration) |
| 310 | 14073707 | MAGIC search for VHE γ -ray emission from AE Aquarii in a multiwavelength context | International journal | Aleksić et al. (MAGIC collaboration) |
| 311 | 14071236 | Constraining the halo bispectrum in real and redshift space from perturbation theory and non-linear stochastic bias | International journal | F.-Shu Kitaura, H. Gil-Marín, C. Scoccola, C.-H. Chuang, V. Müller, G. Yepes, F. Prada |
| 312 | 14071083 | Radiative corrections to M_h from three generations of Majorana neutrinos and sneutrinos | International journal | S. Heinemeyer et al. |
| 313 | 14070850 | Magnetic fields and cosmic ray anisotropies at TeV energies | International journal | E. Battaner, J. Castellano, M. Masip |
| 314 | 14070394 | The universal nature of subhalo accretion | International journal | Libeskind, Noam I.; Knebe, Alexander; Hoffman, Yehuda; Gottlöber, Stefan |
| 315 | 14070235 | New Developments in FormCalc 8.4 | International journal | S. Heinemeyer et al. |
| 316 | 14070232 | Higher-Order Contributions in Higgs Sectors of Supersymmetric Models | International journal | S. Heinemeyer et al. |
| 317 | 14070231 | Fully Automated Calculations in the complex MSSM | International journal | S. Heinemeyer et al. |
| 318 | 14060511 | On the observability of coupled dark energy with cosmic voids | International journal | Sutter, P. M.; Carlesi, Edoardo; Wandelt, Benjamin D.; Knebe, Alexander |
| 319 | 14057540 | Neutrino oscillations refitted | International journal | D.V. Forero, M.A. Tortola, J.W.F. Valle |
| 320 | 14056960 | Updated Constraints on General Squark Flavor Mixing | International journal | S. Heinemeyer et al. |
| 321 | 14056074 | Discovery of TeV gamma-ray emission from the pulsar wind nebula 3C 58 by MAGIC | International journal | Aleksić et al. (MAGIC collaboration) |
| 322 | 14054706 | Leptogenesis with a dynamical seesaw scale | International journal | D. Aristizabal Sierra, M.A. Tortola, J.W.F. Valle, A. Vicente |
| 323 | 14053900 | The large-scale structure of vacuum | International journal | F.D. Albareti, J.A.R. Cembranos, A.L. Maroto |
| 324 | 14053781 | Higgs Physics | International journal | S. Heinemeyer |

| | | | | |
|-----|----------|---|-----------------------|--|
| 325 | 14053678 | Classification of lepton mixing matrices from finite residual symmetries | International journal | R.M. Fonseca, W. Grimus |
| 326 | 14052332 | Radiative neutrino mass in 3-3-1 scheme | International journal | S.M. Boucenna, S. Morisi, J.W.F. Valle |
| 327 | 14050622 | Profile likelihood maps of a 15-dimensional MSSM | International journal | C. Stuge, G. Bertone, G.J. Besjes, S. Caron, R. Ruiz de Austri, A. Strubig, R. Trotta |
| 328 | 14047074 | Momentum-dependent two-loop QCD corrections to the neutral Higgs-boson masses in the MSSM | International journal | S. Heinemeyer et al. |
| 329 | 14043751 | The low-scale approach to neutrino masses | International journal | S.M. Boucenna, S. Morisi, J.W.F. Valle |
| 330 | 14041740 | Neutrino cosmology and Planck | International journal | J. Lesgourgues, S. Pastor |
| 331 | 14040365 | Does the LHC exclude SUSY Particles at the ILC? | International journal | S. Heinemeyer et al. |
| 332 | 14040186 | Prediction of the light CP-even Higgs-Boson Mass of the MSSM: Towards the ILC Precision | International journal | S. Heinemeyer et al. |
| 333 | 14037534 | Multifrequency Studies of the Peculiar Quasar 4C +21.35 during the 2010 Flaring Activity | International journal | Ackermann et al. (Fermi-LAT collaboration, Aleksić et al (MAGIC collaboration) |
| 334 | 14037525 | The life and death of cosmic voids | International journal | Sutter, P. M.; Elahi, Pascal; Falck, Bridget; Onions, Julian; Hamaus, Nico; Knebe, Alexander; Srisawat, Chaichalit; Schneider, Aurel |
| 335 | 14037384 | . Reduction of Couplings in Quantum Field Theories with applications in Finite Theories and the MSSM | International journal | S. Heinemeyer et al. |
| 336 | 14034599 | The clustering of galaxies in the SDSS-III Baryon Oscillation Spectroscopic Survey: Signs of neutrino mass in current cosmological datasets | International journal | Florian Beutler et al. |
| 337 | 14033675 | Hunting physics beyond the standard model with unusual W^\pm and Z decays | International journal | P. Ghosh, D.E. Lopez-Fogliani, V.A. Mitsou, C. Munoz, R. Ruiz de Austri |
| 338 | 14031582 | Probing the Standard Model with Higgs signal rates from the Tevatron, the LHC and a future ILC | International journal | P. Bechtle, S. Heinemeyer et al. |

| | | | | |
|-----|-----------|---|-----------------------|---|
| 339 | 14026182 | Searches for Point-like and Extended Neutrino Sources Close to the Galactic Centre Using the ANTARES Neutrino Telescope | International journal | S. Adrián-Martínez et al. (ANTARES Collaboration) |
| 340 | 14024219 | Detection of bridge emission above 50 GeV from the Crab pulsar with the MAGIC telescopes | International journal | Aleksić et al. (MAGIC collaboration) |
| 341 | 14022809 | Searches for clustering in the time integrated skymap of the ANTARES neutrino telescope | International journal | S. Adrián-Martínez et al. (ANTARES Collaboration) |
| 342 | 14021846 | Extended Gauss-Bonnet gravities in Weyl geometry | International journal | Jose Beltrán Jiménez and Tomi S. Koivisto |
| 343 | 14021760 | Anisotropic expansion and SNIa: an open issue | International journal | Jose Beltrán Jiménez, Vincenzo Salzano and Ruth Lazkoz |
| 344 | 14021600 | A Search for Time Dependent Neutrino Emission from Microquasars with the ANTARES Telescope | International journal | S. Adrián-Martínez et al. (ANTARES Collaboration) |
| 345 | 14020291 | Search for Very-High-Energy Gamma Rays from the z = 0.896 Quasar 4C +55.17 with the MAGIC telescopes | International journal | Aleksić et al. (MAGIC collaboration) |
| 346 | 14017926 | The Raychaudhuri equation in homogeneous cosmologies | International journal | F.D. Albareti, J.A.R. Cembranos, A. de la Cruz-Dombriz, A. Dobado |
| 347 | 14017154 | MAGIC reveals a complex morphology within the unidentified gamma-ray source HESS J1857+026 | International journal | Aleksić et al. (MAGIC collaboration) |
| 348 | 14015646 | MAGIC gamma-ray and multifrequency observations of flat spectrum radio quasar PKS 1510-089 in early 2012 | International journal | Aleksić et al. (MAGIC collaboration) |
| 349 | 14010464 | MAGIC long-term study of the distant TeV blazar PKS 1424+240 in a multiwavelength context | International journal | Aleksić et al. (MAGIC collaboration) |
| 350 | 151206878 | The LHC diphoton resonance from gauge symmetry | International journal | Sofiane M. Boucenna, Stefano Morisi, Avelino Vicente |
| 351 | 151201551 | Generalized mu-tau reflection symmetry and leptonic CP violation | International journal | P. Chen, G.J. Ding, F. Gonzalez-Canales, J.W.F. Valle |
| 352 | 151106002 | Neutral Higgs Boson Production at e+e- Colliders in the Complex MSSM: A Full One-Loop Analysis | International journal | S. Heinemeyer, C. Schappacher |
| 353 | 151104342 | The Quark Flavor Violating Higgs Decay $h \rightarrow b^- s + b s^-$ in the MSSM | International journal | M. Gomez, S. Heinemeyer, M. Rehman |

| | | | | |
|-----|-----------|--|-----------------------|---|
| 354 | 151103945 | QCD running in neutrinoless double beta decay: Short-range mechanisms | International journal | M. Gonzalez, M. Hirsch, S.G. Kovalenko |
| 355 | 151102149 | First Combined Search for Neutrino Point-Sources in the Southern Hemisphere with the ANTARES and IceCube Neutrino Telescopes | International journal | S.Adrian-Martínez et al. (ANTARES Collaboration) |
| 356 | 151100672 | Bounds on very low reheating scenarios after Planck | International journal | P.F. de Salas, M. Lattanzi, G. Mangano, G. Miele, S. Pastor, O. Pisanti |
| 357 | 151007913 | Spectral analysis of Fermi-LAT blazars above 50 GeV | International journal | A. Domínguez, M. Ajello |
| 358 | 151007048 | Teraelectronvolt pulsed emission from the Crab pulsar detected by MAGIC | International journal | Ahnen et al (MAGIC collaboration) |
| 359 | 151004508 | The data acquisition system of the KM3NeT detector | International journal | S.Biagi, T. Chiarusi, P. Piattelli, D. Real |
| 360 | 151004508 | Search for point-like neutrino sources over the Southern Sky with the ANTARES and IceCube neutrino telescopes | International journal | J. Barrios-Martí, C. Finley |
| 361 | 151004508 | Time-dependent search of high energy cosmic neutrinos from variable Blazars with the ANTARES telescope | International journal | A. Sánchez-Losa, D. Dornic |
| 362 | 151004508 | Limits on point-like sources with different spectral indexes around the Galactic center using the ANTARES neutrino telescope | International journal | J. Barrios-Martí |
| 363 | 151003437 | Diboson anomaly: Heavy Higgs resonance and QCD vectorlike exotics | International journal | D. Aristizabal Sierra, J. Herrero-Garcia, D. Restrepo, A. Vicente |
| 364 | 151001684 | Updating neutrino magnetic moment constraints | International journal | B.C. Cañas, O.G. Miranda, A. Parada, M.A. Tortola, J.W.F. Valle |
| 365 | 150906683 | Warped flavor symmetry predictions for neutrino physics | International journal | P. Chen, G.J. Ding, A.D. Rojas, C.A. Vaquera-Araujo, J.W.F. Valle |
| 366 | 150904936 | First NuSTAR Observations of Mrk 501 within a Radio to TeV Multi-Instrument Campaign | International journal | Furniss et al, Ahnen et al (NuSTAR & MAGIC collaborations) |
| 367 | 150903306 | Production of unstable heavy neutrinos in proto-neutron stars | International journal | C. Albertus, M. Masip, M.A. Pérez-García, |

| | | | | |
|-----|-----------|---|-----------------------|--|
| 368 | 150902537 | The sensitivity of harassment to orbit: mass loss from early-type dwarfs in galaxy clusters | International journal | Smith, R.; Sánchez-Janssen, R.; Beasley, M. A.; Candlish, G. N.; Gibson, B. K.; Puzia, T. H.; Janz, J.; Knebe, A.; Aguerri, J. A. L.; Lisker, T.; Hensler, G.; Fellhauer, M.; Ferrarese, L.; Yi, S. K. |
| 369 | 150900423 | LHC dijet constraints on double beta decay | International journal | J.C. Helo, M. Hirsch |
| 370 | 150807907 | Background model of NaI(Tl) detectors for the ANAIS Dark Matter Project | International journal | J. Amare, S. Cebrian, C. Cuesta, E. Garcia, M. Martinez, M.A. Olivan, Y. Ortigoza, A. Ortiz de Solorzano, C. Pobes, J. Puimedon, M.L. Sarsa, J.A. Villar, P. Villar |
| 371 | 150804902 | Very-high-energy γ -ray observations of novae and dwarf novae with the MAGIC telescopes | International journal | Ahnen et al (MAGIC collaboration) |
| 372 | 150802323 | Consistency of the triplet seesaw model revisited | International journal | C. Bonilla, R.M. Fonseca, J.W.F. Valle |
| 373 | 150801180 | Optical and X-ray early follow-up of ANTARES neutrino alerts | International journal | Adrián-Martínez et al. (ANTARES Collaboration) |
| 374 | 150706706 | Applying Exclusion Likelihoods from LHC Searches to Extended Higgs Sectors | International journal | P. Bechtle, S. Heinemeyer, O. Stal, T. Stefaniak, G. Weiglein |
| 375 | 150704182 | Time calibration with atmospheric muon tracks in the ANTARES neutrino telescope | International journal | S. Adrián-Martínez et al. (ANTARES Collaboration) |
| 376 | 150702532 | MACHETE: A transit imaging atmospheric Cherenkov telescope to survey half of the very high energy γ -ray sky | International journal | J. Cortina, R. López-Coto, A. Moralejo |
| 377 | 150608377 | Sensitivities to neutrino electromagnetic properties at the TEXONO experiment | International journal | T.S. Kosmas, O.G. Miranda, D.K. Papoulias, M.A. Tortola, J.W.F. Valle |
| 378 | 150607354 | Search for muon neutrino emission from GeV and TeV gamma-ray flaring blazars using 5 years of the ANTARES Telescope | International journal | Adrián-Martínez et al. (ANTARES Collaboration) |
| 379 | 150506583 | Neutrino-nucleon cross section at ultrahigh energy and its astrophysical implications | International journal | J.L. Albacete, J.I. Illana, A. Soto-Ontoso |
| 380 | 150506121 | SU(5)-inspired double beta decay | International journal | R.M. Fonseca, M. Hirsch |

| | | | | |
|-----|-----------|---|-----------------------|--|
| 381 | 150503202 | Probing neutrino magnetic moments at Spallation Neutron Source facilities | International journal | T.S. Kosmas, O.G. Miranda, D.K. Papoulias, M.A. Tortola, J.W.F. Valle |
| 382 | 150503133 | Renormalization scheme dependence of the two-loop QCD corrections to the neutral Higgs-boson masses in the MSSM | International journal | S. Borowka, T. Hahn, S. Heinemeyer, G. Heinrich, W. Hollik |
| 383 | 150407957 | The MSSM Higgs Sector at the LHC and Beyond | International journal | S. Heinemeyer |
| 384 | 150406115 | MAGIC detection of short-term variability of the high-peaked BL Lac object 1ES 0806+524 | International journal | Aleksić et al (MAGIC collaboration) |
| 385 | 150404159 | Energy reconstruction of hadron-initiated showers of ultra-high energy cosmic rays | International journal | Ros, G.; Medina-Tanco, G. A.; Supanitsky, A. D.; del Peral, L; Rodríguez-Frías M. D. |
| 386 | 150403695 | On the chirality of the SM and the fermion content of GUTs | International journal | R.M. Fonseca |
| 387 | 150403260 | The pMSSM10 after LHC Run 1 | International journal | K. de Vries, S. Heinemeyer et al. |
| 388 | 150401913 | Status and implications of neutrino masses: A brief panorama | International journal | J.W.F. Valle |
| 389 | 150401726 | Physics at the e+ e- Linear Collider | International journal | G. Moortgat-Pick, S. Heinemeyer et al. |
| 390 | 150308879 | On the description of non-unitary neutrino mixing | International journal | F.J. Escrivela, D.V. Forero, O.G. Miranda, M.A. Tortola, J.W.F. Valle |
| 391 | 150307169 | Strong Optimized Conservative Fermi-LAT Constraints on Dark Matter Models from the Inclusive Photon Spectrum | International journal | Andrea Massari, Eder Izaguirre, Rouven Essig, Andrea Albert, Elliott Bloom, German A. Gomez-Vargas |
| 392 | 150307099 | Are the B decay anomalies related to neutrino oscillations? | International journal | S.M. Boucenna, J.W.F. Valle, A. Vicente |
| 393 | 150304825 | Falsifying high-scale baryogenesis with neutrinoless double beta decay and lepton flavor violation | International journal | F.F. Deppisch, J. Harz, M. Hirsch, W.C. Huang, H. Päs |
| 394 | 150207546 | Predicting charged lepton flavor violation from 3-3-1 gauge symmetry | International journal | S.M. Boucenna, J.W.F. Valle, A. Vicente |
| 395 | 150205188 | Double beta decay and neutrino mass models | International journal | J.C. Helo, M. Hirsch, T. Ota, F. A. Pereira dos Santos |

| | | | | |
|-----|-----------|--|-----------------------|--|
| 396 | 150205038 | Acoustic signal detection through the cross-correlation method in experiments with different signal to noise ratio and reverberation conditions | International journal | S. Adrián-Martínez, M. Ardid, M. Bou-Cabo, et al. |
| 397 | 150202650 | The 2009 multiwavelength campaign on Mrk 421: Variability and correlation studies | International journal | Aleksić et al (MAGIC collaboration) & the VERITAS collaboration |
| 398 | 150201649 | Neutrino mass and invisible Higgs decays at the LHC | International journal | C. Bonilla, J.C. Romão, J.W.F. Valle |
| 399 | 150201529 | MAGIC observations of MWC 656, the only known Be/BH system | International journal | Aleksić et al (MAGIC collaboration) |
| 400 | 150200313 | The Mass-Concentration Relation and the Stellar-to-Halo Mass Ratio in the CFHT Stripe 82 Survey | International journal | H. Shan, J.-P. Kneib, R. Li, J. Comparat, et al |
| 401 | 150107843 | ANTARES constrains a blazar origin of two IceCube PeV neutrino events | International journal | Adrián-Martínez et al. (ANTARES Collaboration) |
| 402 | 150104821 | The Atmospheric Monitoring System of the JEM-EUSO Space Mission | International journal | Rodríguez Frías M.D., Toscano, S., Bozzo, E., del Peral, L., Neronov, A., and Wada, S. for the JEM-EUSO Collaboration |
| 403 | 150104769 | Thin and thick cloud top height retrieval algorithm with the Infrared Camera and LIDAR of the JEM-EUSO Space Mission. | International journal | Sáez-Cano, G., Morales de los Ríos, J. A., del Peral, L., Neronov, A., Wada, S. and Rodríguez Frías, M. D. for the JEM-EUSO Collaboration. |
| 404 | 150103799 | Resonant Higgs boson pair production in the $hh \rightarrow bb^-WW \rightarrow bb^-\ell+v\ell-v^-$ decay channel | International journal | Victor Martin-Lozano, Jesus M. Moreno, Chan Beom Park |
| 405 | 150102258 | Effects of Sfermion Mixing induced by RGE Running in the Minimal Flavor Violating CMSSM | International journal | M.E. Gomez, S. Heinemeyer, M. Rehman |
| 406 | 150100918 | Comparison of subdominant gravitational wave harmonics between post-Newtonian and numerical relativity calculations and construction of multi-mode hybrids | International journal | Juan Calderon Bustillo, Alejandro Bohe, Sascha Husa, Alicia M. Sintes, Mark Hannam, Michael Puerrer |
| 407 | 150100560 | Constraint on the time variation of the fine-structure constant with the SDSS-III/BOSS DR12 quasar sample | International journal | F. D. Albareti, J. Comparat, C. M. Gutiérrez, F. Prada et al. |

| | | | | |
|-----|---------------------------------------|---|-----------------------|---|
| 408 | 150100560 | Constraint on the time variation of the fine-structure constant with the SDSS-III/BOSS DR12 quasar sample | International journal | Franco D. Albareti, Johan Comparat, Carlos M. Gutiérrez, Francisco Prada, et al |
| 409 | Journal: Experimental Astronomy | The EUSO-Balloon pathfinder | International journal | The JEM-EUSO Collaboration |
| 410 | Journal: Experimental Astronomy | Ground-based tests of JEM-EUSO components at the Telescope Array site, "EUSO-TA" | International journal | The JEM-EUSO Collaboration |
| 411 | Journal: Experimental Astronomy | Science of atmospheric phenomena with JEM-EUSO | International journal | The JEM-EUSO Collaboration |
| 412 | Journal: Experimental Astronomy | JEM-EUSO: Meteor and nuclearite observations | International journal | The JEM-EUSO Collaboration |
| 413 | Journal: Experimental Astronomy | Space experiment TUS on board the Lomonosov satellite as pathfinder of JEM-EUSO | International journal | The JEM-EUSO Collaboration |
| 414 | Journal: Experimental Astronomy | Ultra high energy photons and neutrinos with JEM-EUSO | International journal | The JEM-EUSO Collaboration |
| 415 | Journal: EPJ Web of Conferences | The Atmospheric Monitoring System of the JEM-EUSO space mission | International journal | The JEM-EUSO Collaboration |
| 416 | Journal: Experimental Astronomy | Special Issue on the JEM-EUSO Mission | International journal | The JEM-EUSO Collaboration |
| 417 | Journal: Experimental Astronomy | The JEM-EUSO mission: An introduction | International journal | The JEM-EUSO Collaboration |

| | | | | |
|-----|---------------------------------------|---|-----------------------|---|
| 418 | Journal: Experimental Astronomy | The JEM-EUSO instrument | International journal | The JEM-EUSO Collaboration |
| 419 | Journal: Experimental Astronomy | The atmospheric monitoring system of the JEM-EUSO instrument | International journal | The JEM-EUSO Collaboration |
| 420 | Journal: Experimental Astronomy | The infrared camera onboard JEM-EUSO | International journal | The JEM-EUSO Collaboration |
| 421 | Journal: Experimental Astronomy | Calibration aspects of the JEM-EUSO mission.Calibration aspects of the JEM-EUSO mission. | International journal | The JEM-EUSO Collaboration |
| 422 | Journal: Experimental Astronomy | The JEM-EUSO observation in cloudy conditions | International journal | The JEM-EUSO Collaboration |
| 423 | Journal: Experimental Astronomy | Performances of JEM-EUSO: angular reconstruction | International journal | The JEM-EUSO Collaboration |
| 424 | Journal: Experimental Astronomy | Performances of JEM-EUSO: energy and X max reconstruction | International journal | The JEM-EUSO Collaboration |
| 425 | Journal of Instrumentation | Status of the Central Logic Board of the KM3NeT Neutrino Telescope | International journal | D. Calvo, D. Real |
| 426 | 161209566 | The most powerful astrophysical events: gravitational-wave peak luminosity of binary black holes as predicted by numerical relativity | International journal | David Keitel, Xisco Jiménez Forteza, Sascha Husa, Lionel London, Alessandro Nagar, Sebastiano Bernuzzi, Enno Harms, Mark Hannam, Sebastian Khan, Michael Pürrer, Geraint Pratten, Vivek Chaurasia |
| 427 | 161208589 | Search for high-energy neutrinos from bright GRBs with ANTARES | International journal | A. Albert et al. (ANTARES Collaboration) |

| | | | | |
|-----|-----------|---|-----------------------|--|
| 428 | 161207681 | Higgs-Boson Masses and Mixing Matrices in the NMSSM: Analysis of On-Shell Calculations | International journal | Peter Drechsel, Ramona Gröber, Sven Heinemeyer, Milada Margarete Muhlleitner, Heidi Rzehak, Georg Weiglein |
| 429 | 161207377 | Probing CP violation with non-unitary mixing in long-baseline neutrino oscillation experiments: DUNE as a case study | International journal | F. J. Escrihuela, D. V. Forero, O. G. Miranda, M. Tórtola, J. W. F. Valle |
| 430 | 161205621 | Intrinsic limits on resolutions in muon- and electron-neutrino charged-current events in the KM3NeT/ORCA detector | International journal | S. Adrián-Martínez et al. (KM3NeT Collaboration) |
| 431 | 161107025 | Perspectives for detecting lepton flavour violation in left-right symmetric models | International journal | C. Bonilla, M.E. Krauss, T. Opferkuch, W. Porod |
| 432 | 161103468 | Non-renormalizable operators for solar neutrino mass generation in Split SuSy with bilinear R-parity violation | International journal | M.A. Diaz, B. Koch, N. Rojas |
| 433 | 161102066 | Unifying left-right symmetry and 331 electroweak theories | International journal | M. Reig, J.W.F. Valle, C.A. Vaquera-Araujo |
| 434 | 161100332 | Hierarchical data-driven approach to fitting numerical relativity data for non-precessing binary black holes, with an application to final spin and radiated energy | International journal | Xisco Jiménez-Forteza, David Keitel, Sascha Husa, Mark Hannam, Sebastian Khan, Michael Pürrer |
| 435 | 161004190 | Remarks on the Standard Model predictions for $R(D)$ and $R(D^*)$ | International journal | C.S. Kim, G. López-Castro, S.L. Tostado, A. Vicente |
| 436 | 161004096 | QCD corrections and long-range mechanisms of neutrinoless double beta decay | International journal | C. Arbeláez, M. González, M. Hirsch, S. Kovalenko |
| 437 | 161003822 | Confronting SUSY models with LHC data via electroweakino production | International journal | C. Arina, M. Chala, V. Martin-Lozano, G. Nardini |
| 438 | 161003506 | The clustering of galaxies in the completed SDSS-III Baryon Oscillation Spectroscopic Survey: theoretical systematics and Baryon Acoustic Oscillations in the galaxy correlation function | International journal | Mariana Vargas-Magaña, Shirley Ho, et al. |
| 439 | 161002552 | Diffuse flux of galactic neutrinos and gamma rays | International journal | J.M. Carceller, M. Masip |

| | | | | |
|-----|-----------|---|-----------------------|---|
| 440 | 161001814 | Very High-Energy Gamma-Ray Follow-Up Program Using Neutrino Triggers from IceCube | International journal | M. G. Aartsen et al (the IceCube, MAGIC and VERITAS Collaborations) |
| 441 | 160908563 | New limits on neutrino magnetic moments from low energy neutrino data | International journal | B C Canas, O G Miranda, A Parada, M Tortola, J W F Valle |
| 442 | 160907372 | Time-dependent search for neutrino emission from x-ray binaries with the ANTARES telescope | International journal | A. Albert et al. (ANTARES Collaboration) |
| 443 | 160904941 | A new observable in extensive air showers | International journal | C.A. Garcia-Canal, J.I. Illana, M. Masip, S.J. Sciutto |
| 444 | 160902350 | Fermi Large Area Telescope as a Galactic Supernovae Axionscope | International journal | Meyer, M.; Giannotti, M.; Mirizzi, A.; Conrad, J.; Sánchez-Conde, M. A. |
| 445 | 160901095 | Detection of very high energy gamma-ray emission from the gravitationally-lensed blazar QSO B0218+357 with the MAGIC telescopes | International journal | M. L. Ahnen et al. (the MAGIC Collaboration) |
| 446 | 160808840 | Stacked search for time shifted high energy neutrinos from gamma ray bursts with the ANTARES neutrino telescope | International journal | S. Adrián-Martínez et al., (ANTARES Collaboration) |
| 447 | 160807295 | Constraining flavor changing interactions from LHC Run-2 dilepton bounds with vector mediators | International journal | F.S. Queiroz, C. Siqueira, J.W.F. Valle |
| 448 | 160805334 | 331 models and grand unification: From minimal SU(5) to minimal SU(6) | International journal | F.F. Deppisch, C. Hati, S. Patra, U. Sarkar, J.W.F. Valle |
| 449 | 160804755 | Scrutinizing a di-photon resonance at the LHC through Moscow zero | International journal | Giorgio Arcadi, Pradipta Ghosh, Yann Mambrini, Mathias Pierre |
| 450 | 160803746 | Model-independent limits and constraints on extended theories of gravity from cosmic reconstruction techniques | International journal | Dombriz et al. |
| 451 | 160803660 | Galaxy Three-Point Correlation Functions and Halo/Subhalo Models | International journal | Hong Guo, Zheng Zheng, et al. |
| 452 | 160802671 | The weak mixing angle from low energy neutrino measurements: A global update | International journal | B.C. Cañas, E.A. Garces, O.G. Miranda, M. Tortola, J.W.F. Valle |

| | | | | |
|-----|-----------|--|-----------------------|---|
| 453 | 160801349 | Phenomenology of an $SU(2) \times SU(2) \times U(1)$ model with lepton-flavour non-universality | International journal | S.M. Boucenna, A. Celis, J. Fuentes-Martin, A. Vicente, J. Virto |
| 454 | 160800638 | The Light and Heavy Higgs Interpretation of the MSSM | International journal | Philip Bechtle, Howard E. Haber, Sven Heinemeyer, Oscar Stål, Tim Stefaniak, Georg Weiglein, Lisa Zeune |
| 455 | 160706328 | Lepton number violation in 331 models | International journal | R.M. Fonseca, M. Hirsch |
| 456 | 160706097 | Detection of Baryon Acoustic Oscillation Features in the Large-Scale 3-Point Correlation Function of SDSS BOSS DR12 CMASS Galaxies | International journal | Zachary Slepian, Daniel J. Eisenstein, Joel R. Brownstein, Chia-Hsun Chuang, et al. |
| 457 | 160705641 | Quasi-Dirac neutrinos at the LHC | International journal | G. Anamiati, M. Hirsch, E. Nardi |
| 458 | 160703155 | The clustering of galaxies in the completed SDSS-III Baryon Oscillation Spectroscopic Survey: cosmological analysis of the DR12 galaxy sample | International journal | Shadab Alam, Metin Ata, Stephen Bailey, Florian Beutler, Dmitry Bizyaev, Jonathan A. Blazek, Adam S. Bolton, Joel R. Brownstein, Angela Burden, Chia-Hsun Chuang, Johan Comparat, et al. |
| 459 | 160703154 | The clustering of galaxies in the completed SDSS-III Baryon Oscillation Spectroscopic Survey: tomographic BAO analysis of DR12 combined sample in configuration space | International journal | Yuting Wang, Gong-Bo Zhao, Chia-Hsun Chuang, Ashley J. Ross, Will J. Percival, Héctor Gil-Marín, Antonio J. Cuesta, Francisco-Shu Kitaura, Sergio Rodríguez-Torres, Joel R. Brownstein, Daniel J. Eisenstein, Shirley Ho, Jean-Paul Kneib, Matt Olmstead, Francisco Prada, et al. |
| 460 | 160703151 | The Clustering of Galaxies in the Completed SDSS-III Baryon Oscillation Spectroscopic Survey: single-probe measurements from DR12 galaxy clustering -- towards an accurate model | International journal | Chia-Hsun Chuang, Marcos Pellejero-Ibanez, Sergio Rodríguez-Torres, Ashley J. Ross, Gong-bo Zhao, Yuting Wang, Antonio J. Cuesta, J. A. Rubiño-Martín, Francisco Prada, et al. |

| | | | | |
|-----|-----------|--|-----------------------|--|
| 461 | 160703150 | The clustering of galaxies in the completed SDSS-III Baryon Oscillation Spectroscopic Survey: Anisotropic galaxy clustering in Fourier-space | International journal | F. Beutler, H.-J. Seo, S. Saito, C.-H. Chuang, A. J. Cuesta, D. J. Eisenstein, H. Gil-Marín, J. Niklas Grieb, N. Hand, F.-S. Kitaura, C. Modi, R. C. Nichol, M. D. Olmstead, W. J. Percival, F. Prada, A. G. Sánchez, S. Rodriguez-Torres et al. |
| 462 | 160703149 | The clustering of galaxies in the completed SDSS-III Baryon Oscillation Spectroscopic Survey: Baryon Acoustic Oscillations in Fourier-space | International journal | Florian Beutler, Hee-Jong Seo, Ashley J. Ross, Patrick McDonald, Shun Saito, Adam S. Bolton, Joel R. Brownstein, Chia-Hsun Chuang, et al. |
| 463 | 160703147 | The clustering of galaxies in the completed SDSS-III Baryon Oscillation Spectroscopic Survey: cosmological implications of the configuration-space clustering wedges | International journal | A. G. Sanchez, R. Scoccimarro, M. Crocce, J. Niklas Grieb, S. Salazar-Albornoz, C. DallaVecchia, M. Lippich, Florian Beutler, Joel R. Brownstein, Chia-Hsun Chuang, Daniel J. Eisenstein, Francisco-Shu Kitaura, Matthew D. Olmstead, Will J. Percival, Francisco Prada, Sergio Rodriguez-Torres, et al. |
| 464 | 160703146 | The clustering of galaxies in the completed SDSS-III Baryon Oscillation Spectroscopic Survey: combining correlated Gaussian posterior distributions | International journal | A. G. Sanchez, J. Niklas Grieb, S. Salazar-Albornoz, S. Alam, F. Beutler, A. J. Ross, J. R. Brownstein, C.-H. Chuang, A. J. Cuesta, D. J. Eisenstein, F.-S. Kitaura, W. J. Percival, F. Prada, S. Rodriguez-Torres, et al. |
| 465 | 160703145 | The clustering of galaxies in the completed SDSS-III Baryon Oscillation Spectroscopic Survey: Observational systematics and baryon acoustic oscillations in the correlation function | International journal | Ashley J. Ross, Florian Beutler, Chia-Hsun Chuang, Marcos Pellejero-Ibanez, Hee-Jong Seo, et al. |

| | | | | |
|-----|-----------|---|-----------------------|---|
| 466 | 160703144 | The clustering of galaxies in the completed SDSS-III Baryon Oscillation Spectroscopic Survey: Angular clustering tomography and its cosmological implications | International journal | Salvador Salazar-Albornoz, Ariel G. Sanchez, Jan Niklas Grieb, Martin Crocce, Roman Scoccimarro, Shadab Alam, Florian Beutler, Joel R. Brownstein, Chia-Hsun Chuang, Francisco-Shu Kitaura, Matthew D. Olmstead, Will J. Percival, Francisco Prada, Sergio Rodríguez-Torres, et al. |
| 467 | 160703143 | The clustering of galaxies in the completed SDSS-III Baryon Oscillation Spectroscopic Survey: Cosmological implications of the Fourier space wedges of the final sample | International journal | Jan Niklas Grieb, Ariel G. Sánchez, Salvador Salazar-Albornoz, Román Scoccimarro, Martín Crocce, Claudio Dalla Vecchia, Francesco Montesano, Héctor Gil-Marín, Ashley J. Ross, Florian Beutler, Sergio Rodríguez-Torres, Chia-Hsun Chuang, Francisco Prada, Francisco-Shu Kitaura, et al. |
| 468 | 160609555 | Scalar-mediated double beta decay and LHC | International journal | L. Gonzalez, J.C. Helo, M. Hirsch, S.G. Kovalenko |
| 469 | 160608499 | Realistic $SU(3)c \times SU(3)L \times U(1)X$ model with a type II Dirac neutrino seesaw mechanism | International journal | M. Reig, J.W.F. Valle, C.A. Vaquera-Araujo |
| 470 | 160606986 | Relic neutrino decoupling with flavour oscillations revisited | International journal | P.F. de Salas, S. Pastor |
| 471 | 160606981 | Charged Higgs Boson Production at e^+e^- Colliders in the Complex MSSM: A Full One-Loop Analysis | International journal | S. Heinemeyer, C. Schappacher |
| 472 | 160601109 | A flipped 331 model | International journal | R.M. Fonseca, M. Hirsch |
| 473 | 160600660 | Comparison of methods for the detection of gravitational waves from unknown neutron stars | International journal | S. Walsh, M. Pitkin, M. Oliver, S. D'Antonio, V. Dergachev, A. Królak, P. Astone, M. Bejger, M. Di Giovanni, O. Dorosh, S. Frasca, P. Leaci, S. Mastrogiovanni, A. Miller, C. Palomba, M. A. Papa, O. J. Piccinni, K. Riles, O. Sauter, and A. M. Sintes |

| | | | | |
|-----|-----------|--|-----------------------|---|
| 474 | 160600439 | The clustering of galaxies in the SDSS-III Baryon Oscillation Spectroscopic Survey: RSD measurement from the power spectrum and bispectrum of the DR12 BOSS galaxies | International journal | Héctor Gil-Marín, Will J. Percival, Licia Verde, Joel R. Brownstein, Chia-Hsun Chuang, Francisco-Shu Kitaura, Sergio A. Rodríguez-Torres, Matthew D. Olmstead |
| 475 | 160509745 | The Clustering of Galaxies in the Completed SDSS-III Baryon Oscillation Spectroscopic Survey: Cosmic Flows and Cosmic Web from Luminous Red Galaxies | International journal | Metin Ata, Francisco-Shu Kitaura, Chia-Hsun Chuang, Sergio Rodríguez-Torres, Raul E. Angulo, Simone Ferraro, et al. |
| 476 | 160508362 | Naturally light neutrinos in Dirac model | International journal | C. Bonilla, J.W.F. Valle |
| 477 | 160507617 | On the dynamical state of galaxy clusters: insights from cosmological simulations - II. | International journal | Cui, Weiguang; Power, Chris; Borgani, Stefano; Knebe, Alexander; Lewis, Geraint F.; Murante, Giuseppe; Poole, Gregory B. |
| 478 | 160502875 | The evolution of the [OII], H β and [OIII] emission-line luminosity functions over the last nine billions years | International journal | Johan Comparat, Guangtun Zhu, et al. |
| 479 | 160502013 | Flavor Mixing Phenomenology in Supersymmetric Models | International journal | Muhammad Rehman |
| 480 | 160501915 | Lepton Flavor Violation in the singlet-triplet scotogenic model | International journal | P. Rocha-Moran, A. Vicente |
| 481 | 160501670 | Measuring the leptonic CP phase in neutrino oscillations with nonunitary mixing | International journal | Shao-Feng Ge, P. Pasquini, M. Tortola, J.W.F. Valle |
| 482 | 160500569 | Lorentz invariant relative velocity and relativistic binary collisions | International journal | Mirco Cannoni |
| 483 | 160405690 | New ambiguity in probing CP violation in neutrino oscillations | International journal | O.G. Miranda, M. Tortola, J.W.F. Valle |
| 484 | 160403510 | Classifying CP transformations according to their texture zeros: Theory and implications | International journal | P. Chen, G.J. Ding, F. Gonzalez-Canales, J.W.F. Valle |
| 485 | 160403088 | Non-abelian gauge extensions for B-decay anomalies | International journal | S.M. Boucenna, A. Celis, J. Fuentes-Martin, A. Vicente, J. Virto |
| 486 | 160402117 | String completion of an SU(3)c x SU(3)L x U(1)X electroweak model | International journal | A. Addazi, J.W.F. Valle, C.A. Vaquera-Araujo |

| | | | | |
|-----|-----------|--|-----------------------|---|
| 487 | 160401463 | Sussing merger trees: stability and convergence | International journal | Wang, Yang; Pearce, Frazer R.; Knebe, Alexander; Schneider, Aurel; Srisawat, Chaichalit; Tweed, Dylan; Jung, Intae; Han, Jiaxin; Helly, John; Onions, Julian; Elahi, Pascal J.; Thomas, Peter A.; Behroozi, Peter; Yi, Sukyoung K.; Rodriguez-Gomez, Vicente; Mao, Yao-Yuan; Jing, Yipeng; Lin, Weipeng |
| 488 | 160307308 | Multi-Wavelength Observations of the Blazar 1ES 1011+496 in Spring 2008 | International journal | M. L. Ahnen et al. (the MAGIC Collaboration) |
| 489 | 160306978 | Search for Spectral Irregularities due to Photon-Axionlike-Particle Oscillations with the Fermi Large Area Telescope | International journal | Ajello M. et al (the Fermi LAT collaboration) |
| 490 | 160306973 | Super-orbital variability of LS I +61°303 at TeV energies | International journal | M. L. Ahnen et al. (the MAGIC Collaboration) |
| 491 | 160306776 | Insights into the emission of the blazar 1ES 1011+496 through unprecedented broadband observations during 2011 and 2012 | International journal | Aleksić et al. (MAGIC collaboration) |
| 492 | 160306523 | Investigating the peculiar emission from the new VHE gamma-ray source H1722+119 | International journal | M. L. Ahnen et al. (the MAGIC Collaboration) |
| 493 | 160302271 | Murchison Widefield Array Limits on Radio Emission from ANTARES Neutrino Events | International journal | S. Croft et al. (ANTARES Collaboration) |
| 494 | 160300730 | Search for VHE gamma-ray emission from Geminga pulsar and nebula with the MAGIC telescopes | International journal | M. L. Ahnen et al. (the MAGIC Collaboration) |
| 495 | 160208092 | Flavor physics scenario for the 750 GeV diphoton anomaly | International journal | C. Bonilla, M. Nebot, R. Srivastava, J.W.F. Valle |
| 496 | 160207691 | The NMSSM lives - with the 750 GeV diphoton excess | International journal | F. Domingo, S. Heinemeyer, J.S. Kim, K. Rolbiecki |
| 497 | 160207246 | Development of the Model of Galactic Interstellar Emission for Standard Point-Source Analysis of Fermi Large Area Telescope Data | International journal | Acero F. et al. (the Fermi LAT collaboration) |

| | | | | |
|-----|-----------|--|-----------------------|--|
| 498 | 160206892 | Reducing the fine-tuning of gauge-mediated SUSY breaking | International journal | J. Alberto Casas, Jesus M. Moreno, Sandra Robles, Krzysztof Rolbiecki |
| 499 | 160205581 | Precision tools and models to narrow in on the 750 GeV diphoton resonance | International journal | F. Staub, P. Athron, L. Basso, M.D. Goodsell, D. Harries, M.E. Krauss, K. Nickel, T. Opferkuch, L. Ubaldi, A. Vicente, A. Voigt |
| 500 | 160205411 | High-energy Neutrino follow-up search of Gravitational Wave Event GW150914 with ANTARES and IceCube | International journal | S. Adrián-Martínez et al., (ANTARES Collaboration) |
| 501 | 160205239 | Magic observations of the February 2014 flare of 1ES 1011+496 and ensuing constraint of the EBL density | International journal | M. L. Ahnen et al. (the MAGIC Collaboration) |
| 502 | 160203362 | Long-range contributions to double beta decay revisited | International journal | J.C. Helo, M. Hirsch, T. Ota |
| 503 | 160203290 | Gravitational effects on the Higgs field within the Solar System | International journal | Franco D. Albareti, Antonio L. Maroto, Francisco Prada |
| 504 | 160203099 | Deep observation of the NGC 1275 region with MAGIC: search of diffuse γ -ray emission from cosmic rays in the Perseus cluster | International journal | Ahnen et al. (MAGIC) |
| 505 | 160203036 | Constraints on the neutrino emission from the Galactic Ridge with the ANTARES telescope | International journal | S. Adrián-Martínez et al., (ANTARES Collaboration) |
| 506 | 160202776 | Gravitational perturbations of the Higgs field | International journal | Franco D. Albareti, Antonio L. Maroto, Francisco Prada |
| 507 | 160202243 | Bayesian analysis of cosmic-ray propagation: evidence against homogeneous diffusion | International journal | G. Johannesson, R. Ruiz de Austri, A.C. Vincent, I.V. Moskalenko, E. Orlando, T.A. Porter, A.W. Strong, R. Trotta, F. Feroz, P. Graff, M.P. Hobson |
| 508 | 160202231 | Testing the mapping between redshift and cosmic scale factor | International journal | Radosław Wojtak, Francisco Prada |
| 509 | 160200864 | Neutrino oscillations and the seesaw origin of neutrino mass | International journal | O.G. Miranda, J.W.F. Valle |
| 510 | 160108100 | Precise Predictions for the Higgs-Boson Masses in the NMSSM | International journal | P. Drechsel, S. Heinemeyer, L. Galeta, G. Weiglein |

| | | | | |
|-----|-------------|--|-----------------------|--|
| 511 | 160107459 | Letter of intent for KM3NeT 2.0 | International journal | S. Adrián-Martínez et al., (KM3NeT Collaboration) |
| 512 | 160105746 | Effects of Sfermion Mixing induced by RGE in the CMSSM | International journal | M. Gomez, S. Heinemeyer, M. Rehman |
| 513 | 160105237 | Dynamical seesaw mechanism for Dirac neutrinos | International journal | J.W.F. Valle, C.A. Vaquera-Araujo |
| 514 | 160104079 | Free hyperboloidal evolution in spherical symmetry | International journal | Alex Vañó-Viñuales, Sascha Husa |
| 515 | 170.702.471 | Searching for left sneutrino LSP at the LHC | International journal | Pradipta Ghosh, Inaki Lara, Daniel E. Lopez-Fogliani, Carlos Munoz, Roberto Ruiz de Austri |
| 516 | 170701583 | A cut-off in the TeV gamma-ray spectrum of the SNR Cassiopeia A | International journal | MAGIC Collaboration |
| 517 | 170700887 | MAGIC observations of the microquasar V404 Cygni during the 2015 outburst | International journal | M. L. Ahnen, S. Ansoldi, L. A. Antonelli, et al. |
| 518 | 170607818 | Constraints on hidden gravitons from fifth-force experiments and stellar energy loss | International journal | J. A. R. Cembranos, A. L. Maroto, H. Villarrubia-Rojo |
| 519 | 170605392 | Constraining Neutrino Masses, the Cosmological Constant and BSM Physics from the Weak Gravity Conjecture | International journal | Luis E. Ibanez, Victor Martin-Lozano, Irene Valenzuela |
| 520 | 170601857 | First all-flavour Neutrino Point-like Source Search with the ANTARES Neutrino Telescope | International journal | ANTARES Collaboration |
| 521 | 170601378 | Observation of the Black Widow B1957+20 millisecond pulsar binary system with the MAGIC telescopes | International journal | MAGIC Collaboration |
| 522 | 170601290 | High energy neutrinos from the Sun | International journal | M. Masip |
| 523 | 170600346 | Reconciling EFT and hybrid calculations of the light MSSM Higgs-boson mass | International journal | Henning Bahl, Sven Heinemeyer, Wolfgang Holllik, Georg Weiglein |
| 524 | 170506497 | Probing the Electroweakino Sector of General Gauge Mediation at the LHC | International journal | Jong Soo Kim, Manuel E. Krauss, Victor Martin-Lozano |
| 525 | 170502526 | Novel signatures for vector-like quarks | International journal | J.A. Aguilar-Saavedra, D.E. López-Fogliani, C. Muñoz |

| | | | | |
|-----|-----------|---|-----------------------|---|
| 526 | 170501790 | Monte Carlo Performance Studies for the Site Selection of the Cherenkov Telescope Array | International journal | T.Hassan, ..., A. Moralejo et al. |
| 527 | 170500497 | New Constraints on all flavour Galactic diffuse neutrino emission with the ANTARES telescope | International journal | A. Albert, M. André, M. Anghinolfi, G. Anton, M. Ardid et al. |
| 528 | 170500013 | Observational evidence of galaxy assembly bias | International journal | Antonio D. Montero-Dorta, Enrique Perez, Francisco Prada, Sergio Rodriguez-Torres, Ginevra Favole, Anatoly Klypin, et al. |
| 529 | 170407627 | Chargino and Neutralino Production at e+e- Colliders in the Complex MSSM: A Full One-Loop Analysis | International journal | S. Heinemeyer, C. Schappacher |
| 530 | 170404504 | DsixTools: the standard model effective field theory toolkit | International journal | A. Celis, J. Fuentes-Martin, A. Vicente, J. Virto |
| 531 | 170404136 | Prospects for CTA observations of the young SNR RX J1713.7-3946 | International journal | The CTA Consortium |
| 532 | 170400906 | Performance of the MAGIC telescopes under moonlight | International journal | MAGIC Collaboration |
| 533 | 170310786 | Origin of the high-energy neutrino flux at IceCube | International journal | J.M. Carceller, J.I. Illana, M. Masip, D. Meloni |
| 534 | 170309647 | Towards gauge coupling unification in left-right symmetric $SU(3)_C \times SU(3)_L \times SU(3)_R \times U(1)_X$ theories | International journal | C. Hati, S. Patra, M. Reig, J.W.F. Valle, C.A. Vaquera-Araujo |
| 535 | 170307651 | First Multi-wavelength Campaign on the Gamma-ray-loud Active Galaxy IC 310 | International journal | M. L. Ahnen (1), S. Ansoldi (2,25), L. A. Antonelli (3), et al. |
| 536 | 170306298 | Search for High-energy Neutrinos from Gravitational Wave Event GW151226 and Candidate LVT151012 with ANTARES and IceCube | International journal | A. Albert et al. (ANTARES, IceCube and LIGO Collaborations) |
| 537 | 170306140 | Reionization of the Milky Way, M31, and their satellites I: reionization history and star formation | International journal | Keri L. Dixon, Ilian T. Iliev, Stefan Gottlöber, Gustavo Yepes, Alexander Knebe, Noam Libeskind, Yehuda Hoffman |
| 538 | 170306012 | Pushing down the low-mass halo concentration frontier with the Lomonosov cosmological simulations | International journal | Pilipenko, Sergey V.; Sánchez-Conde, Miguel A.; Prada, Francisco; Yepes, Gustavo |

| | | | | |
|-----|-----------|--|-----------------------|--|
| 539 | 170304351 | Model-independent search for neutrino sources with the ANTARES neutrino telescope | International journal | A. Albert et al. (ANTARES Collaboration) |
| 540 | 170302432 | An algorithm for the reconstruction of high-energy neutrino-induced particle showers and its application to the ANTARES neutrino telescope | International journal | A. Albert et al. (ANTARES Collaboration) |
| 541 | 170302229 | Lepton flavor violating Higgs Boson Decays in Supersymmetric High Scale Seesaw Models | International journal | M.E. Gomez, S. Heinemeyer, M. Rehman |
| 542 | 170300424 | Search for relativistic magnetic monopoles with five years of the ANTARES detector data | International journal | A. Albert et al. (ANTARES Collaboration) |
| 543 | 170207677 | Very-high-energy gamma-ray observations of the Type Ia Supernova SN 2014J with the MAGIC telescopes | International journal | MAGIC Collaboration |
| 544 | 170206795 | MAGIC detection of very high energy gamma-ray emission from the low-luminosity blazar 1ES 1741+196 | International journal | MAGIC Collaboration |
| 545 | 170205333 | The Potential of the ILC for Discovering New Particles | International journal | Keisuke Fujii, Christophe Grojean, Michael E. Peskin, et al. |
| 546 | 170201124 | Diffuse cosmic rays shining in the Galactic center: A novel interpretation of H.E.S.S. and Fermi-LAT gamma-ray data | International journal | D. Gaggero, D. Grasso, A. Marinelli, M. Taoso, A. Urbano |
| 547 | 170108977 | The running of featureful primordial power spectra | International journal | S. Gariazzo, O. Mena, V. Miralles, H. Ramirez, L. Boubekeur |
| 548 | 170108165 | The clustering of galaxies in the completed SDSS-III Baryon Oscillation Spectroscopic Survey: Examining the observational evidence for dynamical dark energy | International journal | Gong-Bo Zhao, Marco Raveri, Levon Pogosian, et al. |
| 549 | 170102652 | On a reinterpretation of the Higgs field in supersymmetry and a proposal for new quarks | International journal | D Lopez-Fogliani, C. Munoz |

| Dissemination of results – articles in conference proceedings and books derived from the Project: <u>44</u> | | | | |
|---|--|---|---|---|
| | Reference (ePrint) http://arxiv.org/ | Title | Type of publication (scientific article) | Authors |
| 1 | 10021912 | Direct Detection of WIMPs | Proceedings of international conference | D.G. Cerdeno and A.M. Green |
| 2 | 11106775 | Searches for Dark Matter signatures in the Segue 1 dwarf spheroidal galaxy with the MAGIC-I telescope | Proceedings of international conference | S. Paiano, S. Lombardi, M. Doro, D. Nieto, for the MAGIC Collaboration, M. Fornasa |
| 3 | 11100324 | Dark Matter implications of the Fermi-LAT measurement of anisotropies in the diffuse gamma-ray background: status report. | Proceedings of international conference | Mattia Fornasa, Jesus Zavala, Miguel A. Sanchez-Conde, Francisco Prada, Mark Vogelsberger |
| 4 | 11096781 | Segue 1: the best dark matter candidate dwarf galaxy surveyed by MAGIC | Proceedings of international conference | J. Aleksic, M. Doro, S. Lombardi, D. Nieto, for the MAGIC Collaboration, M. Fornasa |
| 5 | 11096216 | Observation of the Perseus galaxy cluster with the MAGIC telescopes | Proceedings of international conference | S. Lombardi, F. Zandanel, P. Colin, M. Doro, D. Hildebrand, F. Prada, for the MAGIC Collaboration, C. Pfrommer, A. Pinzke |
| 6 | 11095935 | The search for galactic dark matter clump candidates with Fermi and MAGIC | Proceedings of international conference | Nieto et al. for the MAGIC Coll. |
| 7 | 11095027 | Dark matter with photons | Proceedings of international conference | Alvaro de la Cruz-Dombriz and Viviana Gammaldi |
| 8 | 11085206 | Dark Matter Seeding in Neutron Stars | Proceedings of international conference | M. A. Perez-Garcia, J. Silk, J. R. Stone |
| 9 | 11062096 | Cosmic ray constraints on singlino-like dark matter candidates | Proceedings of international conference | T. Delahaye, D.G. Cerdeno, J. Lavalle |
| 10 | 10124473 | Fitting formulae for photon spectra from WIMP annihilation. | Proceedings of international conference | J.A.R. Cembranos, A. de la Cruz-Dombriz, A. Dobado, R. Lineros, A.L. Maroto |
| 11 | 10120755 | Measurement of anisotropies in the large-scale diffuse gamma-ray emission | Proceedings of international conference | German Gomez Vargas, on behalf of the Fermi-LAT collaboration |
| 12 | 10120447 | Specific Dark Matter signatures from hidden U(1) | Proceedings of international conference | Yann Mambrini |
| 13 | 10112137 | Photon spectra from quark generation by WIMPs. | Proceedings of international conference | J.A.R. Cembranos, A. de la Cruz-Dombriz, A. Dobado, R. Lineros, A.L. Maroto |

| | | | | |
|----|-------------|---|---|--|
| 14 | | Complementarity of LHC and direct detection data for the identification of dark matter | Proceedings of international conference | D.G. cerdeno |
| 15 | | 2010 update on the ROSEBUD Project | Proceedings of international conference | N. Coron, J. Gironnet, P. de Marcillac, M. Martínez, T. Redon, L. Torres, C. Cuesta, E. García, C. Ginestra, Y. Ortigoza*, A. Ortiz de Solórzano, C. Pobes, J. Puimedón, T. Rolón, A. Salinas, M.L. Sarsa, J.A. Villar |
| 16 | | Low energy events in NaI(Tl) scintillators. ANAIS status and prospects | Proceedings of international conference | J. Amaré, S. Borjabad, S. Cebrián, C. Cuesta1, D. Fortuño, E. García, C. Ginestra, H. Gómez, M. Martínez, M. A. Oliván, Y. Ortigoza, A. Ortiz de Solórzano, C. Pobes, J. Puimedón, M. L. Sarsa and J. A. Villar |
| 17 | | Internal bremsstrahlung in neutralino annihilation: Revised impact on indirect detection from gamma-rays | Proceedings of international conference | M. Cannoni, M.E. Gomez, M.A. Sanchez-Conde, F. Prada, O. Panella |
| 18 | PoS IDM2010 | Internal bremsstrahlung in neutralino annihilation: Revised impact on indirect detection through gamma-rays | Proceedings of international conference | Cannoni et al. |
| 19 | 12121290 | Indirect search for dark matter with the ANTARES neutrino telescope | Proceedings of international conference | G. Lambard |
| 20 | 12045290 | Search for Dark Matter in the Sun with the ANTARES Neutrino Telescope in the CMSSM and mUED frameworks | Proceedings of international conference | J.D. Zornoza |
| 21 | 12045066 | Dark matter search with the ANTARES neutrino telescope | Proceedings of international conference | J.D. Zornoza |
| 22 | 12030678 | Indirect Dark Matter Searches and Models | Proceedings of international conference | Carlos Muñoz |
| 23 | | Update on the ANAIS experiment. ANAIS-0 prototype results at the new Canfranc Underground Laboratory | Proceedings of international conference | J. Amaré, S. Cebrián, C. Cuesta, D. Fortuño, E. García, C. Ginestra, H. Gómez, M. Martínez, M. A. Oliván, Y. Ortigoza, A. Ortiz de Solórzano, C. Pobes, J. Puimedón, M. L. Sarsa and J. A. Villar |

| | | | |
|----|---|---|--|
| 24 | Measurement of the differential neutron flux inside a lead shielding in a cryogenic experiment. | Proceedings of international conference | N. Coron, J. Gironnet, P. de Marcillac, M. Martínez, T. Redon, L. Torres, C. Cuesta, E. García, C. Ginestra, Y. Ortigoza*, A. Ortiz de Solórzano, C. Pobes, J. Puimedón, T. Rolón, A. Salinas, M.L. Sarsa, J.A. Villar |
| 25 | Background model for a NaI (Tl) detector devoted to dark matter searches | Proceedings of international conference | S. Cebrián, C. Cuesta, J. Amaré, S. Borjabad, D. Fortuño, E. García, C. Ginestra, H. Gómez, M. Martínez, M.A. Oliván, Y. Ortigoza, A. Ortiz de Solórzano, C. Pobes, J. Puimedón, M.L. Sarsa, J.A. Villar |
| 26 | First results on dark matter annihilation in the Sun using the ANTARES neutrino telescope | Proceedings of international conference | S. Adrián-Martínez et al. (ANTARES Collaboration) |
| 27 | Proceedings of the 9th workshop on Science with the New Generation of High Energy Gamma-ray Experiments: From high energy gamma sources to cosmic rays, one century after their discovery | Proceedings of international conference | Aldo Morselli et al. |
| 28 | EURECA Conceptual Design Report 2012 | Proceedings of international conference | G. Angloher, E. Armengaud, C. Augier, M. Bauer, A. Benoit, T. Bergmann, J. Blümer, A. Broniatowski, V. Brudanin, P. Camus, B. Censier, N. Coron, P. Coulter, G.A. Cox, C. Cuesta, F.A. Danevich, L. Dumoulin, K. Eitel, A. Erb, F. von Feilitzsch, D. Filosofov, E. García, J. Gascon, G. Gerbier, C. Gine |
| 29 | Response of parylene-coated NaI(Tl) scintillators at low temperature | Proceedings of international conference | N. Coron, C. Cuesta, E. García, C. Ginestra, T. Girard, P. de Marcillac, M. Martínez, Y. Ortigoza, A. Ortiz de Solórzano, C. Pobes, J. Puimedón, T. Redon, M.L. Sarsa, L. Torres, P. Valko, J.A. Villar |
| 30 | The KM3NeT Neutrino Telescope: Status and Prospects | Proceedings of international conference | J.J. Hernández-Rey |
| 31 | Overview of ANTARES results on Dark Matter Searches | Proceedings of international conference | J.D. Zornoza |
| 32 | Neutrinos in High Energy and Astroparticle Physics | Libro | Jose W. Furtado Valle, Jorge Romao |

| | | | | |
|----|-----------|--|---|--|
| 33 | 151204239 | Status of the ANAIS Dark Matter Project at the Canfranc Underground Laboratory | Proceedings of international conference | J. Amaré, S. Cebrián, C. Cuesta, E. García, M. Martínez, M.A. Oliván, Y. Ortigoza, A. Ortiz de Solórzano, C. Pobes, J. Puimedón, M.L. Sarsa, J.A. Villar, P. Villar |
| 34 | 151004508 | The indirect search for dark matter with the ANTARES neutrino telescope | Proceedings of international conference | C. Tönnis et al (ANTARES collaboration) |
| 35 | 150807213 | Status of the ANAIS Dark Matter Project at the Canfranc Underground Laboratory | Proceedings of international conference | J. Amare, S. Cebrian, C. Cuesta, E. Garcia, M. Martinez, M.A. Olivan, Y. Ortigoza, A. Ortiz de Solorzano, C. Pobes, J. Puimedon, M.L. Sarsa, J.A. Villar, P. Villar |
| 36 | 150806152 | Light Collection in the Prototypes of the ANAIS Dark Matter Project | Proceedings of international conference | Julio Amaré, Susana Cebrián, Clara Cuesta, Eduardo García, María Martínez, Miguel A. Oliván, Ysrael Ortigoza, Alfonso Ortíz de Solórzano, Carlos Pobes, Jorge Puimedón, María Luisa Sarsa, José Ángel Villar, Patricia Villar |
| 37 | 150806128 | Prospects for Indirect Dark Matter Searches with the Cherenkov Telescope Array (CTA) | Proceedings of international conference | J. Carr, C. Balazs, T. Bringmann, T. Buanes, M. K. Daniel, M. Doro, C. Farnier, M. Fornasa, J. Gaskins, G. A. Gomez-Vargas, M. Hayashida, K. Kohri, V. Lefranc, A. Morselli, E. Moulin, N. Mirabal, J. Rico, T. Saito, M.A. Sanchez-Conde, M. Wilkinson, M. Wood, G. Zaharijas, H.-S. Zechlin. |
| 38 | 150805388 | Sussing Merger Trees: A proposed Merger Tree data format | Technical Report | Peter A. Thomas, Julian Onions, Dylan Tweed, et al |
| 39 | 150603210 | Background analysis and status of the ANAIS dark matter project | Proceedings of international conference | J. Amaré, S. Cebrián, C. Cuesta, E. García, C. Ginestra, M. Martínez, M. A. Oliván, Y. Ortigoza, A. Ortiz de Solórzano, C. Pobes, J. Puimedón, M. L. Sarsa, J. A. Villar, P. Villar |
| 40 | 150506102 | Production and relevance of cosmogenic radionuclides in NaI(Tl) crystals | Proceedings of international conference | J. Amaré, S. Cebrián, C. Cuesta, E. García, C. Ginestra, M. Martínez, M. A. Oliván, Y. Ortigoza, A. Ortiz de Solórzano, C. Pobes, J. Puimedón, M. L. Sarsa, J. A. Villar, P. Villar. |

| | | | | |
|----|-----------|---|---|--|
| 41 | 150100104 | ANAlS: Status and prospects | Proceedings of international conference | Julio Amaré, Susana Cebrián, Clara Cuesta, Eduardo García, Carlos Ginestra, María Martínez, Miguel A. Oliván, Ysrael Ortigoza, Alfonso Ortíz de Solórzano, Carlos Pobes, Jorge Puimedón, María Luisa Sarsa, José Ángel Villar, Patricia Villar |
| 42 | 161102555 | Results of dark matter searches with the ANTARES neutrino telescope | Proceedings of international conference | J. D. Zornoza, C. Toennis |
| 43 | 160105691 | Indirect search for dark matter with neutrino telescopes | Proceedings of international conference | J.D. Zornoza |
| 44 | 170105259 | Models of Supersymmetry for Dark Matter | Proceedings of international conference | C. Munoz |

| Dissemination of results – articles in conference proceedings and books derived from collaborations maintained during the execution of the project and that could be relevant for it: <u>90</u> | | | | |
|---|--|--|--|---|
| | Reference (ePrint) http://arxiv.org/ | Title | Type of publication | Authors |
| 1 | 11010593 | Handbook of LHC Higgs Cross Sections: 1. Inclusive Observables | Handbook of LHC Higgs Cross Sections working group | S. Dittmaier, S. Heinemeyer et al. |
| 2 | 12034557 | Proceedings of the 2nd Iberian Nuclear Astrophysics Meeting on Compact Stars, 22–23 September 2011, Salamanca, Spain Journal of Physics: Conference Series IOP | Libro | Eds. M A Pérez-García, J. Pons and C. Albertus |
| 3 | 10125170 | Introducing HiggsBounds 2.0.0 | Proceedings of international conference | Philip Bechtle, Oliver Brein, Sven Heinemeyer, Georg Weiglein, Karina E. Williams |
| 4 | 10124572 | Consistent Higher-Order Corrections to Stop_i -> Sbottom_j H^+ in the Complex MSSM | Proceedings of international conference | S. Heinemeyer, H. Rzehak, C. Schappacher |
| 5 | 10092680 | BSM Higgs Physics at the LHC in the Forward Proton Mode | Proceedings of international conference | S. Heinemeyer, V.A. Khoze, M.G. Ryskin, M. Tasevsky, G. Weiglein |
| 6 | 10092678 | Discovering SUSY in the First LHC Run | Proceedings of international conference | S. Heinemeyer |
| 7 | 10070206 | Predicting Supersymmetry | Proceedings of international conference | S. Heinemeyer, G. Weiglein |
| 8 | 10063318 | The Kinetic dark-mixing in the light of CoGENT and XENON100 | Proceedings of international conference | Yann Mambrini |
| 9 | 10031643 | THE TOOLS AND MONTE CARLO WORKING GROUP Summary Report from the Les Houches 2009 Workshop on TeV Colliders | Proceedings of international conference | S. Heinemeyer et al. |

| | | | | |
|----|----------|--|---|---|
| 10 | 10023527 | 13th International Conference on Elastic and Diffractive Scattering (Blois Workshop) - Moving Forward into the LHC Era | Proceedings of international conference | M. Deile, S. Heinemeyer et al. |
| 11 | 10015189 | Status of Neutrino Theory. | Proceedings of international conference | Jose W. F. Valle |
| 12 | 10012693 | The Hunt for New Physics at the Large Hadron Collider | Proceedings of international conference | P. Nath, S. Heinemeyer et al. |
| 13 | 10012454 | Black holes in modified gravity theories. | Proceedings of international conference | Alvaro de la Cruz-Dombriz, Antonio Dobado, Antonio L. Maroto |
| 14 | 10010428 | Finite Unification: Theory and Predictions | Proceedings of international conference | Sven Heinemeyer, Myriam Mondragon, George Zoupanos |
| 15 | | Detection of very high energy gamma-ray emission from IC 310 by the MAGIC telescopes | Proceedings of international conference | J. Sitarek, F. Zandanel, F. Prada, S. Lombardi for the MAGIC Coll.A31, and A. Neronov, C. Pfrommer, A. Pinzke, D. Semikov |
| 16 | | Observation of Ultra-High Energy Cosmic Rays in cloudy conditions by the space-based JEM-EUSO Observatory | Proceedings of international conference | G.Saez Cano et al., in Proc. of TAUP (2011). |
| 17 | | Observation of Ultra-High Energy Cosmic Rays in cloudy conditions by the JEM-EUSO Space Observatory | Proceedings of international conference | G.Saez Cano et al., in Proc. of 32nd Int. Cosmic Ray Conf., Beijing (2011). |
| 18 | | The IR-Camera of the JEM-EUSO Space Observatory | Proceedings of international conference | J. Morales et al., Beijing 2011 |
| 19 | | The JEM-EUSO Space Mission @ forefront of the highest energies never observed from Space | Proceedings of international conference | J.A. Morales et al., in Proc. of 32nd Int. Cosmic Ray Conf., Beijing (2011). |
| 20 | | The ANTARES neutrino telescope: current status and first results | Proceedings of international conference | H. Yepes-Ramirez |
| 21 | 11120478 | Contributions to the 32nd International Cosmic Ray Conference (ICRC 2011) by the ANTARES collaboration | Proceedings of international conference | S. Adrián-Martínez et al. (ANTARES collaboration) |

| | | | | |
|----|----------|---|---|--|
| 22 | 11110783 | Searches for Point Sources of High Energy Cosmic Neutrino with the ANTARES Telescope | Proceedings of international conference | D. Dornic for the ANTARES Coll. |
| 23 | 11105358 | MAGIC detection of VHE Gamma-ray emission from NGC 1275 and IC 310 | Proceedings of international conference | Dorothee Hildebrand, Saverio Lombardi, Pierre Colin, Julian Sitarek, Fabio Zandanel, Francisco Prada, for the MAGIC Collaboration, Christoph Pfrommer, Andreas Pintzke |
| 24 | 11081423 | Scientific Potential of Einstein Telescope | Proceedings of international conference | B. Sathyaprakash et al (including S. Husa & A. Sintes) |
| 25 | 11070241 | Mh in the MSSM with Heavy Majorana Neutrinos | Proceedings of international conference | S. Heinemeyer, M. Herrero, S. Penaranda, A. Rodriguez |
| 26 | 11063450 | Exclusive productino of BSM Higgs Bosons at the LHC | Proceedings of international conference | S. Heinemeyer, V. Khoze, M. Ryskin, M. Tasevsky, G. Weiglein |
| 27 | 11030952 | SUSY predictions for and from the LHC | Proceedings of international conference | S. Heinemeyer |
| 28 | 11013195 | R&D studies for the development of a compact transmitter able to mimic the acoustic signature of a UHE neutrino interaction | Proceedings of international conference | M. Ardid*, S. Adrián, M. Bou-Cabo, G. Larosa, J.A. Martínez-Mora, V. Espinosa, F. Camarena, M. Ferri |
| 29 | 11012476 | Finite Unification: Theory, Models and Predictions | Proceedings of international conference | S. Heinemeyer, M. Mondragon, G. Zoupanos |
| 30 | 11010582 | Neutrino Telescopes | Proceedings of international conference | J.J Hernandez-Rey |
| 31 | 12041447 | Search for neutrino emission in gamma-ray flaring blazars with the ANTARES telescope | Proceedings of international conference | Agustín Sánchez-Losa |
| 32 | 12032143 | High Energy Neutrino Telescopes in the Northern Hemisphere | Proceedings of international conference | Juan Jose Hernandez-Rey |
| 33 | 12031488 | Les Houches 2011: Physics at TeV colliders new physics working group report | Proceedings of international conference | G. Brooijmans et al. (with D.G. Cerdeno and T. Delahaye) |
| 34 | 12025152 | Progress for Higgs Bosons Physics at the LC | Proceedings of international conference | S. Heinemeyer |

| | | | | |
|----|----------|---|---|---|
| 35 | 12023283 | Recent Results of the ANTARES Neutrino Telescope | Proceedings of international conference | Juan Jose Hernandez-Rey |
| 36 | 12021991 | Implications of SUSY Searches at the LHC for the ILC | Proceedings of international conference | S. Heinemeyer |
| 37 | 12016345 | The Higgs sector of the NMfv MSSM at the ILC | Proceedings of international conference | M. Arana, S. Heinemeyer, M. Herrero, S. Penaranda |
| 38 | 12016305 | MSSM Higgs Bosons from Stop and Chargino Decays | Proceedings of international conference | S. Heinemeyer, F. v.d. Pahlen, H. Rzebak, C. Schappacher |
| 39 | 12016157 | Mh in the MSSM-Seesaw Scenario with ILC Precision | Proceedings of international conference | S. Heinemeyer, M. Herrero, S. Penaranda, A. Rodriguez |
| 40 | 12015171 | Finite Unified Theories and the Higgs boson | Proceedings of international conference | S. Heinemeyer, M. Mondragon, G. Zoupanos |
| 41 | 12014770 | Heavy Majorana Neutrino Effects on MSSM-Mh | Proceedings of international conference | S. Heinemeyer, M. Herrero, S. Penaranda, A. Rodriguez |
| 42 | | Observation of ultra-high energy cosmic rays in cloudy conditions by the space-based JEM-EUSO Observatory. 2014 | Proceedings of international conference | G. Sáez Cano , J.A. Morales de los Ríos , K. Shinozaki , S. Briz ,H. Prieto, L. del Peral , J. H. Carretero , A.J. de Castro , F. Cortés, F. Lopez, A. Neromov, S. Wada , & M.D. Rodríguez Frías for the JEM-EUSO Collaboration |
| 43 | | The JEM-EUSO Space Mission @ forefront of the highest energies never detected from Space. 2012 | Proceedings of international conference | M. D. Rodriguez Frias for the JEM-EUSO collaboration. |
| 44 | | Proposal of a Computing Model using GRID resources for the JEM-EUSO Space Mission. | Proceedings of international conference | J. A. Morales de los Ríos, M. D. Rodríguez Frías, L. Del Peral, H. Prieto & G. Sáez-Cano. |
| 45 | | The ANTARES Neutrino Detector Instrumentation. 2012 | Proceedings of international conference | H. Yepes-Ramírez |

| | | | | |
|----|----------|--|---|---|
| 46 | 13077071 | Towards the Preliminary Design Review of the Infrared Camera of the JEM-EUSO Space Mission. | International journal | M. D. RODRIGUEZ FRIAS, J. LICANDRO, M. D. SABAU, M. REYES, T. ELENGUER, M. C GONZALEZ ALVARADO, E. JOVEN, J. A. MORALES DE LOS RIOS; M. SAEZ-PALOMINO, H. PRIETO-ALFONSO, G. SAEZ-CANO, J. H. CARRETERO, S. PEREZ CANO & L. DEL PERAL FOR THE JEM-EUSO COLLABORATION. |
| 47 | 13077071 | An End to End Simulation code for the IR-Camera of the JEM-EUSO Space Observatory. | International journal | A. MORALES DE LOS RIOS, L. DEL PERAL, G. SAEZ-CANO, H. PRIETO, J. H-CARRETERO, M.D. SABAU, T.BELENGUER, C. GONZALEZ ALVARADO, M. SANZ PALOMINO, J. LICANDRO, E. JOVEN, M. REYES AND M.D. RODRIGUEZ FRIAS FOR THE JEM-EUSO COLLABORATION |
| 48 | 13077071 | Multi-Anode Photomultiplier Tube reliability analysis and radiation hardness assurance for the JEM-EUSO Space Mission. | International journal | H.Prieto-Alfonso; K.Tsuno; L. Del Peral; M. Casolino; J.A. Morales de los Ríos; G. Sáez-Cano; T. Ebisuzaki ; M.D . Rodríguez Frías |
| 49 | 13077071 | Simulations of extensive air showers produced by UHECRs in cloudy sky to be detected by JEM-EUSO | International journal | Guadalupe Sáez Cano; J .A. Morales de los Rios; Kenji Shinozaki; Luis del Peral Gochicoa; Mario Bertaina; Andrea Santangelo; M. Dolores Rodríguez Frías |
| 50 | | The SPAS-UAH Cluster for the JEM-EUSO Computing Model | Proceedings of international conference | J.A. Morales de los Ríos, G. Sáez Cano, H. Prieto, del Peral L., Carretero J.H. Shinozaki J.H. Rodríguez-Frías, M.D |
| 51 | | Proceedings of the 2nd Iberian > Nuclear Astrophysics Meeting on Compact Stars, 22–23 September 2011, Salamanca, Spain | Proceedings of international conference | Eds. M A Pérez-García, J. Pons and C. Albertus |
| 52 | | EUSO-BALLOON a pathfinder for detecting UHECR's from the edge of Space. | Proceedings of international conference | P. von Balloos, S. Dagoret.... M. D. Rodríguez Frías et al. for the JEM-EUSO Collaboration. |

| | | | | |
|----|--|---|---|---|
| 53 | | An Analog Level 1 Trigger Prototype for CTA | Proceedings of international conference | L.A. Tejedor, J.I. Alonso, J.A. Barrio, J.L. Lemus, C. Delgado |
| 54 | | Study of parylene-coated NaI(Tl) at low temperatures for bolometric applications | Proceedings of international conference | N. Coron, C. Cuesta, E. García, C. Ginestra, T.A. Girard, P. de Marcillac, M. Martínez, Y. Ortigoza, A. Ortiz de Solórzano, C. Pobes, J. Puimedón, T. Redon, M.L. Sarsa, L. Torres, P. Valko, J.A. Villar |
| 55 | | The JEM-EUSO Space Mission: Frontier Astroparticle Physics @ ZeV range from Space. | Proceedings of international conference | M. D. Rodríguez Frías, J. A. Morales de los Ríos, L. del Peral, G. Sáez, H. Prieto, J. H-Carretero for the JEM-EUSO Collaboration. |
| 56 | | Very high energy gamma-ray observation of the peculiar transient event Swift J1644+57 with the MAGIC telescopes and AGILE | Proceedings of international conference | Aleksic et al (MAGIC collaboration) and AGILE collaboration |
| 57 | | Supersymmetric Lepton Flavour Violation and Neutrinos mass textures: an update | Proceedings of international conference | M. E. Gómez, M. Cannoni, |
| 58 | | Expansion cone for the 3-inch PMTs of the KM3NeT optical modules | Proceedings of international conference | S. Adrián-Martínez et al. (KM3NeT Collaboration) |
| 59 | | Light Relative Efficiency Factors for ions in BGO and Al ₂ O ₃ at 20mK | Proceedings of international conference | Y. Ortigoza, L. Torres, N. Coron, C. Cuesta, E. García, C. Ginestra, J. Gironnet, P. de Marcillac, M. Martínez, A. Ortiz de Solórzano, C. Pobes, J. Puimedón, T. Redon, M.L. Sarsa, J.A. Villar |
| 60 | | Multi-Anode Photomultiplier Tube reliability analysis and radiation hardness assurance for the JEM-EUSO Space mission | Proceedings of international conference | H.PRIETO-ALFONSO, K.TSUNO, L.DEL PERAL, M.CASOLINO, J.A. MORALES DE LOS RIOS, G. SAEZ-CANO, T.EBISUZAKI AND M.D.RODRIGUEZ FRIAS 1 FOR THE JEM-EUSO COLLABORATION. |
| 61 | | An evaluation of the exposure in nadir observation of the JEM-EUSO mission | Proceedings of international conference | Jem-Euso collaboration |

| | | | | |
|----|---------------------------------|---|---|--|
| 62 | | Towards the Preliminary Design Review of the Infrared Camera of the JEM-EUSO Space Mission | Proceedings of international conference | M.D.Rodríguez-Frías et al |
| 63 | | An End to End Simulation code for the IR-Camera of the JEM-EUSO Space Observatory | Proceedings of international conference | Jose A. Morales de los Ríos et al |
| 64 | | Observation of extensive air showers in cloudy conditions by the JEM-EUSO Space Mission | Proceedings of international conference | G. Saez-Cano, K. Shinozaki, L. del Peral, M. Bertaina, M. D. Rodriguez-Frias, for the JEM-EUSO Collaboration |
| 65 | | The Atmospheric Monitoring System of the JEM-EUSO Space Mission. | Proceedings of international conference | M. D. Rodríguez Frías et al. for the JEM-EUSO Collaboration. |
| 66 | | Anisotropy in Cosmic rays from internal transitions in neutron stars | Proceedings of international conference | M.Angeles Perez-Garcia, K. Kotera, J. Silk |
| 67 | | A balloon-borne prototype for demonstrating the concept of JEM-EUSO | Proceedings of international conference | P. Von Ballmoos, A. Santangelo, J. H. Adams, P. Barrillon, J. Bayer, M. Bertaina, F. Cafagna, M. Casolino, S. Dagoret, P. Danto, G. Distratis, M. Dupieux, A. Ebersoldt, T. Ebisuzaki, J. Evrard, Ph. Gorodetzky, A. Haungs, A. Jung, Y. Kawasaki, G. Medina-Tanco, B. Mot, G. Osteria, E. Parizot, I.H. Par |
| 68 | Journal: EPJ Web of Conferences | Thin and thick cloud top height retrieval algorithm with the Infrared Camera and LIDAR of the JEM-EUSO Space Mission | Proceedings of international conference | The JEM-EUSO Collaboration |
| 69 | | Transducer Development and Characterization for Underwater Acoustic Neutrino Detection Calibration | Proceedings of international conference | Saldaña M., Llorens C. D., Felis I., Martínez-Mora J. A. y Ardid M. |
| 70 | | Deep sediment resuspension and thick nepheloid layer generation by open-ocean convection | Proceedings of international conference | X. Durrieu de Madron et al. (ANTARES collaboration) |
| 71 | | Cloud Optical Depth obtained from the Infrared Camera data and the UV Flashers mounted on a helicopter flying under the EUSO- | Proceedings of international conference | G. Sáez Cano, Luis del Peral, Malek Mustafa, J.F. Soriano, James Adams, Lawrence Wiencke, Laura López, A. Merino, Marcos Reyes, Enrique Joven et al. |

| | | | | |
|----|-----------|--|---|--|
| 72 | 161208249 | Heavy MSSM Higgs Interpretation of the LHC Run I Data | Proceedings of international conference | S. Heinemeyer |
| 73 | 160807912 | Searching for SUSY and decaying gravitino DM at the LHC and Fermi-LAT with the munuSSM | Proceedings of international conference | Carlos Muñoz |
| 74 | 160508324 | The 750 GeV diphoton excess and SUSY | Proceedings of international conference | S. Heinemeyer |
| 75 | 160208041 | Neutral Higgs Boson Production at e^+e^- Colliders in the Complex MSSM: Towards the LC Precision | Proceedings of international conference | S. Heinemeyer, C. Schappacher |
| 76 | 160208040 | SUSY Fits and their Implications for ILC and CLIC | Proceedings of international conference | S. Heinemeyer |
| 77 | 170105259 | Models of Supersymmetry for Dark Matter | Proceedings of international conference | C. Munoz |
| 78 | 11030988 | Fiber Assignment in Next-generation Wide-field Spectrographs | Scientific report | Isaac Morales, Antonio D. Montero-Dorta, Marco Azzaro, Francisco Prada, Justo Sanchez, Santiago Becerril |
| 79 | | Observation of extensive air showers in cloudy conditions by the JEM-EUSO Space Mission | Proceedings of international conference | G. Saez-Cano, K. Shinozaki, L. del Peral, M. Bertaina, M. D. Rodriguez-Frias, for the JEM-EUSO Collaboration |
| 80 | | The infrared camera prototype characterization for the JEM-EUSO space mission | Proceedings of international conference | .A. Morales de los Ríos, E. Joven, L. del Peral, M. Reyes, J. Licandro, M.D. Rodríguez Frías, JEM-EUSO Collaboration, |
| 81 | | Performance and air-shower reconstruction techniques for the JEM-EUSO mission | Proceedings of international conference | M. Bertaina, S. Biktemerova, K. Bittermann, P. Bobik, D. Campana, F. Fenu, A. Gorgi, F. Guarino, A. Guzmán, K. Higashide, G. Medina-Tanco, T. Mernik, D. Naumov, M. Putis, M.D. Rodríguez Frías, G. Sáez Cano, A. Santangelo, K. Shinozaki and S. Toscano for the JEM-EUSO Collaboration |

| | | | | |
|----|--|--|---|---|
| 82 | | The Atmospheric Monitoring System of the JEM-EUSO instrument. | Proceedings of international conference | The JEM-EUSO Collaboration (corresponding authors S. Toscano, J. A. Morales de los Ríos, A. Neronov, M. D. Rodríguez Frías & S. Wada) |
| 83 | | The Infrared Camera onboard JEM-EUSO instrument. | Proceedings of international conference | The JEM-EUSO Collaboration (corresponding authors J. A. Morales de los Ríos & M. D. Rodríguez Frías). |
| 84 | | The JEM-EUSO observation in cloudy conditions | Proceedings of international conference | The JEM-EUSO Collaboration (corresponding authors: Guzmán, A., Sáez-Cano, G. and Shinozaki, K.). |
| 85 | | The JEM-EUSO instrument | Proceedings of international conference | The JEM-EUSO Collaboration (Corresponding Authors: M. Casolino, F. Kajino, L. W. Piotrowski) |
| 86 | | JEM-EUSO: Meteor and nuclearite observations | Proceedings of international conference | The JEM-EUSO Collaboration (corresponding authors: Bertaina, M. and Cellino, A. and Ronga, F.) |
| 87 | | JEM-EUSO observational technique and exposure | Proceedings of international conference | The JEM-EUSO Collaboration (corresponding authors: Bertaina, M. and Bobik, P. and Fenu, F. and Shinozaki, K.) |
| 88 | | Performances of JEM-EUSO: angular reconstruction | Proceedings of international conference | The JEM-EUSO Collaboration (corresponding authors: Biktemerova, S. and Guzman, A. and Mernik, T.) |
| 89 | | High-frequency internal wave motions at the ANTARES site in the deep Western Mediterranean | Proceedings of international conference | Hans van Haren et al. (ANTARES Collaboration) |
| 90 | | Ultra high energy photons and neutrinos with JEM-EUSO | Proceedings of international conference | The JEM-EUSO Collaboration (corresponding authors: Supanitsky, A.D. and Medina-Tanco, G. and Guzmán, A.) |

| Dissemination of results - conferences in international congresses and institutions, outreach talks, etc.: <u>880</u> | | |
|---|--|----------------------------|
| Title | Type | Authors |
| Dark Matter in Galaxies | Conferencia de divulgación en la Dark Matter Awareness Week (DMAW). 10 Diciembre 2010, 17:00. Granada | F. Zandanel |
| Dark Matter in Galaxies | Conferencia de divulgación en la Dark Matter Awareness Week (DMAW). 2 Diciembre 2010, 13:00. Huelva | M. Gómez |
| Dark Matter in Galaxies | Conferencia de divulgación en la Dark Matter Awareness Week (DMAW). 10 Diciembre 2010, 13:45. Madrid | D. Nieto, J.A.R. Cembranos |
| Dark Matter in Galaxies | Conferencia de divulgación en la Dark Matter Awareness Week (DMAW). 2 Diciembre 2010, 14:30 | A. Knebe |
| Dark Matter in Galaxies | Conferencia de divulgación en la Dark Matter Awareness Week (DMAW). 3 Diciembre 2010, 15:00. Barcelona | J. Aleksic |
| Dark Matter in Galaxies | Conferencia de divulgación en la Dark Matter Awareness Week (DMAW). 3 Diciembre 2010, 12:00, La Laguna | M.A. Sánchez-Conde |
| Particle Physics I & II | Conferencia en TeV Particle Astrophysics 2010 (IAP 2010), París, Francia. 19-23 Julio, 2010 | S. Heinemeyer |
| Search of point sources with the ANTARES neutrino telescope | Conferencia en TeV Particle Astrophysics 2010 (IAP 2010), París, Francia. 19-23 Julio, 2010 | J. D. Zornoza |
| WIMP Dark matter candidates | Conferencia en TeV Particle Astrophysics 2010 (IAP 2010), París, Francia. 19-23 Julio, 2010 | D. Cerdeño |
| The inert doublet model of dark matter revisited | Conferencia en TeV Particle Astrophysics 2010 (IAP 2010), París, Francia. 19-23 Julio, 2010 | C. Yaguna |
| Indirect Search for Dark Matter with Fermi from de Galactic Center | Conferencia en TeV Particle Astrophysics 2010 (IAP 2010), París, Francia. 19-23 Julio, 2010 | B. Cañadas |
| Looking into the dark: the fingerprint of neutralinos and asions in gamma-rays | Conferencia en TeV Particle Astrophysics 2010 (IAP 2010), París, Francia. 19-23 Julio, 2010 | M.A. Sanchez-Conde |
| Indirect dark matter detection in light of high-resolution N-body simulation results | Conferencia en TeV Particle Astrophysics 2010 (IAP 2010), París, Francia. 19-23 Julio, 2010 | J. Lavalle |

| | | |
|--|---|-------------------|
| DM searches with Fermi | MULTI3 - A cubic approach to Dark matter, Padova, Italia. 1-4 Marzo, 2010 | A. Morselli |
| DM searches and direct | MULTI3 - A cubic approach to Dark matter, Padova, Italia. 1-4 Marzo, 2010 | D. Cerdeño |
| Combining direct detection with colliders Detection | MULTI3 - A cubic approach to Dark matter, Padova, Italia. 1-4 Marzo, 2010 | M. Fornasa |
| LHC impact on Dark Matter searches | WONDER Workshop on next Dark Matter Experimental Researches at LNGS, Italia. 22-23 Marzo, 2010 | D. Cerdeño |
| Phenomenological review on Dark Matter (interaction channels against detection techniques) | WONDER Workshop on next Dark Matter Experimental Researches at LNGS, Italia. 22-23 Marzo, 2010 | N. Fornengo |
| Dark Matter from de UV Completion of Gravity | The Dark Side of the Universe DSU 2010, Mexico. 1-6 Junio, 2010 | J.A.R. Cembranos |
| Gamma Ray Line Generated by Anomalies | The Dark Side of the Universe DSU 2010, Mexico. 1-6 Junio, 2010 | Y. Mambrini |
| The Fermi Large Area Gamma Ray Telescope and the Current Searches for Dark Matter in Space | The Dark Side of the Universe DSU 2010, Mexico. 1-6 Junio, 2010 | A. Morselli |
| Identification of Dark Matter particles with LHC and direct detection data | The Dark Side of the Universe DSU 2010, Mexico. 1-6 Junio, 2010 | D. Cerdeño |
| Lepton Flavor Violation Signals from GUT theories | The Dark Side of the Universe DSU 2010, Mexico. 1-6 Junio, 2010 | M. Gómez |
| A new Supersymmetric Standard Model and Gravitino Dark Matter | The Dark Side of the Universe DSU 2010, Mexico. 1-6 Junio, 2010 | C. Muñoz |
| Impact of Internal Bremsstrahlung on the Detection of Gamma-rays from Neutralinos | The Dark Side of the Universe DSU 2010, Mexico. 1-6 Junio, 2010 | M. Cannoni |
| Bayesian constraints on supersymmetric neutralino dark matter | 8 th International Workshops on Identification of Dark Matter IDM 2010. Montpellier, Francia. 26-30 Julio, 2010 | R. Ruiz de Austri |
| The Pamela/Atic/Fermi Anomaly - Dark Matter or not? | 8 th International Workshops on Identification of Dark Matter IDM 2010. Montpellier, Francia. 26-30 Julio, 2010 | J. Lavalle |

| | | |
|---|---|--|
| The galactic electron and positron "escesses": astrophysical versus dark matter interpretations | 8 th International Workshops on Identification of Dark Matter IDM 2010. Montpellier, Francia. 26-30 Julio, 2010 | J. Lavalle |
| Effects of WIMP DM transport in the Sun | 8 th International Workshops on Identification of Dark Matter IDM 2010. Montpellier, Francia. 26-30 Julio, 2010 | M. Taoso |
| Low energy events in NaI scintillators. ANAIS status and prospects | 8 th International Workshops on Identification of Dark Matter IDM 2010. Montpellier, Francia. 26-30 Julio, 2010 | C. Cuesta Soria |
| Spanish Relativity Meeting ERE 2011 | Organización del congreso en la UCM, Madrid, 29 Agosto - 2 Septiembre | J. Beltrán, A. de la Cruz-Dombriz, A.L. Maroto, J. A. R. Cembranos |
| The magnetic side of dark energy | Conferencia en el congreso The nature of dark energy, Instituto de Física Teórica CSIC/UAM, Madrid, 30 Mayo - 3 Junio | A. López Maroto |
| On the electromagnetic nature of dark energy and the origin of cosmic magnetic fields | Conferencia en Instituto de Estructura de la Materia (IEM-CSIC). Madrid, 10 Febrero | A. López Maroto |
| A cosmic vector for dark energy | Conferencia en The nature of dark energy, Instituto de Física Teórica CSIC/UAM, Madrid, 30 Mayo - 3 Junio | J. Beltrán Jiménez |
| A cosmic vector for dark energy and high z massive clusters | Conferencia en Institute of Theoretical Astrophysics, University of Oslo, Abril | J. Beltrán Jiménez |
| The dark magnetism of the universe | Conferencia en Departament d'Estructura i Constituents de la Matèria, Universitat de Barcelona, Marzo | J. Beltrán Jiménez |
| The dark magnetism of the universe | Conferencia en Département de Physique Théorique, Université de Genève, Marzo | J. Beltrán Jiménez |
| Cosmological effects from additional states in QED | Conferencia en CERN, Diciembre | J. Beltrán Jiménez |
| Backreaction in modified gravity | Conferencia en Iberian Cosmology Meeting, University of Salamanca, Abril | A. de la Cruz-Dombriz |
| Some light from the darkness | Conferencia en PHOTON11 meeting, University of Louvain, Bélgica, Mayo | A. de la Cruz-Dombriz |

| | | |
|--|---|-----------------------|
| The light of the Dark | Conferencia en Institut de Ciencies del Espai IEEC-CSIC, Autonomous University of Barcelona, Marzo | A. de la Cruz-Dombriz |
| Dark matter candidates and gamma rays searches | Conferencia en COSMO11 meeting, University of Porto, Portugal, Agosto | A. de la Cruz-Dombriz |
| Large Scale Structure: From Clusters to groups | Colloquium en IKI Moscow, Russia, Julio | S. Gottloeber |
| Bullet Clusters in the MareNostrum Universe | Conferencia en KITP Cluster Conference, Santa Barbara, USA, 20 Marzo | S. Gottloeber |
| Clustering of BOSS-CMASS galaxies in the MultiDark simulation | Conferencia en CLUES workshop, University of Brighton, UK, Junio | S. E. Nuza |
| MultiDark Simulation Database DR 1 | Conferencia en MultiDark Workshop, Madrid, April 2011 | Adrian M. Partl |
| Data Mining of the MultiDark Simulation | Conferencia en GREAT Astrostatistics and Data Mining Workshop, La Palma, June 2011 | Adrian M. Partl |
| The MultiDark Database | Conferencia en CLUES Meeting, Brighton, June 2011 | Adrian M. Partl |
| Dark Matter Gamma-Ray Emission from the Local Universe: CLUES from Fermi | Conferencia en 4th MULTIDARK Consolider Workshop, Madrid, Spain, April 2011 | Fabio Zandanel |
| The Quest for Gamma-rays in Clusters of Galaxies: Simulations and Observations | Conferencia en Institute for Theoretical Studies, Heidelberg, Germany, June 2011 | Fabio Zandanel |
| A Dance with Dragons: Dark Matter and Cosmic Rays in Galaxy Clusters | Conferencia en Instituto de Física Teórica (IFT-UAM/CISC), Madrid, Spain, May 2011 | Fabio Zandanel |
| The Quest for Gamma-rays in Clusters of Galaxies: Simulations and Observations | Conferencia en Instituto de Astrofísica de Canarias, La Laguna, Tenerife, Spain, January 2011 | Fabio Zandanel |
| Cryogenic particle detection at the Canfranc Underground Laboratory | Conferencia en 1st International Workshop for the Design of the ANDES Underground Laboratory. Centro Atómico Constituyentes, Buenos Aires, Argentina, 11-14 April 2011. | SWG Direct |
| Characterization of a SrF ₂ scintillating bolometer | Presentación poster en 14th International Workshop on Low Temperature Detectors (LTD 14). Heidelberg, Germany, 1-5 August 2011. | Carlos Ginestra |

| | | |
|---|--|----------------------------------|
| Scintillating bolometers for fast neutron spectroscopy in rare events searches | Conferencia en 12th International Conference on Topics in Astroparticle and Underground Physics (TAUP 2011). Munich, Germany, 5-9 September 2011. | María Martínez y Carlos Ginestra |
| 39th International meeting on Fundamental Physics (IMPF 2011) | Contribuciones. Canfranc, Spain, 7-11 February 2011. | SWG Direct |
| ANAlS: Direct Dark Matter detection with NaI(Tl) scintillators | Presentación poster en EIROforum School on Instrumentation (ESI 2011), European Photon & neutron Science Campus. Grenoble, France, 15-22 May 2001. | Clara Cuesta Soria |
| Update on the ANAlS experiment. ANAlS-0 prototype results at the new Canfranc Underground Laboratory | Conferencia en 12th International Conference on Topics in Astroparticle and Underground Physics (TAUP 2011). Munich, Germany, 5-9 September 2011 | Clara Cuesta Soria |
| Measurement of the differential neutron flux inside a lead shielding in a cryogenic experiment | Presentación poster en 12 th International Conference on Topics in Astroparticle and Underground Physics (TAUP 2011). Munich, Germany, 5-9 September 2011. Poster | Jorge Puimedón |
| Development of scintillating bolometers for dark matter searches | Conferencia en 3 rd Galileo-Xu Guangqi Meeting. Beijing, China, 11-15 October 2011 | SWG Direct |
| Status of ICECUBE, ANTARES and the km3 Project | Conferencia en XXXIX International Meeting on Fundamental Physics - LSC Canfranc, Spain, 8-11 February | J.J. Hernández Rey |
| DSU-2011 | Contribuciones en Beijing, China, 26-30 September | SWG Direct |
| ICATPP | Contribuciones en Villa Olmo, Italy 3-7 October | SWG Direct |
| The 2nd Iberian Nuclear Astrophysics Meeting on Compact Stars | Contribuciones en Salamanca, Spain 22-23 September | M. Angeles Pérez García |
| ASPERA Workshop, The next generation projects in Deep Underground Laboratories: Towards a common strategy and linking schemes | Organización del congreso en colaboración con los miembros de ASPERA. 30 Junio – 2 Julio, Zaragoza y Canfranc | SWG Direct |
| The search for galactic dark matter clump candidates with Fermi and MAGIC | Conferencia en Conference: 32nd International cosmic ray conference, Beijing 2011 | D. Nieto et al. |
| Segue 1: the best dark matter candidate dwarf galaxy surveyed by MAGIC | Conferencia en 32nd International cosmic ray conference, Beijing 2011 | J. Aleksic et al. |

| | | |
|--|--|--|
| A search for possible dark matter subhalos as IACT targets in the First Fermi-LAT Source Catalog | Contribución poster 2011 Fermi Symposium, Rome. | D. Nieto et al. |
| The axion challenge in gamma-rays: a blueprint of the best search strategy | Conferencia en 3rd Rome International Conference on Astroparticle Physics, Rome, May 2011 | Miguel A. Sánchez-Conde |
| CLUES on Fermi-LAT prospects for munuSSM gravitino dark matter extragalactic detection | Conferencia en 7th TeV Particle Astrophysics Conference, Stockholm, August 2011. | G.A. Gomez-Vargas et al. |
| Indirect Dark Matter Searches with the MAGIC Telescopes | Conferencia en Workshop on Indirect Dark Matter Searches, Hamburg, June 2011 | J. Aleksic |
| Indirect Dark Matter Searches with the MAGIC Telescopes | Conferencia en 2011 Europhysics Conference on High Energy Physics, Grenoble, July 2011 | J. Aleksic |
| II Iberian Nuclear astrophysics meeting | Organización de congreso. Universidad de Salamanca, Salamanca, Spain, 21-23 September, 2011. | M. A. Perez-García |
| CTA semestral international collaboration meeting | Organización de congreso. UCM, Madrid, 28 November - 2 December, 2011. | J. L. Contreras, N. Mirabal, J.A. Barrio |
| 7th TeV Particle Astrophysics Conference | Organización de congreso. Stockholm, Sweden, 1-5 August, 2011 | G. Bertone |
| The MasterCode: Status and Prospects | Conferencia en LPCC workshop "Global BSM fits and LHC data", CERN, 02/11 | Sven Heinemeyer |
| Implications of LHC searches for the ILC | Conferencia en Spanish ILC network meeting, Granada, 05/11 | Sven Heinemeyer |
| SUSY Decays in the Complex MSSM: A Full One-Loop Analysis | Conferencia en SUSY11, Fermilab, 08/11 | Sven Heinemeyer |
| Confronting SUSY with LHC Data | Conferencia en SUSY11, Fermilab, 08/11 | Sven Heinemeyer |
| Implications of SUSY Searches at the LHC for the LC | Conferencia en LCWS11, Granada, Spain, 09/11 | Sven Heinemeyer |
| Higgs Production via SUSY Decays at the LC | Conferencia en LCWS11, Granada, Spain, 09/11 | Sven Heinemeyer |
| DM production from SUSY decays | Conferencia en LCWS11, Granada, Spain, 09/11 | Federico v.d. Pahlen |

| | | |
|---|---|---|
| Lepton Flavor Violation in SUSY particles at the LHC and at the LC | Conferencia en DSU2011, Beijing, China, September 2011. | Mario Gómez Santamaría |
| Prospects to see LFV on stau decays. | Conferencia en Theory Seminar at the INFN Perugia, Italy, July 2011 | Mario Gomez Santamaría |
| Spin-dependent neutralino-nucleous scattering simplified. | Conferencia en DSU2011, Beijing, China, September 2011 | Mirco Cannoni |
| WIMP-nucleus elastic scattering simplified | Conferencia en Planck 2011, Lisbon, Portugal, May 2011 | Mirco Cannoni |
| SUSY WIMP-nucleous cross sections | Conferencia en TeV Particle Astrophysics, Stockholm, Sweden, Aug. 2011 | Mirco Cannoni |
| SUSY mass spectra and the seesaw scale | Conferencia en Planck 2011, June 2011, Lisbon, Portugal | Laslo Reichert |
| Supersymmetric mass spectra and the seesaw scale | Conferencia en LHC-D, SUSY/BSM + Neutrinos workshop at DESY, Germany, May 2011 | Laslo Reichert |
| Soft masses in SUSY SO(10) GUTs with low intermendiate scales | Conferencia en BLV-2011, Gatlinburg, Tennessee, USA, Sep 22-24, 2011 | Michal Malinsky |
| Iberian Gravitational Waves Meeting 2011 | Organización de congreso. Feb. 2011, Palma de Mallorca | Alicia Sintes, Jaume Carot Giner, Sascha Husa |
| El parámetro Sb aplicado a la discriminación entre fotones y hadrones en el flujo de rayos cósmicos de ultra-alta energía | Conferencia en XXXIII Reunión Bienal de la Real Sociedad Española de Física. Santander. Sep 2011 | G. Ros et al. |
| ANTARES WIMPs limits | Conferencia en MANTS, Uppsala, September 2011 | G. Lambard |
| Indirect searches for dark matter with the ANTARES telescope | Conferencia en International Europhysics Conference on High Energy Physics – EPS-HEP, Grenoble France, July 2011. | G. Lambard |
| Indirect searches for dark matter with the ANTARES telescope | Conferencia en ICRC 2011, Bejing, Aug. 2011 | G. Lambard |
| Dark matter search with the ANTARES neutrino telescope | Conferencia en Very Large Volume Neutrino Telescopes Workshop, VLvnT 2011, Erlangen, October 2011 | J. D. Zornoza |
| Search for dark matter with ANTARES | Conferencia en TeV Particle Astrophysics, TeVPA 2011, Stockholm, August 2011 | J. D. Zornoza |

| | | |
|---|--|------------------------|
| Dark matter search with the ANTARES Neutrino Telescope | Roma International Conference on Astroparticle Physics 2011, Tor Vergata, May 2011", Rome | J. D. Zornoza |
| Neutrinos: una nueva forma de mirar el Universo | Seminario en la Universidad Autónoma de Madrid, May 2011. | J. D. Zornoza |
| Neutrino Telescopes | Conferencia en Winter Meeting on Fundamental Physics, Canfranc, February 2011. | J. D. Zornoza |
| ANTARES and KM3NeT | Conferencia en Looking at the Neutrino Sky NUSKY 2011, ICTP Trieste, June 2011 | J. J. Hernández-Rey |
| Recent results of the ANTARES neutrino telescope | Conferencia en 12th International Conference on Topics in Astroparticle and Underground Physics, Munich, September 2011 | J. J. Hernández-Rey |
| Northern Hemisphere Neutrino Telescopes | Conferencia en Very Large Volume Neutrino Telescopes Workshop, VLNVnT 2011, Erlangen, October 2011 | J. J. Hernández-Rey |
| Deep-Sea Neutrino Telescopes | Seminario en University of Chicago, Chicago (US), Octubre | J.J. Hernandez-Rey, M. |
| The Underwater Neutrino Telescopes ANTARES and KM3NeT | Seminario en Fermilab, Batavia (US), Octubre | M. Ardid |
| IMPRSS Lecture Week No.3 | Conferencia en International Max Planck Research School on Gravitational Wave Astronomy, Oct. 2011, Palma de Mallorca, Spain | A. Vañó-Viñuales |
| Numerical Relativity and the Search for Gravitational Wave Signals from Black Hole Binaries | Conferencia en Iberian Gravitational Waves Meeting 2011, Feb. 2011, Palma de Mallorca, Spain | S. Husa |
| The NINJA waveform model data set | Conferencia en 9th Edoardo Amaldi Conference on Gravitational Waves and 2011 Numerical Relativity", July 2011, Cardiff, United Kingdom | S. Husa |
| Numerical Modeling of Gravitational Waves from Black Hole Binaries | Conferencia en Astro-GR@Mallorca, Sep 2011, Palma de Mallorca | S. Husa |
| Gravitational Wave Astronomy at UIB | Conferencia en Iberian Gravitational Waves Meeting 2011, Feb. 2011, Palma de Mallorca | A. Sintes |
| Update on Full-S5 Hough Search | Conferencia en LSC-VIRGO Scientific Collaboration Meeting, March 2011, Arcadia-California, USA | A. Sintes |

| | | |
|--|---|---|
| Towards Gravitational-Wave Astronomy | Conferencia en ERE2011: Spanish Relativity Meeting, Aug. 2011, Madrid | A. Sintes |
| 4th MultiDark Consolider Workshop | Organización de congreso. IFT UAM/CSIC, Madrid, 4-6 Abril | Carlos Muñoz, David G. Cerdeño y Susana Hernández |
| 5th MultiDark Consolider Workshop | Organización de congreso. CIECEM, Huelva, 3-4 Noviembre 2011 | Mario Gómez, Mirco Cannoni y Susana Hernández |
| El mundo de la relatividad | Conferencia Ciencia y Sociedad en Alfacar, Granada, Enero | José Ignacio Illana |
| Últimas noticias desde el CERN | Conferencia en la II Reunión de Divulgadores de Ciencia, Bilbao, Noviembre | José Ignacio Illana |
| La relatividad en juego | Conferencia en la Asociación EFE, Granada, Diciembre | José Ignacio Illana |
| El lado Oscuro del Universo | Seminario que sirve de apertura al "Campus Científico de Verano" en el que jóvenes de Bachillerato podrán desarrollar un proyecto de investigación a lo largo de dos semanas en el Campus de Excelencia UAM-CSIC. 18 Julio | David G. Cerdeño |
| La UAM explica CosmoCaixa | Estudiantes de doctorado de la Universidad Autónoma de Madrid (UAM) y del Instituto de Física Teórica (IFT) explicaron las leyes y principios que demuestran algunos de los módulos de ciencia interactiva presentes en CosmoCaixa Madrid. 14 y 15 de Mayo. CosmoCaixa Madrid | David G. Cerdeño |
| La Física en la UAM para Estudiantes de Bachillerato | Jornada Divulgativa en la UAM. 26 Abril | David G. Cerdeño |
| El mundo cuántico | Seminario en colaboración con el Master en Artes Escénicas y Cultura Visual de la Universidad de Alcalá de Henares. Lugar: Museo Nacional Centro de Arte Reina Sofía. 17 Abril 2011 | David G. Cerdeño |
| Taller Internacional de Física de Partículas 2011 | Jornadas orientadas a estudiantes de Bachillerato. Instituto de Física Teórica IFT-UAM/CSIC. Marzo | David G. Cerdeño |
| Física de partículas elementales y cosmología | Conferencia en curso de formación del profesorado dirigido a catedráticos y profesores de secundaria y realizado en el CRIF Acacias (Centro Regional de innovación y Formación). | David G. Cerdeño |
| Al acecho de la partícula divina | Artículo de opinión, Última Hora. 20 de Diciembre | Alex Vañó Viñuales |

| | | |
|---|---|---|
| Actividades durante la Semana de la Ciencia en Noviembre | Stand de videojuegos, exposición de pósters y organización de charlas | Alicia Sintes, Sascha Husa y Alex Vañó Viñuales |
| La simfonia de l'univers | Colaboración en la producción de un documental sobre ondas gravitacionales, UIB (convenio RTVM). Enero | Alicia Sintes |
| Neutrino masses and mixing: evidences and implications | Conferencia en 18th Int. Symposium on Particles, Strings and Cosmology (PASCOS 2012). Merida (Mexico), 3-8 Junio 2012 | J.W.F. Valle |
| Neutrino Masses and Mixing: Evidences and Implications | Conferencia en Workshop on Flavor Symmetries and consequences in Accelerators and Cosmology (FLASY 12). Dortmund (Alemania), 30 Junio - 4 Julio 2012 | J.W.F. Valle |
| Light neutrinos in Cosmology: a short review | Conferencia en ISAPP 2012: International School on Cosmic Microwave Background and High Energy Physics. La Palma, 16-24 Julio 2012 | S. Pastor |
| El mundo de las astroparticulas | Conferencia en Conference on Extreme Science, elementary particles and the Universe. European Southern Observatory ESO, Santiago de Chile, 6 Diciembre 2012 | J.W.F. Valle |
| Neutrinos (theory) | Conferencia en IX Latin American Symposium on High Energy Physics (SILAFAE 2012). Sao Paulo (Brasil), 10 -14 Diciembre 2012 | J.W.F. Valle |
| Energy-Dependent Likelihood: an optimized analysis approach for indirect Dark Matter searches | Conferencia en Darkattack2012, Ascona, Switzerland, July 15 - 20, 2012 | J. Aleksić |
| Radiowaves and Dark Matter | Conferencia en 6th MULTIDARK Consolider workshop, Canfranc, April 14, 2012 | R. Lineros |
| Radio emission from galactic and extragalactic dark matter | Conferencia en LAPTH, U. of Savoie, Annecy, France May 31, 2012 | R. Lineros |
| Dark Matter: indirect constrains from radio emission | Conferencia en IVIFCA, Valencia. Nov 16, 2012 | R. Lineros |
| Dark matter constraints from the anisotropies of the gamma-ray background measured by the Fermi-LAT | Conferencia en IDM 2012, Chicago, USA. Jul 27, 2012 | G. Gomez-Vargas |
| Dark matter searches in the Galactic center with Fermi | Conferencia en 6th MULTIDARK Consolider workshop, Canfranc, Apr 14, 2012 | G. Gomez-Vargas |

| | | |
|--|---|--------------------|
| Dark Matter implications of Fermi-LAT measurement of anisotropies in the diffuse gamma-ray background | Conferencia en Fourth International Fermi Symposium, Oct 28 - Nov 2, 2012, Monterrey USA | G. Gomez-Vargas |
| Multidark/Fermi projects: Inner galaxy and anisotropies | Conferencia en 7th MultiDark Consolider Workshop, Nov 19-20, 2012, IFAE, Barcelona | G. Gomez-Vargas |
| Fundamental Physics with future gamma-ray observatories | Conferencia en XL International Meeting on Fundamental Physics, Benasque, May 24 - June 3, 2012 | A. Moralejo |
| Dark matter constraints from the Fermi/LAT extragalactic gamma-ray background and the role of halo substructure | Conferencia en 220 AAS meeting, Anchorage, AK, USA, June 2012 | M.A. Sánchez-Conde |
| ALP gamma-ray searches with Fermi and Cherenkov telescopes, Vistas in Axion physics: A Roadmap for Theoretical and Experimental Axion Physics through 2025 | Conferencia en University of Washington, Seattle, WA, USA, April 2012 | M.A. Sánchez-Conde |
| Looking into the dark: the present status of gamma-ray dark matter searches | Conferencia en UC Riverside, USA, February 2012 | M.A. Sánchez-Conde |
| The Fermi/LAT Extragalactic Diffuse Background and its dark matter interpretation | Conferencia en UCLA, Dark Matter 2012, Marina del Rey, CA, USA, February 2012 | M.A. Sánchez-Conde |
| Dark matter in nearby dwarf galaxies, local galaxy clusters and the role of halo substructure | Conferencia en UCLA Dark Matter 2012, Marina del Rey, CA, USA, February 2012 | M.A. Sánchez-Conde |
| Axion searches with Fermi, MAGIC and CTA | Conferencia en 6th MULTIDARK Consolider workshop, Canfranc, Apr 14, 2012 | M.A. Sánchez-Conde |
| Current status of gamma-ray dark matter searches with Fermi | Conferencia en :, Instituto de Física Teórica, Universidad Autónoma de Madrid, Spain, November 2012 | M.A. Sánchez-Conde |
| Current status of gamma-ray dark matter searches with Fermi | Conferencia en Instituto de Física de Altas Energías, Universidad Autónoma de Barcelona, Spain, November 2012 | M.A. Sánchez-Conde |

| | | |
|---|--|---|
| Short GRBs and dark matter triggered NS transition to QS | Conferencia en FALL 2012 GAMMA-RAY BURST SYMPOSIUM: 15 years of afterglow discoveries: progenitors, environments and host galaxies from the nearby to the early Universe" held in Marbella-Málaga, 7-12 Oct 2012 | M. Ángeles Pérez-García |
| Deconfinement of quark content in Neutron Stars due to cosmic external agents | Conferencia en international meeting Compact Stars in the QCD Phase Diagram III, Guarujá, Brasil, M. Ángeles Pérez-García, 12-15 Diciembre 2012 | M. Ángeles Pérez-García |
| Multimessenger emission from Neutron star internal phase transitions | Conferencia en international meeting 26th Texas Symposium in Relativistic Astrophysics, Sao Paulo, Brasil, M. Ángeles Pérez-García, 15-20 Diciembre 2012. | M. Ángeles Pérez-García |
| Status of the ANAIS experiment | Conferencia en 6th MULTIDARK Consolider Workshop & RENATA Meeting, LSC, Canfranc, 12-15 April, 2012 | C. Cuesta on behalf of ANAIS experiment |
| ROSEBUD experiment and the UZ participation in EURECA | Conferencia en 6th MultiDark Consolider Workshop & RENATA Meeting. LSC, Canfranc 12-15 April, 2012 | Y. Ortigoza on behalf of ROSEBUD collaboration |
| Dark matter detection with the ANAIS experiment | Conferencia en Cantabria Campus Nobel, Santander 10-15 June 2012 | C. Cuesta on behalf of ANAIS experiment. |
| Scintillating bolometers: at the forefront of particle detection | Conferencia en Cantabria Campus Nobel, Santander 10-15 June 2012 | C. Ginestra on behalf of ROSEBUD collaboration. |
| Rare event searches at Canfranc: ANAIS and ROSEBUD experiments | Conferencia en , 13th Marcel Grossmann meeting (MG13). Stockholm 1-7 July 2012 | M. Martínez on behalf of ANAIS experiment and ROSEBUD collaboration |
| Background model for a NaI(Tl) detector in the frame of the ANAIS experiment | Conferencia en Identification of Dark Matter (IDM 2012), Chicago, U.S.A., July 2012 | M.L. Sarsa on behalf of ANAIS experiment |
| Cryogenic efforts in the University of Zaragoza and the Canfranc Underground Laboratory | Conferencia en First Topical Workshop of the HAP Dark Universe: Workshop on Data Analysis and Detector. Burg Liebenzell (Alemania), 18-23 November 2012 | Y. Ortigoza on behalf of ROSEBUD collaboration |
| Background model for the ANAIS-0 prototype | Conferencia en First Topical Workshop of the HAP Dark Universe: Workshop on Data Analysis and Detector. Burg Liebenzell (Alemania), 18-23 November 2012 | C. Cuesta on behalf of ANAIS experiment |

| | | |
|---|---|---|
| Muon veto in SuperCDMS | Conferencia en First Topical Workshop of the HAP Dark Universe: Workshop on Data Analysis and Detector. Burg Liebenzell (Alemania), 18-23 November 2012 | L. Esteban on behalf of the SuperCDMS collaboration |
| Perspectives on Direct DM Detection | Conferencia en SuperCDMS Collaboration meeting, University of Florida. 11-13 January | David G. Cerdeño |
| Where is the New Physics II? Review of non-LHC results (dark matter, rare decays, other experiments). | Conferencia en International Workshop on Future Linear Colliders, University of Texas, Arlington 22-26 October 2012. | David G. Cerdeño |
| Dark Matter: Indirect detection and Colliders | Conferencia en International Workshop on Future Linear Colliders, University of Texas, Arlington 22-26 October 2012. | David G. Cerdeño |
| Dark Matter Th | Conferencia en International Meeting on Fundamental Physics, Benasque, May 24 - Jun 3. | David G. Cerdeño |
| (Where is my) SUSY? | Conferencia en International Meeting on Fundamental Physics, Benasque, May 24 - Jun 3. | David G. Cerdeño |
| Complementarity of direct DM detection | Conferencia en 8th International Meeting on the Dark Side of the Universe, Búzios, Brazil. 10-15 June 2012 | David G. Cerdeño |
| Neutrino mass textures and lepton flavor violation with a determined theta13 | Conferencia en VIII International Workshop on the Dark Side of the Universe. Buzios, Brasil 10-15 June 2012. | Mario E. Gómez |
| LFV in a future Linear Collider. | Conferencia en Discrete 2012, Third Symposium on Prospects in the Physics of Discrete Symmetries. Lisbon, Portugal 3-7 December 2012 | Mario E. Gómez |
| Higgs and soft SUSY masses in models with extended gauge groups | Conferencia en 4th International Workshop on High Energy Physics in the LHC Era, Valparaiso (Chile), 4-10 Enero 2012 | Martin Hirsch |
| Lepton flavour violation and neutrinos | Conferencia en Rencontres de Physique des Particules (RPP-2012). Montpellier (Francia), 14-16 Mayo 2012 | Martin Hirsch |
| Lepton Flavour Violation | Conferencia en XL International Meeting on Fundamental Physics (Flavour mini-workshop) . Benasque, 24 Mayo - 3 Junio 2012 | Martin Hirsch |

| | | |
|--|---|-----------------|
| Pathways to small neutrino masses: The one-loop story | Conferencia en Workshop on Flavor Symmetries and consequences in Accelerators and Cosmology (FLASY 12). Dortmund (Alemania), 30 Junio -- 4 Julio 2012 | Martin Hirsch |
| Higgs Searches in the $\tau\tau$ Mode at the LHC: Theory vs. Experiment | Conferencia en CMS tau tau meeting, CERN, 12/12. | Sven Heinemeyer |
| SUSY - Global Fits | Conferencia en ATLAS SUSY/Exotics Interpretation workshop, CERN, 11/12. | Sven Heinemeyer |
| Review of Status of Theory Predictions for Charged Higgs Cross Sections and Branching Ratios | Conferencia en cHarged 2012, Uppsala, Sweden, 10/12 | Sven Heinemeyer |
| Elementary Particle Physics: Theory | Conferencia en "Campus Nobel Cantabria" conference, Santander, Spain, 06/12. | Sven Heinemeyer |
| News from the (LHC Higgs XS WG) Overall Contacts | Conferencia en 6th LHC Higgs XS WG workshop, CERN, 05/12. | Sven Heinemeyer |
| The Top Mass in the SM and MSSM (and BMSSM) | Conferencia en "Top at LC" workshop, Paris, France, 05/12. | Sven Heinemeyer |
| Towards Fully Automated (N)MSSM Calculations | Conferencia en Loops & Legs 2012, Wernigerode, Germany, 04/12. | Sven Heinemeyer |
| Recent LHC Searches and Dark Matter | Conferencia en 6th MultiDark workshop, Canfranc, Spain, 04/12. | Sven Heinemeyer |
| LHC2TSP/WG1: Towards the Final Document | Conferencia en 2nd LHC2TSP workshop, CERN, 03/12. | Sven Heinemeyer |
| Implications of a 125 GeV Higgs for the ILC | Conferencia en 2nd LHC2TSP workshop, CERN, 03/12. | Sven Heinemeyer |
| From the LHC to Terascale Physics: How to go ahead | Conferencia en 3rd ILC Forum, DESY Hamburg, Germany, 02/12. | Sven Heinemeyer |
| Higgs and LSP Production via SUSY Decays at the ILC | Conferencia en 3rd ILC Forum, DESY Hamburg, Germany, 02/12. | Sven Heinemeyer |
| Science prospects beyond the BAO scale | Conferencia en BOSS Collaboration Workshop, January 4th -6th, 2012, New York University, New York. | Francisco Prada |

| | | |
|--|--|--|
| BOSS and BigBOSS | Conferencia en 6th MultiDark Consolider Workshop, Canfranc. Underground Laboratory, April 12th -15th , 2012 | Francisco Prada |
| Contributions on /IAA/AVS Fiber Positioner Progress/ and Positioner/Communication | Conferencia en BigBOSS Collaboration Meeting, October 8th -10th, 2012, Institut Henri Poincaré, Paris. Co-Chair (F. Prada and C. Zhai) of Session on /Instrument: Positioner | Francisco Prada / in collaboration with Justo Sanchez & Guillermo Gómez de Rivera; both are collaborators from the IAA-CSIC (Granada) and EPS-UAM (Madrid) |
| Review on Status and perspectives of AstroParticles in Spain: Cosmology | Conferencia en Red Nacional de Astropartículas Workshop - IV CPAN DAYS, November 26th -28th, 2012, Granada. | Francisco Prada |
| Constraints on the ISW effect from LOWZ and CMASS DR8 photo-z galaxy samples, and The New Suite of MultiDark Simulations for Large Surveys | Conferencia en BOSS Collaboration Meeting, December 10th. 12th, 2012, Carnegie Mellon University, Pittsburgh. | Francisco Prada |
| BBN bounds on the cosmological lepton asymmetry for non-zero θ_{13} | Conferencia en 6th Multidark Consolider Workshop & RENATA meeting. Canfranc, 12-15 April 2012 | S. Pastor |
| Cosmological lepton asymmetry with a non-zero mixing angle θ_{13} | Conferencia en XXV International Conference on Neutrino Physics and Astrophysics (Neutrino 2012). Kyoto (Japan), 3-9 June 2012 | U. França |
| Cosmological lepton asymmetry with a non-zero mixing angle θ_{13} | Conferencia en Galileo Institute Workshop: What is nu? Florence (Italy), 25-29 June 2012 | S. Pastor |
| MultiDark CLUES | Conferencia en 7th MultiDark workshop, Barcelona, Spain. 11/2012 | A. Knebe |
| The state of affairs of halo finding• | Conferencia en Joint Euclid CSWG-OUSIM meeting, Barcelona, Spain. 07/2012 | A. Knebe |
| Haloes going MAD | Conferencia en MPA-IFT Spring Workshop, Miraflores de la Sierra, Spain. 04/2012 | A. Knebe |
| Dark energy and cosmic magnetic fields: electromagnetic relics from inflation | Conferencia en VIIth Iberian Cosmolgy Meeting, Lisboa, 2-4 April 2012 | Antonio L. Maroto |
| Coherent vector-field oscillations in an expanding universe | Conferencia en Ibericos 2012. VIIth Iberian Cosmology Meeting, Lisboa, Portugal. University of Lisbon. April 2012. | S. J. Núñez Jareño |
| Non thermal vector Dark Matter | Conferencia en 6th MultiDark Consolider Workshop & RENATA meeting. Canfranc Underground Laboratory, Spain. April 2012. | S. J. Núñez Jareño |

| | | |
|---|--|----------------------------|
| Neutrino Telescopes | Conferencia en Workshop of Institut Valencià d'Investigació Cooperativa en Física Avançada (IVICFA), Valencia, November 2012 | J.D. Zornoza |
| Neutrino Telescopes | Conferencia en Neutrino Workshop within the International Doctorate Network in Particle Physics, Astrophysics and Cosmology (IDPASC), Granada, October 2012. | J.J. Hernandez-Rey |
| Status of Indirect Search for Dark Matter in ANTARES | Conferencia en Mediterranean and Antarctic Neutrino Telescope Symposium (MANTS12), Bologna, October 2012. | G. Lambard |
| Neutrino Telescopes | Conferencia en 5th International Pontecorvo Neutrino Physics School, Alushta, Ucrania, September 2012 | J.D. Zornoza |
| Dark Matter searches with the ANTARES neutrino telescope | Conferencia en 36th International Conference on High Energy Physics”, Melbourne, July 2012. | J.D. Zornoza |
| Recent results of the ANTARES neutrino telescope | Conferencia en 36th International Conference on High Energy Physics”, Melbourne”, July 2012. | J.D. Zornoza |
| Indirect dark matter search with the ANTARES neutrino telescope | Conferencia en 23rd European Cosmic Ray Symposium, Moscow, July 2012. | G. Lambard |
| Indirect Dark Matter Search with the ANTARES neutrino telescope | Conferencia en 7th International Workshop on the Dark Side of the Universe (DSU12), Búzios, Rio de Janeiro, Brazil, June 2012. | G. Lambard |
| ANTARES and KM3NeT | Conferencia en Renata 2012, Canfranc, Spain, April 2012. | J.D. Zornoza |
| Status and perspectives of AP in Spain: Gravitational Waves. | Conferencia en IV Jornadas CPAN. Granada. 26-28 November, 2012 | Alicia Sintes |
| CoCoNut Meeting | Organizadores del congreso CoCoNut Meeting. Universitat de les Illes Balears, Palma. 24-26 October, 2012. | Alicia Sintes, Sascha Husa |
| Accuracy requirements for binary black hole waveforms | Conferencia en CoCoNut Meeting. Universitat de les Illes Balears, Palma. 24-26 October, 2012. | Sascha Husa |
| Application of a chi2 veto to a Hough all-sky search for continuous gravitational waves | Conferencia en LVC "LIGO-VIRGO COLLABORATION. Roma, Italia. 10-14/09/2012 | Alicia Sintes |
| Gravitational Waves | Conferencia en XL International Meeting on Fundamental Physics, FPA Winter. Benasque, Spain, May 24 -Jun 03 , 2012 | Alicia Sintes |

| | | |
|--|---|--|
| Gravitational Waves: Status | Conferencia en 6th MultiDark Consolider Workshop &RENATA meeting. Canfranc, Aragón. 12-15 April, 2012 | Alicia Sintes |
| Computational modeling of GW sources | Conferencia en 6th MultiDark Consolider Workshop &RENATA meeting. Canfranc, Aragón. 12-15 April, 2012 | Sascha Husa |
| Numerical Relativity Contributions for Ninja 2 | Conferencia en NINJA Face-to-Face workshop. Atlanta, USA. March 29-30, 2012 | Sascha Husa |
| Towards Gravitational-Wave Astronomy with ground-based observatories | Conferencia en 2nd IBERIAN GRAVITATIONAL WAVE MEETING. Barcelona, Spain. Feb. 14-17 2012 | Alicia Sintes |
| The Ninja project and surveys of the binary black hole parameter space | Conferencia en 2nd IBERIAN GRAVITATIONAL WAVE MEETING. Barcelona, Spain. Feb. 14-17 2012 | Sascha Husa |
| On the use of Sb as energy estimator | Conferencia en Pierre Auger Observatory Analysis meeting. Praha, Czech Republic. June, 18-22, 2012 | G. Ros y M.D. Rodríguez-Frías |
| Dark matter and the origin of the highest energy cosmic rays | Conferencia en Simulation and Atmospheric Monitoring Workshop of the Jem-EUSO Colaboration. Alcalá de Henares, Spain. 26-30 March, 2012 | G. Ros |
| Sb for photons: recent results and on-going work | Conferencia en Annual meeting of the Pierre Auger Observatory. Malargüe, Argentina. March 2012 | G. Ros y M.D. Rodríguez-Frías |
| Outreach activities of the SPAS-UAH group | Conferencia en Annual meeting of the Pierre Auger Observatory. Malargüe, Argentina. Malargüe, Argentina. March 2012 | G. Ros y M.D. Rodríguez-Frías |
| IR Camera EUSO-BALLOON | Conferencia en 10th EUSO-BALLOON Progress Meeting. Wako (Tokio), (Japón), 04/12/2012 – 05/12/2012 | J. S. Perez Cano, H. Prieto, J. A. Morales de los Ríos, G. Sáez Cano and M. D. Rodriguez Frias |
| IR Camera status | Conferencia en 12th JEM-EUSO International Meeting. Wako (Tokio), (Japón), 04/12/2012 – 05/12/2012 | J. S. Perez Cano, H. Prieto, J. A. Morales de los Ríos, G. Sáez Cano and M. D. Rodriguez Frias |
| EUSO-BALLOON @ CNES supported by Multidark: A pathfinder of the JEM-EUSO Space Mission | Conferencia en 7th MulitDark Consolider Workshop. Barcelona, 20/11/2012 | J. S. Perez Cano, H. Prieto, J. A. Morales de los Ríos, G. Sáez Cano and M. D. Rodriguez Frias |

| | | |
|---|--|---|
| IR Camera EUSO-BALLOON | Conferencia en IX EUSO-BALLOON progress meeting at Naples, (Italia), 08/11/2012 – 09/11/2012 | J. S. Perez Cano, H. Prieto, J. A. Morales de los Ríos, G. Sáez Cano and M. D. Rodriguez Frias |
| EUSO Balloon Battery Power Pack | Conferencia en JEM-EUSO International Meeting 2012. Riken Institute, Wako, Japan. December 6th 2012 | H.Prieto, Marco Casolino |
| EUSO Balloon and IR Camera Battery Power Pack | Conferencia en EUSO BALLOON Design Review. CNES, Toulouse, France. December 17th 2012 | H.Prieto, Marco Casolino, J.A Morales de los Ríos, G. Sáez-Cano, S.Perez Cano and María Dolores Rodríguez Frías |
| Reliability Work in JEM-EUSO Mission | Poster presentado en el congreso 39th COSPAR Scientific Assembly. Mysore University, Mysore, India. 14th to 22nd July 2012 | H.Prieto, Marco Casolino, J.A Morales de los Ríos, G. Sáez-Cano, S.Perez Cano and María Dolores Rodríguez Frías on behalf of the JEM-EUSO collaboration |
| Reliability Work in JEM-EUSO Mission | Poster presentado en el congreso RAMS in science Meeting, Madrid. Universidad Complutense de Madrid, Madrid, Spain. September 27th - 28th 2012 | H.Prieto, Marco Casolino, J.A Morales de los Ríos, G. Sáez-Cano, S.Perez Cano and María Dolores Rodríguez Frías on behalf of the JEM-EUSO collaboration |
| Direction reconstruction methods in cloudy sky | Conferencia en Simulation & Atmospheric Monitoring (SAM) Workshop. ESAF Reconstruction Code. Moscow - 2012, May 28 | J. H. Carretero, J. A. Morales de los Ríos, H. Prieto, G. Sáez-Cano, M. D. Rodríguez-Frías |
| Track direction reconstruction algorithms comparison in clear sky and cloudy conditions | Conferencia en Jem-Euso Moscow Meeting, Russia. Geneva - 2012, October 17-19 | J. H. Carretero, J. A. Morales de los Ríos, H. Prieto, G. Sáez-Cano, M. D. Rodríguez-Frías |
| JEM-EUSO Simulation and Atmospheric Monitoring Meeting | Conferencia en JEM-EUSO Simulation and Atmospheric Monitoring Meeting in Geneva, Switzerland | J. H. Carretero, G. Sáez-Cano, J. A. Morales de los Ríos, H. Prieto, M. D. Rodríguez-Frías |

| | | |
|---|---|---|
| Status on cloud simulations | Conferencia en JEM-EUSO International Meeting 2012. Wakoshi, Japón. Diciembre 2012 | Guadalupe Sáez Cano; J .A. Morales de los Rios; Hector Prieto Alfonso; Jesús Hernández Carretero; M. Dolores Rodríguez Frías |
| Status on clouds simulation: angular reconstruction | Conferencia en JEM-EUSO AMS & Simulation Meeting. Ginebra, Suiza. Octubre 2012 | Guadalupe Sáez Cano; Hector Prieto Alfonso; J .A. Morales de los Rios; M. Dolores Rodríguez Frías |
| Status on simulation of cloud using ESAF | Conferencia en JEM-EUSO International Meeting 2012. Moscú, Rusia. Junio 2012 | Guadalupe Sáez Cano; J .A. Morales de los Rios; Hector Prieto Alfonso; Jesús Hernández Carretero; M. Dolores Rodríguez Frías |
| Status on cloud simulations using ESAF | Conferencia en JEM-EUSO AMS & Simulation Meeting. Alcalá de Henares, España. Marzo 2012 | Guadalupe Sáez Cano; J .A. Morales de los Rios; Hector Prieto Alfonso; Jesús Hernández Carretero; M. Dolores Rodríguez Frías |
| Detecting Cirrus with the JEM-EUSO IR-Camera | Conferencia en 12th JEM-EUSO international collaboration meeting at ICRR & RIKEN, 3-7 Dec. 2012. Tokyo, Japón | J .A. Morales de los Rios; Guadalupe Sáez Cano; Hector Prieto Alfonso; Jesús Hernández Carretero; M. Dolores Rodríguez Frías; for the JEM-EUSO Collaboration. |
| The IR-Camera End to End Simulation; Compression algorithm study. | Conferencia en 12th JEM-EUSO international collaboration meeting at ICRR & RIKEN, 3-7 Dec. 2012. Tokyo, Japón | J .A. Morales de los Rios; Guadalupe Sáez Cano; Hector Prieto Alfonso; Jesús Hernández Carretero; M. Dolores Rodríguez Frías; for the JEM-EUSO Collaboration. |

| | | |
|--|---|---|
| The IAC INO IR-Camera, a pathfinder for the JEM-EUSO IR-Camera | Conferencia en JEM-EUSO AMS and Simulation International Meeting at Geneva. Geneva, Suiza. 17/10/2012 | J .A. Morales de los Rios; Guadalupe Sáez Cano; Hector Prieto Alfonso; Jesús Hernández Carretero; M. Dolores Rodríguez Frías; for the JEM-EUSO Collaboration. |
| The JEM-EUSO IR-Camera END to END Simulation | Conferencia en JEM-EUSO AMS and Simulation International Meeting at Geneva.Geneva, Suiza. 17/10/2012 | J .A. Morales de los Rios; Guadalupe Sáez Cano; Hector Prieto Alfonso; Jesús Hernández Carretero; M. Dolores Rodríguez Frías; for the JEM-EUSO Collaboration. |
| The IR Camera of the JEM-EUSO Space Observatory | Poster presentado en 39th COSPAR Scientific Assembly. Mysore, India. 14/07/2012 | Morales de los Rios; Guadalupe Sáez Cano; Hector Prieto Alfonso; Jesús Hernández Carretero; M. Dolores Rodríguez Frías; for the JEM-EUSO Collaboration |
| Modelos distribuidos para aplicaciones de computación masiva | Conferencia en I Jornadas de Computación Distribuida Inteligente y Sistemas Complejos (CDISC2012). Trujillo, España. 11/06/2012 | J .A. Morales de los Rios. |
| The IAC INO IR-Camera, a pathfinder for the JEM-EUSO IR-Camera, and END to END IR-Camera Simulation. | Presentation at the XI International JEM-EUSO Conference, Moscow, Rusia. June 2012. | J .A. Morales de los Rios; Guadalupe Sáez Cano; Hector Prieto Alfonso; Jesús Hernández Carretero; M. Dolores Rodríguez Frías; for the JEM-EUSO Collaboration. |
| The IAC-INO IR-Camera prototype caracterization, and END to END IR-Camera Simulation | Conferencia en JEM-EUSO AMS & Simulation Meeting. Alcalá de Henares, España. 26/03/2012 | J .A. Morales de los Rios; Guadalupe Sáez Cano; Hector Prieto Alfonso; Jesús Hernández Carretero; M. Dolores Rodríguez Frías; for the JEM-EUSO Collaboration. |

| | | |
|--|--|--|
| Studies with BATATA | Conferencia en Particle Physics with High Energy Cosmic Rays. Lisbon 16/01/2012 | Dolores Rodríguez Frías |
| Report on the "Atmospheric Monitoring System" WG | Conferencia en JEM-EUSO International Conference. Tokyo, Japón. 7 de diciembre de 2012. | MD. Rodríguez Frías. |
| On the way to the Preliminary Design Review (PDR) of the JEM-EUSO Space Mission IR camera. | Conferencia en Simulation & Atmospheric Monitoring System (AMS) meeting. Ginebra, Suiza. 18 de octubre de 2012. | MD. Rodríguez Frías for the Spanish JEM-EUSO consortium. |
| Frontier Astroparticle Physics from Space: The JEM-EUSO Space Mission. | Conferencia en VI MULTIDARK Consolider Workshop & RENATA meeting. Canfranc, Huesca. 14 de abril de 2012. | MD. Rodríguez Frías for the JEM-EUSO consortium. |
| Baseline of the Infrared Camera for the EUSO-BALLOON. | Conferencia en Phase A review of the EUSO-BALLOON @ French Space Agency (CNES). Toulouse, Francia. 1 de febrero de 2012. | MD. Rodríguez Frías |
| Dynamics of General Relativity: Black Holes and Asymptotics | Co-organización de Dynamics of General Relativity: Black Holes and Asymptotics. December 10-21 2012. Erwin Schrödinger Institute Boltzmanngasse. Viena. Austria | Sascha Husa |
| Charged Lepton Flavour violation and the physics potential of a Linear Collider | Conferencia en LC13: exploring QCD from the infrared regime to heavy flavour scales at B-factories, the LHC and a Linear Collider. 16-20 September, Trento, Italy. | M. E. Gómez |
| Dark Matter and the LHC | Conferencia en 9th MultiDark workshop, Alcalá de Henares, Spain, 11/13 | M.E. Gómez |
| Double beta decay at the LHC | Conferencia en 2013 International Workshop on Baryon and Lepton Number Violation (BLV2013). MPIK Heidelberg (Alemania), 8-11 Abril 2013 | M. Hirsch |
| Double beta decay at the LHC | Conferencia en MEDEX'13: Matrix Elements for the Double-beta-decay Experiments. Praga (República Checa), 11-14 Junio 2013 | M. Hirsch |
| Lepton Flavour Violation | Conferencia en IDPASC School of Flavour Physics. Valencia, 2-7 Mayo 2013 | M. Hirsch |
| Double beta decay and lepton number violation | Conferencia en IVICFA, Valencia, 18/10/2013 | M. Hirsch |

| | | |
|---|---|---------------|
| Double beta decay at the LHC | Conferencia en USM, Valparaiso, Chile, 21/01/2014 | M. Hirsch |
| LC Precision in the MSSM | Conferencia en LCWS13, Tokyo, Japan, 11/13 | S. Heinemeyer |
| Does the LHC exclude SUSY Particles at the ILC? | Conferencia en LCWS13, Tokyo, Japan, 11/13 | S. Heinemeyer |
| MW in the MSSM | Conferencia en LCWS13, Tokyo, Japan, 11/13 | S. Heinemeyer |
| Towards the LC Precision: Progress in the Mh Calculation in the MSSM | Conferencia en LCWS13, Tokyo, Japan, 11/13 | S. Heinemeyer |
| Theory Uncertainties in LC Higgs Coupling | Conferencia en LCWS13, Tokyo, Japan, 11/13 | S. Heinemeyer |
| Higgs and DM Production via SUSY Decays at the LC | Conferencia en LCWS13, Tokyo, Japan, 11/13 | S. Heinemeyer |
| LHC Searches, LUX and Dark Matter in Supersymmetry | Conferencia plenaria en 9th MultiDark workshop, Madrid, Spain, 11/13 | S. Heinemeyer |
| Theory Uncertainties in SM Higgs Decays | Conferencia en Snowmass Energy Frontier workshop, Seattle, USA, 07/13 | S. Heinemeyer |
| Exploring Quantum Physics at the ILC (White Paper) | Conferencia en Snowmass Energy Frontier workshop, Seattle, USA, 07/13 | S. Heinemeyer |
| EWPO in the pMSSM | Conferencia en Snowmass Energy Frontier workshop, Seattle, USA, 07/13 | S. Heinemeyer |
| Physics at the ILC | Conferencia plenaria en ILC TDR launch, CERN, 06/13 | S. Heinemeyer |
| Impact of mt Measurements on Precision Tests in the SM and MSSM (and BMSSM) | Conferencia en LCWS13, DESY, Hamburg, Germany, 05/13 | S. Heinemeyer |
| Implications of SUSY and Higgs Searches for the ILC | Conferencia en LCWS13, DESY, Hamburg, Germany, 05/13 | S. Heinemeyer |
| Higgs Production via SUSY Decays at the LC | Conferencia en LCWS13, DESY, Hamburg, Germany, 05/13 | S. Heinemeyer |
| LC Precision in the MSSM: Getting It Under Control | Conferencia en LCWS13, DESY, Hamburg, Germany, 05/13 | S. Heinemeyer |
| Where Will We Find SUSY? | Conferencia en SUSY/Allianz workshop, DESY, Hamburg, Germany, 05/13 | S. Heinemeyer |

| | | |
|--|---|---------------------------|
| Modified gravity theories explaining Dark Matter and Dark energy | Conferencia en Dark matter and New Physics meeting, Kavli Institute for Theoretical Physics China (KITPC), Chinese Academy of Sciences, Pekin, China, 5 September 2013. | Álvaro de la Cruz Dombriz |
| Branons as dark matter candidates | Conferencia en EPNT workshop 2013, Centre de Physique des Particules de Marselle (Francia), 03/04/2013 | J.A.R. Cembranos |
| Reliability of Monte Carlo event generators for gamma ray dark matter searches | Conferencia en Workshop on Cosmic rays and photons from dark matter annihilation: Theoretical Issues. Mainz (Alemania), 30/06/2013 | J.A.R. Cembranos |
| Gravitational dark matter | Conferencia en SUSY 2013, ICTP, Trieste (Italia), 27/08/2013 | J.A.R. Cembranos |
| Solution to the isotropy problem for cosmological hidden vector models | Conferencia en 9th PATRAS workshop on Axions, WIMPs and WISPs, Mainz (Alemania), 27/06/2013 | J.A.R. Cembranos |
| Isotropy theorem for cosmological Yang-Mills theories | Conferencia en VIIth Iberian Cosmology Meeting, Granada, España | Santos José Núñez Jareño |
| Introduction to Theoretical Cosmology | Conferencia en Third International Doctorate School on Particles, Strings and Cosmology. Third IDPASC, Santiago de Compostela, 2171 - 2/2 2013 | A.L. Maroto |
| Cosmology with oscillating vectors | Conferencia en 1st-ILINK Workshop Macro from micro: Quantum Gravity and Cosmology, CFMAC (CSIC). Madrid, 24-27 June 2013 | A.L. Maroto |
| Isotropy theorem for cosmological vectors and higher spin fields | Conferencia en COSMO 2013, DAMTP, University of Cambridge UK, 1-7 September 2013 | A.L. Maroto |
| Avoiding the anisotropy problem of cosmological vector and higher-spin fields | Conferencia en BIPAC (Oxford University). Sep10 2013 | A.L. Maroto |
| Clusters in Cosmological simulations: From MultiDark to Jubilee | Conferencia en Cluster conference, Madonna di Campiglio, March, 2013 | S. Gottlöber |
| Formation of structure in the universe | Conferencia en XXV IUPAP Conf. on Computational Physics, Moscow, August 2013 | S. Gottlöber |
| The response of dark mater haloes to baryonic physics | Conferencia en 9th MultiDark workshop, Alcala de Henares. 6-8 Noviembre 2013 | Alexander Knebe |
| Finding in Cosmological Simulations: The State-of-Affair | Conferencia en Exascale Computing in Astrophysics, Ascona | Alexander Knebe |

| | | |
|--|---|-----------------|
| Spain Participation in DESI | Conferencia en CosmoRENTA 2013: Cosmology Conference, June 3rd-4th, 2013, Instituto de Física Cospúscular CSIC-UV, Valencia, Spain | Francisco Prada |
| The New MultiDark Cosmological Simulations | Conferencia en SDSS-III and SDSS-IV Collaboration Meetings, June 10 th -14 th , 2013, Baltimore, USA | Francisco Prada |
| Clustering and Bias of Dark Matter Halos | Conferencia en KICP Workshop on Galaxies in the Cosmic Web, June 17th-21th, Chicago, USA | Francisco Prada |
| BAO damping and shifts in the Planck Cosmology | Conferencia en LSS13 Workshop, July 1st-5th, 2013, Ascona, Suiza | Francisco Prada |
| Performance Results of the Spanish Fiber Robot Positioner, and the Focal Plate | Conferencia en 1st DESI Collaboration Meeting, July 15th-18th, 2013, Berkeley, USA | Francisco Prada |
| Studies of the Clustering and Bias in the Planck Cosmology | Conferencia en Ripples in the Cosmos Workshop, July 22th-26th, 2013, Durham, UK. | Francisco Prada |
| Spanish Participation in BigBOSS/DESI | Conferencia en Workshop Red de Infraestructuras de Astronomía – ASTROMADRID on Desarrollo de instrumentación astronómica en España Perspectivas y estrategia para la próxima década, September 25 th -27 th , 2012, Consejo Superior de Investigaciones Científicas, Madrid, Spain. | Francisco Prada |
| Clustering and Bias in the New BigMultiDark simulations | Conferencia en Conference on Origin of cosmic structures: numerical and theoretical approaches, November 25th-29th, 2013, Institut Henri Poincaré, Paris, France | Francisco Prada |
| Dark Matter constraints from Fermi-LAT inner Galaxy measurements | Conferencia en HAP Dark Matter 2013', 18-20 February 2013, Munster, Germany | Carlos Muñoz |
| Theoretical Aspects of Dark Matter Search | Conferencia en `4th Roma International Conference on Astro-particle Physics RICAP 13', 22-24 May 2013, Roma, Italy. | Carlos Muñoz |
| Phenomenology of a New Supersymmetric Standard Model | Conferencia en `Supersymmetries and Quantum Symmetries - SQS 2013', July 29-August 3 2013, Dubna, Russia. | Carlos Muñoz |
| Theoretical Aspects of Dark Matter Search | Conferencia en `Dark Matter and New Physics' Program, August 19-September 13, 2013, KITPC Beijing, China | Carlos Muñoz |

| | | |
|--|---|---|
| Dark Matter constraints from Fermi-LAT inner Galaxy measurements | Conferencia en `Dark Matter and New Physics' Program, August 19-September 13, 2013, KITPC Beijing, China | Carlos Muñoz |
| Constraints on WIMP annihilation for contracted Dark Matter in the inner Galaxy with the Fermi-LAT | Conferencia en `IX International Workshop on The Dark Side of the Universe DSU2013', 14-17 October 2013, SISSA, Trieste, Italia | Carlos Muñoz |
| Dark Matter | Conferencia en `XLII International Meeting on Fundamental Physics IMFP14', Jan 26-Feb 01, 2014, Benasque, Spain | Carlos Muñoz |
| 8 th MultiDark Consolider Workshop | Organización del congreso 8 th MultiDark Consolider Workshop, April 17-19, 2013. Univ. de Granada | Carlos Muñoz |
| 9 th MultiDark Consolider Workshop | Organización del congreso 9 th MultiDark Consolider Workshop, November 6-8, 2013, Univ. de Alcalá | Carlos Muñoz |
| Indirect DM searches with MAGIC | Conferencia en 25th Rencontres de Blois, Blois, May 2013 | K. Satalecka |
| MAGIC observation of the unassociated Fermi-LAT object 2FGL J1410.4+7411 | Conferencia en 33th International Cosmic Rays Conference, Rio de Janeiro, Brazil, July 2013 | K. Satalecka et al |
| Prospects for indirect DM detection with CTA | Conferencia en Cherenkov Telescope Array (CTA) and TeV science at Observatoire de Paris, Meudon, November 2013 | K. Satalecka |
| Gamma-rays in Clusters from Dark Matter & Cosmic Rays | Conferencia en Amsterdam Paris Stockholm Meeting, Paris, France, December 2013 | F. Zandanel |
| The Quest for Gamma-rays in Clusters of Galaxies | Conferencia en Dutch Cherenkov Telescope Array Day, Amsterdam, Netherlands, October 2013 | F. Zandanel |
| Fermi-LAT Analysis of the Coma Cluster | Conferencia en 18th Symposium of Astroparticle Physics in the Netherlands, Leiden, Netherlands, October 2013 | F. Zandanel |
| MAGIC Gamma-ray Observations of the Perseus Galaxy Cluster | Conferencia en 33th International Cosmic Rays Conference, Rio de Janeiro, Brazil, July 2013 | F. Zandanel et al., |
| MAGIC observations of the radio galaxy NGC 1275 and multi-wavelength studies | Conferencia en 33th International Cosmic Rays Conference, Rio de Janeiro, Brazil, July 2013 | P. Colin et al. (including F.Zandanel) |
| The Aftermath of an Exceptional TeV Flare in the AGN Jet if IC 310 | Conferencia en 33th International Cosmic Rays Conference, Rio de Janeiro, Brazil, July 2013 | D. Eisenacher et al. (including F.Zandanel) |

| | | |
|---|---|--------------------|
| On the Physics of Radio Halos: Scaling Relations and Luminosity Functions | Conferencia en Astronomy, Radio Sources and Society, Leiden, Netherlands, June 2013 | F. Zandanel |
| Dark Matter and Cosmic Rays in Clusters of Galaxies | Conferencia en Fermi Summer School, Lewes, Delaware, USA, May-June 2013 | F. Zandanel |
| What we know about the Dark Matter velocity distribution | Conferencia en Oxford University, March 2013 | M. Fornasa |
| CTA and Dark Matter | Conferencia en Science with the Cherenkov Telescope Array: an IoP meeting, Leicester, April 2013 | M. Fornasa |
| Dark Matter induced anisotropies in gamma-rays | Conferencia en Anisotropic Universe, GRAPPA Institute, Amsterdam, 25-27 September 2013 | M. Fornasa |
| CTA and Dark Matter | Conferencia en The Violent Universe, London, 31 October – 1 November 2013 | M. Fornasa |
| Deep survey of Segue 1 dwarf spheroidal galaxy with the MAGIC Telescopes | Conferencia en European Physical Society Conference on High Energy Physics, Stockholm, July 2013. PoS (EPS-HEP 2013) 389 | J. Aleksić et al |
| Optimized analysis method for indirect dark matter searches with Imaging Air Cherenkov Telescopes | Conferencia en European Physical Society Conference on High Energy Physics, Stockholm, July 2013. PoS(EPS-HEP 2013) 005 | J. Aleksić et al |
| Deep observations of Segue 1 dwarf spheroidal galaxy with the MAGIC Telescopes | Conferencia en 33rd International Cosmic Ray Conference, Rio de Janeiro, Brazil, July 2013. To appear in the Proceedings of the 33rd ICRC | J. Aleksić et al |
| Fundamental Physics with Imaging Atmospheric Cherenkov Telescopes | Conferencia en 48th Rencontres de Moriond "Very High Energy Phenomena in the Universe", La Thuile, Italy, March 9-16, 2013 | A. Moralejo |
| Cold dark matter halo concentrations and substructure annihilation boosts | Conferencia en What can we learn from the gamma-ray sky? workshop, Minneapolis, USA, October 2013 | M.A. Sánchez-Conde |
| Cold dark matter halo concentrations and substructure annihilation boosts | Conferencia en TeV Particle Astrophysics international conference, Irvine, CA, USA, August 2013 | M.A. Sánchez-Conde |
| Cold dark matter halo concentrations and substructure annihilation boosts | Conferencia en 2013 Galaxy Formation workshop, Santa Cruz, CA, USA, August 2013 | M.A. Sánchez-Conde |
| The present status of gamma-ray dark matter searches | Conferencia en CEFCA seminar, CEFCA, Teruel, Spain, November 2013 | M.A. Sánchez-Conde |

| | | |
|--|---|--------------------|
| Dark matter halo substructure and its role in gamma-ray dark matter searches | Conferencia en High Energy Physics seminar, Columbia University, NY, USA, October 2013 | M.A. Sánchez-Conde |
| Dark matter halo substructure and its role in gamma-ray dark matter searches | Conferencia en KIPAC Tea Talk, KIPAC/SLAC, Stanford, Menlo Park, USA, July 2013 | M.A. Sánchez-Conde |
| Dark matter halo substructure and its role in gamma-ray dark matter searches | Conferencia en TAPIR seminar, CalTech, Pasadena, USA, June 2013 | M.A. Sánchez-Conde |
| Shedding light to the dark with N-body cosmological simulations | Conferencia en Workshop on dark matter tools, IFIC/CSIC, Valencia, Spain, April 2013 | M.A. Sánchez-Conde |
| Dark matter evidences and the LCDM cosmological model | Conferencia en Workshop on dark matter tools, IFIC/CSIC, Valencia, Spain, April 2013 | M.A. Sánchez-Conde |
| Hands on LanHEP/MicrOmegas | Conferencia en Workshop on dark matter tools, IFIC/CSIC, Valencia, Spain, April 2013 | R. A. Lineros |
| Hands on PYTHIA: dark matter and collider | Conferencia en Workshop on dark matter tools, IFIC/CSIC, Valencia, Spain, April 2013 | R. A. Lineros |
| Dark Matter Indirect Searches: Gamma and Cosmic Rays (a modest review) | Conferencia en Encuentro de excelencia VLC/Campus “Busqueda de la Materia Oscura”, UPV-Gandia, Spain. December 10, 2013 | R. A. Lineros |
| Probing interactions within the dark matter sector via extra radiation contributions | Conferencia en Dark Side of the Universe Workshop, Trieste, Italy. October 14, 2013 | R. A. Lineros |
| Radio constraints on (extra) Galactic WIMP dark matter | Conferencia en Anisotropic Universe Workshop, Amsterdam, Netherlands, September 27, 2013 | R. A. Lineros |
| Radio constraints on Galactic WIMP dark matter | Conferencia en XXXIV Reunión Bienal de la Sociedad Española de Física, Valencia, Spain, July 17, 2013 | R. A. Lineros |
| Radio constraints on Galactic WIMP dark matter | Conferencia en Roma International Conference on AstroParticle physics (RICAP 2013), Rome, Italy, May 22, 2013 | R. A. Lineros |
| Anisotropy in Cosmic rays from internal transitions in neutron stars | Conferencia en Roma International Conference on AstroParticle physics (RICAP 2013), Rome, Italy, May 22, 2013 | M. A. Perez-Garcia |
| The Detection of the Cosmic γ -ray Horizon | Conferencia en HEAD Meeting, Monterey, CA, April 2013 | A. Domínguez |
| The measurement of the expansion rate of the Universe from gamma-ray attenuation | Conferencia en UCSC Galaxy workshop, Santa Cruz, USA, August 2013 | A. Domínguez |

| | | |
|--|--|--------------|
| The measurement of the expansion rate of the Universe from gamma-ray attenuation | Conferencia en TeV Particle Astrophysics, Irvine, USA, August 2013 | A. Domínguez |
| The measurement of the expansion rate of the Universe from gamma-ray attenuation | Conferencia en What are we learning from the γ -ray sky?, Minneapolis, USA, October 2013 | A. Domínguez |
| The measurement of the expansion rate of the Universe from gamma-ray attenuation | Conferencia en 27th Texas Symposium on Relativistic Astrophysics, Dallas, USA, December 2013 | A. Domínguez |
| The Detection of the Cosmic γ -ray Horizon | Conferencia en UCSC Fermi meeting, Santa Cruz, USA, April 2013 | A. Domínguez |
| The measurement of the expansion rate of the Universe from gamma-ray attenuation | Conferencia en Carnegie Observatories, Pasadena, June 2013 | A. Domínguez |
| The measurement of the expansion rate of the Universe from gamma-ray attenuation | Conferencia en UCSB, Santa Barbara, October 2013 | A. Domínguez |
| The measurement of the expansion rate of the Universe from gamma-ray attenuation | Conferencia en UCSD, San Diego, October 2013 | A. Domínguez |
| The measurement of the expansion rate of the Universe from gamma-ray attenuation | Conferencia en UCI, Irvine, October 2013 | A. Domínguez |
| The measurement of the expansion rate of the Universe from gamma-ray attenuation | Conferencia en University of Delaware, Newark, November 2013 | A. Domínguez |
| From ANAIS-0 to ANAIS-25 | Conferencia en MULTIDARK Consolider Workshop. Granada, Spain, April 2013 | C. Cuesta |
| Preliminary results of ANAIS-25 | Conferencia en RICAP-13 Roma International Conference on AstroParticle Physics. Rome, Italy, May 2013 | C. Cuesta |
| Response of parylene-coated NaI(Tl) scintillators at low temperature | Conferencia en International Workshop on Radiopure Scintillators RPSCINT 2013. Kiev, Ukraine, September 2013 | M. Martínez |
| Preliminary results of ANAIS-25 at the Canfranc Underground Laboratory | Conferencia en International Workshop on Topics in Astroparticle and Underground Physics (TAUP 2013). Asilomar Conference Grounds, California, USA, September 2013 | M.L. Sarsa |
| The ANAIS dark matter search at the Canfranc Underground Laboratory | Conferencia en Fundamental Physics, CMB and LSS in the light of Planck satellite and DES, PACT 2013. Madrid, Spain, October 2013 | ML. Sarsa |

| | | |
|--|---|------------------------------------|
| Anais status | Conferencia en 9th MULTIDARK Consolider Workshop. Alcalá de Henares, Spain, November 2013 | M.L. Sarsa |
| Parylene-coated NaI(Tl) scintillators at low temperature | Conferencia en 9th MULTIDARK Consolider Workshop. Alcalá de Henares, Spain, November 2013 | M. Martínez |
| Actividades de búsqueda de materia oscura en la Universidad de Zaragoza y el Laboratorio Subterráneo de Canfranc | Conferencia en Encuentro de excelencia VLC/Campus "Búsqueda de la Materia Oscura". Valencia, Spain. December 2013 | M.L. Sarsa and E. García |
| Acoustic studies for alpha background rejection in dark matter bubble chamber detectors | Conferencia en Low Radioactivity Techniques 2013 (LRT 2013) Gran Sasso, Italy, April 2013, AIP Conference Proceedings, Volume 1549, pp. 142-147 (2013) | M. Bou-Cabo, I. Felis and M. Ardid |
| Update on COUPP status and activities | Conferencia en 8 th MULTIDARK Consolider Workshop. Granada, Spain, April 2013 | M Bou-Cabo, M. Ardid and I. Felis |
| . Dark Matter Searches with COUPP Bubble Chambers | Conferencia en 21st International Conference on Supersymmetry and Unification of Fundamental Interactions (SUSY 2013). ICTP Trieste, Italy. August 2013 | M. Ardid |
| Update on COUPP status and activities | Conferencia en 9th MULTIDARK Consolider Workshop. Alcalá de Henares, Spain, November 2013 | M Bou-Cabo |
| The Search for Dark Matter | Conferencia en Encuentro de excelencia VLC/Campus "Búsqueda de la Materia Oscura". Valencia, Spain. December 2013 | J.I. Collar |
| Very Light WIMPs | Conferencia en Encuentro de excelencia VLC/Campus "Búsqueda de la Materia Oscura". Valencia, Spain. December 2013 | David G. Cerdeño |
| SuperCDMS: Recent results and prospects | Conferencia en Fundamental Physics, CMB and LSS in the light of Planck and DES, IFT, Madrid, 21 October 2013 | David G.Cerdeño |
| Particle Candidates for Dark Matter | Conferencia en TAUP 2013: International Conference on Topics in Astroparticle and Underground Physics, Asilomar California, USA, 10 September 2013 | David G. Cerdeño |
| Target complementarity for direct dark matter detection | Conferencia en Dark Matter and New Physics. Programme of the KITPC Beijing, China. 20 August 2013. | David G. Cerdeño |

| | | |
|--|--|--|
| Dark Matter | Conferencia en XLI International Meeting on Fundamental Physics. IFCA, Santander, Spain | David G. Cerdeño |
| Dark Matter | Conferencia en IVICFA Easter Workshop. IFIC Valencia, Spain. 25 March 2013 | David G. Cerdeño |
| El Universo Invisible | Conferencia de divulgación en el ciclo “Encuentros con la ciencia”, Ambito Cultural de El Corte Inglés. 14 Noviembre 2013 | M. L. Sarsa |
| Indirect and direct detection prospects of RH-sneutrino dark matter in the NMSSM | Conferencia en Roma International Conference on Astro-Particle physics RICAP13 | Miguel Peiró |
| Displaced Vertices in the NMSSM with RH Sneutrino Dark Matter | Conferencia en XXIV Bienal de Física de la RSEF | Víctor Martín |
| Displaced Vertices in the NMSSM with RH Sneutrino Dark Matter | Conferencia en XLI International Meeting on Fundamental Physics 2013 | Víctor Martín |
| SuperCDMS: present status and future perspectives | 8 th MultiDark Consolider Workshop, April 17-19, 2013, Granada. | E. López Asamar |
| A la caza de la materia oscura | Conferencia de divulgación en Encuentro de excelencia VLC/Campus “Búsqueda de la Materia Oscura”. Gandia, Spain. December 2013 | J.I. Collar |
| Cazadores de Materia Oscura | Conferencia de divulgación en Semana de la Ciencia mi+d, Madrid | David G. Cerdeño |
| Cazadores de Materia Oscura | Conferencia de divulgación en Café Scientifique, Madrid | David G. Cerdeño |
| IR Camera Status | Conferencia en XI EUSO-BALLOON Progress Meeting Toulouse (Francia), 14/02/2013 | J. S. Perez Cano, H. Prieto, L. del Peral, J. A. Morales de los Ríos, G. Sáez Cano and M. D. Rodriguez Frias |
| IR Camera EUSO-BALLOON | Conferencia en EUSO-BALLOON Critical Design Review for the IR Camera, Toulouse (Francia), 18/02/2013 | J. S. Perez Cano, H. Prieto, L. del Peral, J. A. Morales de los Ríos, G. Sáez Cano and M. D. Rodriguez Frias |
| IR Camera Status | Conferencia en XII EUSO-BALLOON Progress Meeting Karlsruhe (Germany). 11/04/2013 | J. S. Perez Cano, H. Prieto, L. del Peral, J. A. Morales de los Ríos, G. Sáez Cano and M. D. Rodriguez Frias |

| | | |
|---|--|--|
| Photon propagation in the atmosphere (clouds) | Conferencia en JEM-EUSO AMS & Simulation Meeting, Karlsruhe, Germany, April 2013 | Guadalupe Sáez Cano; Kenji Shinozaki; J .A. Morales de los Rios; Hector Prieto Alfonso; Luis del Peral Gochicoa; Jesús Hernández Carretero; M. Dolores Rodríguez Frías |
| The search of Super-heavy dark matter from Ultra and extremely high energy cosmic rays | Conferencia en 9 th Consolider-Multidark Workshop, Alcalá de Henares (Spain), 6-8 November, 2013 | G. Ros, L. del Peral, M. D. Rodríguez-Frías |
| Simulations of extensive air showers produced by UHECRs in cloudy sky to be detected by JEM-EUSO | Conferencia en ICRC 2013, Rio de Janeiro, arXiv:1307.7071v1, August, 2013 | Guadalupe Sáez Cano; J .A. Morales de los Rios; Kenji Shinozaki; Luis del Peral Gochicoa; Mario Bertaina; Andrea Santangelo; M. Dolores Rodríguez Frías |
| Photons propagation in the atmosphere (realistic clouds) | Conferencia en 13th JEM-EUSO international collaboration meeting in Tenerife. Date: June 2013 | Guadalupe Sáez Cano; J. A. Morales de los Rios; Kenji Shinozaki; Hector Prieto Alfonso; Luis del Peral Gochicoa; M. Dolores Rodríguez Frías, |
| Photon propagation in 3D clouds | Conferencia en JEM-EUSO International Simulation and Atmospheric Meeting in Sophia, Date: October 2013 | Guadalupe Sáez Cano; J .A. Morales de los Rios; Hector Prieto Alfonso; Kenji Shinozaki; Luis del Peral Gochicoa; M. Dolores Rodríguez Frías, J |
| Multi-Anode Photomultiplier Tube reliability analysis and radiation hardness assurance”, for the JEM-EUSO Space Mission | Conferencia en 33nd International Cosmic Ray Conference, Rio de Janeiro, arXiv:1307.7071v1, Date: August, 2013 | H.Prieto-Alfonso; K.Tsuno; L. del Peral; M. Casolino; J.A. Morales de los Ríos; G. Sáez-Cano; T. Ebisuzaki ; M.D. Rodríguez Frías |

| | | |
|--|---|--|
| IR Camera Contribution to the CNES-EUSO BALLOON pathfinder | Conferencia para JEM-EUSO Collaboration, Encuentro RIA-AstroMadrid. Desarrollo de instrumentación astronómica en España, Madrid, September 2013 | S. Pérez, H. Prieto, L. del Peral, J. A. Morales de los Ríos, G. Sáez-Can, J. H. Carretero , L. Sabau, C. González 2, T. Belenguer, M. Sanz, J. Licandro, M. Reyes, E. Joven , M. D. Rodríguez Frías |
| IRCam Status | Conferencia en XV EUSO-BALLOON Progress Meeting, Paris, September 2013 | José Santiago Pérez Cano |
| IR camera status | Conferencia en XIV JEM-EUSO INTERNATIONAL MEETING, Tenerife, June, 2013 | José Santiago Pérez Cano |
| SPDR interna Cámara Infrarroja misión espacial JEM-EUSO | Conferencia en SPDR interna Cámara Infrarroja misión espacial JEM-EUSO, Madrid, March, 2013. | José Santiago Pérez Cano |
| IR Camera Status | Conferencia en XI EUSO-BALLOON Progress Meeting Tolouse, February, 2013 | José Santiago Pérez Cano |
| The JEM-EUSO Instrument | Conferencia para JEM-USO collaboration. arXiv:1307.7071v1 [astro-ph.IM] 23 Jul 2013, Proc 33rd International Cosmic Ray Conference (ICRC) , Sao Paulo, Brasil, 2013 | F. Kajino, M. Casolino, T. Ebisuzaki, J. Adams, P. Von Ballmoos, M. Bertaina, M. Christi, S. Dagoret, C. De la Taille, M. Fukushima, P. Gorodetzky, A. Haungs, N. Inoue, Y. Kawasaki, K. Kudela, B. Khrenov, G. Medina-Tanco, A. Neronov, H. Ohmori, A. Olinto, G. Osteria, M. Panasyuk, E. Parizot, I. Park, P. Picozza, M. Ricci, M. Rodriguez Frias, H. Sagawa, Santangelo, J. Szabelski, Y. Takizawa, K. Tsuno, G. Vankova-Kirilova, S. Wada |

| | | |
|--|---|--|
| EUSO-BALLOON: a pathfinder for observing UHECRs from Space | Conferencia para JEM-EUSO collaboration. arXiv:1307.7071v1 [astro-ph.IM] 23 Jul 2013, Proc 33rd International Cosmic Ray Conference (ICRC) , Sao Paulo, Brasil, 2013. | P. Von Ballmoos, A. Santangelo, J. H. Adams, P. Barrillon, J. Bayer, M. Bertaina, S. Blin-Bondil, F. Cafagna, M. Casolino, S. Dagoret, P. Danto, A. Ebersoldt, T. Ebisuzaki, J. Evrard, P. Gorodetzky, A. Haungs, A. Jung, Y. Kawasaki, H. Lim, G. Medina-Tanco, T.Ohmori, G.Osteria, E. Parizot, I. Park, P. Picozza, G. Prevot, H. Prieto, M. Ricci, M. Rodriguez Frias, J.Szabelski, Y. Takizawa, K. Tsuno |
| Atmospheric Monitoring System of the JEM-EUSO Telescope | Conferencia para JEM-EUSO collaboration. arXiv:1307.7071v1 [astro-ph.IM] 23 Jul 2013. Proc 33rd International Cosmic Ray Conference (ICRC) , Sao Paulo, Brasil, 2013. | A. Neronov, M. D. Rodriguez Frias, S. Toscano, S. Wada |
| Global Description of EUSO-BALLOON Instrument | Conferencia para JEM-EUSO collaboration. arXiv:1307.7071v1 [astro-ph.IM] 23 Jul 2013, Proc 33rd International Cosmic Ray Conference (ICRC) , Sao Paulo, Brasil, 2013. | C. Moretto, S. Dagoret, J. Adams, P. Von Ballmoos, P. Barrillon, J. Bayer, M. Bertaina, S. Blin-Bondil, F. Cafagna, M. Casolino, C. Catalano, P. Danto, A. Ebersoldt, T. Ebisuzaki, J. Evrard, P. Gorodetzky, A. Haungs, A. Jung, Y. Kawasaki, H. Lim, G. Medina-Tanco, H. Miyamoto, D. Monnier-Ragaigne, T. Ohmori, G. Osteria, E. Parizot, I. Park, P. Picozza, G. Prevot, H. Prieto, M. Ricci, M. Rodriguez Frias, A. Santangelo, J. Szabelski, Y. Takizawa, K. Tsuno |

| | | |
|--|--|--|
| Towards the Preliminary Design Review of the Infrared Camera of the JEM-EUSO Collaboration | Conferencia para JEM-EUSO Collaboration. arXiv:1307.7071v1 [astro-ph.IM] 23 Jul 2013, Proc 33rd International Cosmic Ray Conference (ICRC) , Sao Paulo, Brasil, 2013 | M D Rodriguez Frias, J. Licandro, M. D. Sabau, M. Reyes, T. Belenguer, M. C. Gonzalez-Alvarado, E. Joven, J. A. Morales de los Ríos, M. Saez-Palomino, H. Prieto, G. Saez Cano, J. H-Carretero, S. Pérez Cano & L. Del Peral |
| Situación actual de la mission JEM-EUSO y el experimento EUSO-BALLOON | Conferencia para JEM-EUSO Spanish Consortium, II Workshop de Instrumentación Espacial. ASTROMADRID, Madrid, 27 de septiembre de 2013. | MD. Rodríguez Frías |
| The JEM-EUSO Space Mission & The EUSO-BALLOON pathfinder @ CNES | Conferencia para JEM-EUSO Consortium, XXXVII International Conference on Theoretical Physics, Ustron, Poland, 1-6 September 2013. | MD. Rodríguez Frías |
| The origin of cosmic rays above 1018 eV: The Pierre Auger Observatory and the JEM-EUSO Mission | Conferencia para JEM-EUSO Collaboration, Multifrequency Behaviour of High Energy Cosmic Sources. Frascati Workshop 2013, Palermo, Sicilia, Italia, June 1st 2013 | MD. Rodríguez Frías |
| Indirect search for dark matter with the ANTARES neutrino telescope | Conferencia en 33rd ICRC - The Astroparticle Physics Conference 2013, Rio de Janeiro, Brazil, July 2013. | J.J. Hernández-Rey |
| Search for neutrino point sources with ANTARES 2007-2012 data | Conferencia en VLvnT13 - Very Large Volume Neutrino Telescope Workshop 2013, Stockholm, Sweden, August, 2013 | J.D. Zornoza |
| Indirect search for dark matter with the ANTARES neutrino telescope | Conferencia en ICRC 2013 - The Astroparticle Physics Conference, Rio de Janeiro, Brazil, July 2013. | J.J. Hernández-Rey |
| The KM3NeT Neutrino Telescope: Status and Prospects | Conferencia en RICAP 2013, Roma International Conference on Astroparticle Physics, Rome, May 2013 | J.J. Hernández-Rey |
| Results and prospects of dark matter searches with ANTARES | Conferencia en RICAP 2013, Roma International Conference on Astroparticle Physics, Rome, May 2013 | J.D.Zornoza |
| Report on Deep Underground/Underwater/Under-ice experiments: results and prospects | Conferencia en RICAP 2013 - Roma International Conference on Astroparticle Physics, Rome, May 2013 | J.D.Zornoza |

| | | |
|---|---|---------------------|
| Results from the ANTARES neutrino telescope | Conferencia en IPA2013 – IceCube Particle Astrophysics Symposium, Madison, Wisconsin, USA, May 2013. | J.P. Gómez-González |
| Status of ANTARES dark matter searches | Conferencia en EPNT 2013 - Exotic Physics with neutrino telescopes workshop, Marseilles, April 2013 | G. Lambard |
| ANTARES results | Conferencia en NeuTel 2013 - XV International Workshop on Neutrino Telescopes, Venice, March 2013. | J.D. Zornoza |
| The Formula that describes the World | Conferencia de divulgación en la exhibición del CERN, Santander, Spain, 04/13 | S. Heinemeyer |
| Higgsteria masiva | Conferencia de divulgación en IX Reunión de Divulgadores de Ciencia, Salamanca, 1 al 3 de noviembre de 2013 | J.I. Illana |
| El bosón de Higgs: un descubrimiento con participación española | Conferencia de divulgación en el Rectorado de la Universidad de Málaga, 30 de octubre de 2013. | J.I. Illana |
| El Higgs: la masa y el misterio de la simetría perdida | Conferencia de divulgación en la Universidad Miguel Hernández, Orihuela (Alicante), 25 de abril de 2013 | J.I. Illana |
| ¿Qué es el bosón de Higgs y por qué es tan importante? | Conferencia de divulgación organizada en Institutos de Educación Secundaria, IES Nuevo Scala, Rute (Córdoba), 22 de febrero de 2013 | J.I. Illana |
| SUSY Higgses: What to look out for at the LHC Run II | Conferencia en Particle Physics Theory Seminar, LMU Munich, Germany, 12/14 | S. Heinemeyer. |
| SUSY Higgses: What to look out for at the LHC Run II | Conferencia en IPPP Xmas meeting, Durham, UK, 12/14 | S. Heinemeyer. |
| DM in (Un)Constrained SUSY Models | Conferencia en 11th MultiDark meeting, Santiago de Compostela, Spain, 11/14 | S. Heinemeyer. |
| Physics at the ILC | Conferencia en UK Forum on Future Colliders, Cosener's House, 11/14 | S. Heinemeyer. |
| Precision Electroweak Calculations: Future Plans | Conferencia en 7th FCC-ee workshop, Paris, France, 10/14 | S. Heinemeyer. |
| SUSY and 2HDM | Conferencia en Hamburg WS on Higgs Physics, DESY, 10/14 | S. Heinemeyer. |
| The lightest MSSM Higgs boson mass: Theoretical Uncertainties | Conferencia en KUTS2, DESY, 10/14 | S. Heinemeyer. |

| | | |
|---|--|----------------|
| DM in (Un)Constrained SUSY Models | Conferencia en IBS/MultiDark Joint Focus Program, Daejeon, Korea, 10/14 | S. Heinemeyer. |
| Extracting Higgs ``Couplings'' from LHC and ILC Data | Conferencia en HEFT 14, Madrid, Spain, 09/14 | S. Heinemeyer. |
| Report from the LHC Higgs Cross Section Working Group | Conferencia en cHarged Higgs 14, Uppsala, Sweden, 09/14 | S. Heinemeyer. |
| High Precision Prediction for the lightest CP-even MSSM Higgs-Boson Mass | Conferencia en SUSY 14, Manchester, UK, 07/14 | S. Heinemeyer. |
| Higgs Physics in the SM and the MSSM | Conferencia en SUSY 14, Manchester, UK, 07/14 | S. Heinemeyer. |
| Where we will find SUSY | Conferencia en Particle Physics seminar, Siegen University, Germany, 07/14 | S. Heinemeyer. |
| High Precision Prediction for the lightest CP-even MSSM Higgs-Boson Mass | Conferencia en ICHEP14, Valencia, Spain, 07/14 | S. Heinemeyer. |
| Higgs at the ILC | Conferencia en LoopFest XIII, CUNY, NY, USA, 06/14 | S. Heinemeyer. |
| Telling the LHC where to look for SUSY | Conferencia en Physics Colloquium for PhD students, Pavia, Italy, 05/14 | S. Heinemeyer. |
| Combination of Feynman Diagrammatic Results and Log Resummation -- FeynHiggs 2.10.0 | Conferencia en KUTS2014, MPI Munich, Germany, 04/14 | S. Heinemeyer. |
| Review of Recent Developments in BSM Higgs Physics (Relevant for the LHC) | Conferencia en SM-at-LHC conference, Madrid, Spain, 04/14 | S. Heinemeyer. |
| What if IT is NOT the SM Higg ? | Conferencia en CMS SUSY Higgs WS, Karlsruhe University, Germany, 03/14 | S. Heinemeyer. |
| The Higgs Boson Mass and its SM/SUSY Implications | Conferencia en Theoretical Physics Seminar, Granada University, Spain, 02/14 | S. Heinemeyer. |
| The LHC Higgs Cross Section Working Group: Predictions for the Higgs Discovery and Precision Measurements | Conferencia en Royal Society Higgs Workshop, Chicheley Hall, UK, 01/14 | S. Heinemeyer. |
| Higgs Boson Mass Calculations in the MSSM: Status and Perspectives | Conferencia en TLEP meeting, CERN, 01/14 | S. Heinemeyer. |

| | | |
|---|--|---------------------------|
| Theoretical implications of neutrinoless double-beta decay measurements. | Conferencia en XXVI Int. Conference on Neutrino Physics and Astrophysics (Neutrino 2014) Boston (Estados Unidos), 2-7 junio 2014 | M. Hirsch. |
| Neutrinos, lepton number violation and the LHC | Conferencia en 8th Neutrino Oscillation Workshop (NOW 2014) Conca Specchiulla, Otranto (Italia), 7-14 septiembre 2014 | M. Hirsch. |
| Relativistic thermal rates of DM annihilations. | Conferencia en Perugia, Italia, 30-01-2014 | M. Cannoni |
| SUSY DM and Lepton Flavour Violation in SU(5) | Conferencia en Perugia; Italia, 25-02-2014 | M. E. Gómez |
| Summary Talk of the Working Group of DM and Colliders | Conferencia en 11th MultiDark meeting, Santiago de Compostela, Spain, Nov, 2014. | M. E. Gómez |
| DM in SUSY-SU(5) models | Conferencia en IBS/MultiDark Joint Focus Program, Daejeon, Korea, 10/14 | M. E. Gómez |
| Sfermion Mixing Effects in Supersymmetric Models | Conferencia en VI CPAN Days, Sevilla October 20/2015 | M. Rehman |
| Theoretical Elementary Particle Physics - What is this? | Conferencia de divulgación para estudiantes de física de tercer curso en Universidad de Cantabria, 05/14 | S. Heinemeyer. |
| The quest for neutrino mass | Conferencia de divulgación en Instituto Superior Tecnico, Univ. Lisboa (Portugal), 22 octubre 2014 | M. Hirsch |
| El Universo Invisible. | Conferencia de divulgación en IES Catedrático Pulido Rubio. Bonares, Huelva 20/05/2014 | M.E. Gómez |
| Course of Introduction to Modified Gravity | Course of Introduction to Modified Gravity at UCM and at Universitat de Valencia/IFIC | José Beltrán Jiménez |
| Hiding and seeking vector fields in modified gravity and cosmology | Conferencia en 2nd i-Link Macro from Micro: Quantum gravity and Cosmology, CSIC, Madrid, 15-18 September 2014 | José Beltrán Jiménez |
| Inflation in minimal Born-Infeld inspired gravity | Conferencia en The dark side of the universe. UCT, Cape town, November 2014 | José Beltrán Jiménez |
| Geodesics, tidal forces and Raychaudhuri equation in extended theories of gravity | Conferencia en South African Gravity Society meeting. University of Cape Town. 25 Nov 2014, Cape Town, South Africa | Álvaro de la Cruz Dombriz |

| | | |
|--|--|---|
| Complementary routes in the aim of unveiling the nature of dark energy and DM | Conferencia en Dark Side of the Universe meeting DSU 2014. University of Cape Town. 18 Nov 2014, Cape Town, South Africa | Álvaro de la Cruz Dombriz |
| Averaging in extended theories of gravity | Conferencia en Second i-Link Workshop Macro to Micro: Quantum Gravity and Cosmology. CFMAC-CSIC, Institute of Matter Structure. 15 Sep 2014, Madrid | Álvaro de la Cruz Dombriz |
| Status of extended theories of gravity. | Conferencia en Cosmology and the Quantum Vacuum meeting". Pedro Pascual Benasque Center of Sciences. 7 Sep 2014 | Álvaro de la Cruz Dombriz |
| Averaging beyond General Relativity | Conferencia en Service de Physique Théorique, Université Libre de Bruxelles (ULB). July 11 2014, Brussels, Belgium. | Álvaro de la Cruz Dombriz |
| A brief status report on some modified gravity theories | Conferencia en Institut de recherche en Mathématique et Physique (IRMP) and Center for Cosmology, Particle Physics and Phenomenology (CP3). Université Catholique de Louvain (UCL). July 8 2014, Lovain la Neuve, Belgium. | Álvaro de la Cruz Dombriz |
| Averaging in modified gravity theories: an overview of tools able to explain the cosmological late-time acceleration | Conferencia en De Madrid al Cosmos Cosmology seminar series, Complutense Effective Field Theories group and Matter Structure Institute (IEM-CSIC). April 1 2014, Madrid, Spain. | Álvaro de la Cruz Dombriz |
| Backreaction in extended theories of gravity | Conferencia en IFAE seminar series, High Energy Physics Institute (IFAE). March 14 2014, Barcelona | Álvaro de la Cruz Dombriz |
| LIGO-G1400679. All sky Hough search for continuous gravitational waves on data from the 5th LIGO science run. | Conferencia en 4th Iberian Gravitational-Wave Meeting, Granada, Spain, 26-28 February 2014 http://www.ugr.es/~iberiangw14/ | Alicia M Sintes for the LIGO Scientific Collaboration and the Virgo Collaboration |
| Les ones gravitacionals, nous missatgers de l'Univers | Conferencia en 3rd Session of the Sant Cugat Forum on Astrophysics, Sant Cugat, Barcelona, Spain, April 22-25, 2014 | Alicia Sintes |
| (Las ondas gravitacionales, nuevos mensajeros del universo) LIGO-G1400681 | http://www.ice.csic.es/research/forum/2014.html http://www.casadecultura.santcugat.cat/14385/agenda.detall/699/?img=2 | |
| The NINJA Project and Gravitational Wave Astrophysics | Conferencia en Sant Cugat Forum on Astrophysics, Sant Cugat 22-25 April 2014 | Sascha Husa. |

| | | |
|--|---|--|
| Ingredients for aligned spin phenomenological waveform models | Conferencia en NARDA 2014, California State University at Fullerton, Fullerton, CA, EE.UU., August 21-22 2014. Talk August 21. | Sascha Husa |
| LIGO-G1400680. Gravitational Waves: Status and Prospects (with ground based detectors) | Conferencia en Red Nacional Temática de Astropartículas (RENATA) meeting on "La Física de Astropartículas en España a la vista del Horizonte 2020". Canfranc, Spain, 9th June, 2014 | Alicia M. Sintes |
| LIGO-G1400682. Review on gravitational wave detectors. Session classification : Astroparticle Physics and Cosmology. | Conferencia en 37th International Conference on High Energy Physics - ICHEP2014. Valencia, Spain, 2-9 July 2014 http://ichep2014.es/ | Alicia M. Sintes for the LIGO Scientific Collaboration and the Virgo Collaboration |
| Review on gravitational wave detectors , LIGO-DCC-G1401344 | Conferencia en 11th Multidark Consolider Workshop, Santiago de Compostela 28th November, 2014 | Alicia M. Sintes for the LIGO Scientific Collaboration and Virgo Collaboration |
| Listening to Black Holes with Supercomputers | Conferencia en SUPERMUC STATUS AND RESULTS WORKSHOP, GARCHING, ALEMANIA, 08/09.07.14 | Sascha Husa. |
| Modeling gravitational waves from compact binary systems | Conferencia en 10th MULTIDARK CONSOLIDER WORKSHOP, INSTITUTO DE FISICA CORPUSCULAR, VALENCIA, from 02nd to 04th April 2014 | Alejandro Bohé |
| Exploring the Parameter Space of Coalescing Black Hole Binaries | Presentación de poster en CONGRESS XXVI Winter School of Astrophysics (http://www.iac.es/winterschool/2014/). Instituto Astrofísico de Canarias (IAC), La Laguna, Tenerife, Islas Canarias 02-15/11/2014 | Francisco Jiménez Forteza, Sascha Husa, Alicia Sintes. |
| Unconstrained hyperboloidal evolution of strong field initial data in spherical symmetry | Conferencia en Spanish Relativity Meeting (ERE) 2014, ADEIT building, University of Valencia , 1-5 September 2014 | Alex Vañó Viñuales |
| Unconstrained hyperboloidal evolution in spherical symmetry | Conferencia en Relativity Group of the Universidad Nacional de Córdoba, 10th July 2014, Córdoba, Argentina | Alex Vañó Viñuales |
| Research at the UIB in space sciences | Conferencia en Small Satellite System and Services Symposium (Porto Petro, Mallorca, 26 - 30 mayo 2014, organizado por AIAA - ESA). | Jaume Carot |
| The large-scale structure of the Higgs vacuum | Conferencia en Modern Cosmology: Early Universe, CMB and LSS, Benasque, August 3-16, 2014 | Antonio L. Maroto |
| Vacuum energy in perturbed Robertson-Walker backgrounds | Conferencia en State Quantistica, Scalea, Italy, 1-5 September 2014 | Antonio L. Maroto |

| | | |
|---|--|--------------------|
| Formation of structure in the Universe | Conferencia en CHPC National Meeting 2014, Kruger National Park, December 1-5, 2014 | Stefan Gottloeber |
| Cosmology with the Jubilee and MultiDark simulations | Conferencia en Zeldovi 100 conference, Moscow, June 16 – 20, 2014 | Stefan Gottloeber |
| Cosmology with the Jubilee and MultiDark simulations | Conferencia en Rencontres de Moriond, La Thuile, March 22 – 29, 2014 | Stefan Gottloeber |
| Vacuum energy and Higgs effective potential in perturbed Robertson-Walker backgrounds | Conferencia en 2nd-ILINK Workshop Macro from micro: Quantum Gravity and Cosmology, IEM (CSIC) Madrid, 15-18 September 2014 | Antonio L. Maroto |
| Halo Finders & Tree Makers | Conferencia en Semianalytic models and hydrodynamic simulations”, Marseille | Alexander Knebe |
| Double-probe measurements from CMASS and LOWZ | Conferencia en SDSS-III/BOSS and SDSS-IV Collaboration Meeting, Cloudcroft, December 3th-6th, 2014 | Chia-Hsun Chuang |
| BAO with Emission Lines Galaxies | Conferencia en SDSS-III/BOSS and SDSS-IV Collaboration Meeting, Cloudcroft, December 3th-6th, 2014 | Johan Comparat |
| The 4MOST Cosmology Redshift Survey | Conferencia en 4MOST Science Kick-off Meeting, Potsdam, November 17-19, 2014 | Francisco Prada |
| N-body simulations and galaxy mock catalogs | Conferencia en School on Dark Energy and Galaxy Redshift Surveys, Corfu, September 12-20, 2014 | Francisco Prada |
| Baryonic Acoustic Oscillation Systematics | Conferencia en Stanford University and LBNL-Berkeley, January 27 and 31, 2014 | Francisco Prada |
| The indirect search for DM with the ANTARES neutrino telescope | Conferencia en Astroparticle Physics: a joint TeVPA/IDM conference (TeV Particle Astrophysics and Identification of DM), Amsterdam, The Netherlands, June 2014 | C. Tönnis |
| ANTARES Highlights | Conferencia en Neutrino 2014 – XXVI International Conference on Neutrino Physics and Astrophysics, Boston, U.S.A., June 2014. | J.J. Hernández-Rey |
| Indirect searches: from ground detectors (ANTARES) | Conferencia en 49th Rencontres de Moriond, Cosmology, La Thuile, Italy, March 2014. | J.D. Zornoza |
| DM Searches with the ANTARES Neutrino Telescope | Conferencia en International Conference in High Energy Physics, Valencia 2014 | M. Ardid |

| | | |
|--|--|-------------------------------|
| Secluded DM search in the Sun with the ANTARES neutrino telescope | Conferencia en Roma International Conference on Astro-Particle physics - RICAP, Noto (Italy) 2014 | S. Adrián-Martínez |
| Improving EeV photons discrimination @ AUGER: a parameterization of the lateral distribution function | Conferencia en 10th Consolider-Multidark Workshop, Valencia (España). April 2nd-4th, 2014 | G. Ros and the SPAS-UAH Group |
| Thin and thick cloud top height retrieval algorithm with the Infrared Camera and LIDAR of the JEM-EUSO Space Mission | Conferencia en Second Atmospheric Monitoring for High Energy AstroParticle Detectors. Padua. 19-21 May 2014 | G. Sáez-Cano |
| Energy and Xmax reconstruction in cloudy conditions | Conferencia en 15th JEM-EUSO International Meeting. Palermo. June 2014 | G. Sáez-Cano |
| First JEM-EUSO Balloon flight | Conferencia en 10th MultiDark Workshop. Santiago de Compostela. November 26th-28th, 2014 | G. Sáez-Cano |
| UV light detected in presence of real clouds measured by the IR camera of the EUSO-Balloon | Conferencia en Moscú. December, 16th 2014, JEM-EUSO International Meeting | G. Sáez-Cano |
| Closing in on the velocity distribution of DM with direct detection and neutrino telescope | Conferencia en DMUK meeting, Oxford, December 2014. | M. Fornasa |
| Recent results of DM searches with the Fermi-LAT | Conferencia en Instituto de Física Teórica, UAM/CSIC, Madrid, Spain, December 2014 | Miguel A. Sánchez-Conde |
| Recent results of DM searches with the Fermi-LAT | Conferencia en Universidad Complutense de Madrid, Spain, December 2014 | Miguel A. Sánchez-Conde |
| The present status of gamma-ray DM searches | Conferencia en Universidad de Sevilla, December 2014 | Miguel A. Sánchez-Conde |
| The present status of gamma-ray DM searches | Conferencia en Universidad de Huelva, December 2014 | Miguel A. Sánchez-Conde |
| Connecting WIMP DM and radiative neutrino mass generation | Conferencia en 10th Simposio Latinoamericano de Física de Altas Energías (SILAFAE), Medellín, Colombia. November 2014. | R.A.Lineros |
| Shedding light to the darkness: status of particle DM signals | Conferencia en XXI SIGRAV Conference (SIGRAV 2014), Alessandria, Italy, November 2014 | N. Fornengo |
| Radio emission from WIMP DM | Conferencia en IBS-MultiDark Joint Focus Program: WIMPs and Axions, Daejeon, South Korea. October 2014. | R. A. Lineros |

| | | |
|---|--|-------------------------|
| Search for Gamma-ray Spectral Lines with the Fermi Large Area Telescope and status of the 135 GeV feature | Conferencia en 4th KIAS Workshop on Particle Physics and Cosmology Korea Institute for Advanced Study (KIAS). Seoul, Korea. October, 2014. | G. A. Gomez-Vargas |
| A Search for DM Annihilation in the Smith High Velocity Cloud | Conferencia en 5th International Fermi Symposium, Nagoya University. Nagoya, Japan. October, 2014. | Germán A. Gómez-Vargas |
| Recent results of DM searches with the Fermi-LAT | Conferencia en IBS/MultiDark joint focus program, Daejeon, South Korea, October 2014 | Miguel A. Sánchez-Conde |
| Why detecting DM signals from the Milky Way center is challenging? | Conferencia en IBS-MultiDark Joint Focus Program: WIMPs and Axions, IBS Center for Theoretical Physics of the Universe (CTPU). Daejeon, Korea. October, 2014 | Germán A. Gómez-Vargas |
| CDM halo concentrations and implications for substructure annihilation boosts | Conferencia en IBS/MultiDark joint focus program, Daejeon, South Korea, October 2014 | Miguel A. Sánchez-Conde |
| Dissecting the Diffuse Gamma-Ray Background | Conferencia en Nottingham, October, 2014. | M. Fornasa |
| New Physics with the Cherenkov Telescope Array | Conferencia en Workshop on Cosmic Rays and DM, Universidad Católica de Chile, Santiago, Chile. September, 2014. | Germán A. Gómez-Vargas |
| The Spanish contribution to the CTA Observatory | Conferencia en XI Scientific Meeting of the Spanish Astronomical Society. Teruel, Spain. September 2014 | Juan Abel Barrio |
| Astroparticles and DM | Conferencia en Workshop on DM and Cosmic rays, Pontificia Universidad Católica de Chile, Santiago, Chile. September 2014 | R. A. Lineros |
| Inhomogeneous seeding of quark bubbles in Neutron Stars | Conferencia en Compact Stars in the QCD phase diagram IV workshop. Prerow, Germany, September 2014. | M. Angeles Perez-Garcia |
| Recent results of DM searches with the Fermi-LAT | Conferencia en APS meeting, GRAPPA Institute, Amsterdam, Netherlands, September 2014 | Miguel A. Sánchez-Conde |
| Astrophysical interpretation of the AMS-02 leptonic data | Conferencia en Neutrino Oscillation Workshop (NOW 2014), Conca Specchiolla, Italy, September 2014 | N. Fornengo |
| Recent results from the Fermi gamma-ray space telescope | Conferencia en 42 SLAC Summer Institute, SLAC National Lab, Menlo Park, CA, USA, August 2014 | Miguel A. Sánchez-Conde |
| DM annihilation and local warming in the core of a neutron star | Conferencia en Particles and Nuclei International Conference, Hamburg, Germany, August, 2014. | M. Angeles Perez-Garcia |

| | | |
|--|--|-------------------------|
| Constraints on the DM interaction sector via extra radiation contributions | Conferencia en ICHEP conference, Valencia, Spain. July 2014 | R. A. Lineros |
| Observation of Galactic Dark-Matter-dominated targets with CTA | Conferencia en Key Science Programme workshop, Paris, July, 2014. | M. Fornasa |
| DM searches in the AHEP group | Conferencia en RENATA meeting, Laboratorio Subterraneo de Canfranc, Canfranc, Spain. June 2014. | R. A. Lineros |
| Particle DM searches in the anisotropic sky | Conferencia en High energy messengers 2014, Kavli Institute, Chicago, June 2014 | N. Fornengo |
| DM searches with cosmic antideuterons | Conferencia en Antideuteron conference 2014, UCLA, Los Angeles, June 2014 | N. Fornengo |
| DM searches with cosmic antihelium | Conferencia en Antideuteron conference 2014, UCLA, Los Angeles, June 2014 | N. Fornengo |
| DM Searches with MAGIC | Conferencia en RENATA Meeting, Laboratorio Subterráneo de Canfranc, Spain. June 2014. | J. Aleksic |
| Self-consistent velocity distributions for local DM | Conferencia en TeV Particle Astrophysics 2014, Amsterdam, June, 2014 | M. Fornasa |
| New directions for the multiwavelength and multimessenger signals of DM | Conferencia en PASCOS 2014, Warsaw, Poland, June 2014 | N. Fornengo |
| Cosmological DM annihilation signals: theoretical predictions | Conferencia en HEM 2014, Chicago, USA, June 2014 | Miguel A. Sánchez-Conde |
| Cross-correlation of gamma rays and Large Scale Structure | Conferencia en xcoss 2014 workshop, London, May, 2014. | M. Fornasa |
| N-body simulations for indirect detection of DM | Conferencia en SciNeGHE conference, Lisbon, May, 2014. | M. Fornasa |
| Are we seeing DM with the Fermi-LAT in a region around the Milky Way center? | Conferencia en VULCANO Workshop 2014: Frontier Objects in Astrophysics and Particle Physics INFN. Vulcano Island, Sicily, Italy. May, 2014 | Germán A. Gómez-Vargas |
| The anisotropic DM Universe | Conferencia en Seminar at the Institut d'Astrophysique de Paris (IAP), Paris, France, May 2014 | N. Fornengo |

| | | |
|---|---|--|
| What can we learn from gamma-ray astrophysics | Conferencia en Brussels, March, 2014 | M. Fornasa |
| Cold DM halo substructure and its role in gamma-ray DM searches | Conferencia en GRAPPA seminar, GRAPPA Institute, Amsterdam, Netherlands, March 2014 | Miguel A. Sánchez-Conde |
| DM searches in the anisotropies of the gamma-ray sky | Conferencia en CTA Extragalactic and Fundamental Physics Key Science Programme meeting, Munich, February, 2014. | M. Fornasa |
| The flattening of the concentration-mass relation towards low halo masses and its implications for the annihilation signal boos | Conferencia en UCLA DM 2014, Los Angeles, CA, USA, February 2014 | Miguel A. Sánchez-Conde |
| DM halo substructure and its role in gamma-ray DM searches | Conferencia en UC Irvine, Irvine, USA, January 2014 | Miguel A. Sánchez-Conde |
| Mini-Course on DM Searches with Astroparticles | Conferencia de divulgación en Universidad Técnica Federico Santa María, Santiago, Chile. September 2014. | R.A.Lineros |
| HAP workshop 2014 on data analysis for indirect DM searches | Conferencia de divulgación en E. Schrodinger Zentrum, Berlin, Germany, March 2014 | Miguel A. Sánchez-Conde |
| Science referee at the Green Kids conference (science fair organized by Microsoft) | Conferencia de divulgación en Bay Area, CA, USA, May 2014 | Miguel A. Sánchez-Conde |
| Cazadores de materia oscura | Conferencia de divulgación en Google Hangout, evento organizado por el Proyecto MultiDark, Materia online journal y el IFT-UAM/CSIC. February 2014. https://www.youtube.com/watch?v=5beFTXVDhME | Miguel A. Sánchez-Conde, C. Muñoz, M.L. Sarsa y D.G. Cerdeño |
| Open day | Conferencia de divulgación en Bayfordbury Observatory, Hertford, May, 2014. | M. Fornasa |
| Status and prospects of ANAIS | Conferencia en XI MultiDark Consolider Workshop, 26-28 November 2014, Universidad de Santiago de Compostela, Santiago de Compostela | M. Martínez |
| ANAIS: Detección directa de materia oscura en el Laboratorio Subterráneo de Canfranc | Conferencia en 6º Jornada de Jóvenes Investigadores de Aragón, 20 November 2014, Zaragoza | P. Villar |
| Status and Prospects of the ANAIS DM Project | Conferencia en VI CPAN DAYS, 20-22 October 2014 Hotel Tryp Sevilla Macarena, Sevilla, SPAIN | P. Villar |

| | | |
|---|---|--------------|
| DM Searches with NaI(Tl) at the Canfranc Underground Laboratory | Conferencia en IBS-MultiDark Joint Focus Program: WIMPs and Axions, 10-21 October 2014, IBS Center for Theoretical Physics of the Universe (CTPU), Daejeon, Korea | M.L. Sarsa |
| Status of the ANAIS DM Project | Conferencia en Astroparticle Physics 2014: a joint TeVPA/IDM conference, 23-28 June 2014, Amsterdam, The Netherlands | P. Villar |
| The ANAIS experiment at the Canfranc Underground Laboratory | Conferencia en RENATA Meeting: "Astroparticle Physics in Spain in view of Horizon 2020", 9-11 junio 2014, LSC, Canfranc Estación, España | M.L. Sarsa |
| ANAIS: Status and Prospects | Conferencia en International Conference on High Energy Physics, 2-9 July 2014, Valencia, Spain | M. Martínez |
| Results and activities of ANAIS Experiment. | Conferencia en 10th Multidark Consolider Workshop, 2-5 abril 2014, IFIC, Valencia, España | M.L. Sarsa |
| PICO: status and activities | Conferencia en 10th Multidark Consolider Workshop, 2-5 abril 2014, IFIC, Valencia, España | M. Bou-Cabo |
| News and Status of COUPP/PICO & MOSCAB detectors | Conferencia en XI MultiDark Consolider Workshop, 26-28 November 2014, Universidad de Santiago de Compostela, Santiago de Compostela, SPAIN | M. Bou-Cabo |
| DM searches using superheated liquid detectors | Conferencia en RICAP-14 Roma International Conference on AstroParticle Physics, Noto, Italy, September 2014 | M. Bou-Cabo |
| MOSCAB: Direct DM Search Using the Geyser Technique | Conferencia en International Conference on High Energy Physics, 2-9 July 2014, Valencia, Spain | M. Ardid |
| Direct Detection of Very Light WIMPs | Conferencia en Universidad de Bonn, Alemania, 20 Marzo 2014 | D.G.Cerdeño |
| Very light WIMPs: recent results from SuperCDMS | Conferencia en Rencontres de Moriond, 23-29 Marzo 2014 | D.G. Cerdeño |
| SuperCDMS: Recent results for low-mass WIMPs | Conferencia en RENATA meeting, Laboratorio Subterráneo de Canfranc, 9-11 Junio 2014 | D.G. Cerdeño |
| EFT approach in SuperCDMS. | Conferencia en Seminario online. 4 Agosto 2014 | D.G. Cerdeño |
| SuperCDMS: Recent results for low-mass WIMPs | Conferencia en Vulcano Workshop 2014, Vulcano Italia. 18-24 Mayo 2014 | D.G. Cerdeño |
| IBS/Multidark Joint Focus Program | Conferencia en Daejeon, Korea, 20-21 Octubre 2014 | D.G. Cerdeño |

| | | |
|---|--|----------------|
| SuperCDMS: Recent results for low-mass WIMPs | Conferencia en DISCRETE 2014, 2-6 Diciembre 2014, Kings College, London UK | D.G. Cerdeño |
| There's something about light WIMPs | Conferencia en 7th Symposium on large TPCs for low-energy rare events, 15-17 Diciembre 2014, Paris, Francia | D.G. Cerdeño |
| DM | Conferencia en Taller de Altas Energías 2014 , Septiembre 2014 | D.G. Cerdeño |
| A la caza de astropartículas: materia oscura | Conferencia de divulgación el 26 de septiembre de 2014, "La Noche de los Investigadores", Zaragoza, Carpa CAI, Plaza San Francisco. | |
| Direct search for DM at the Canfranc Underground Laboratory: the ANAIS experiment | Conferencia de divulgación el 6 de noviembre de 2014, Centro de Estudios de Física del Cosmos de Aragón (CEFCA), Teruel | |
| DMs | Conferencia de divulgación el 26 de noviembre de 2014, Facultad de Física, Universidad de Santiago de Compostela, Santiago de Compostela | M.L. Sarsa |
| El lado oscuro del Universo | Conferencia de divulgación el 21 Marzo 2014 Universidad de Granada | D.G. Cerdeño |
| Dark Matter | Conferencia en XLII International Meeting on Fundamental Physics IMFP14', Jan 26--Feb 01, 2014, Benasque, Spain | Carlos Muñoz |
| Hunting SUSY at the LHC and dark matter at the Fermi-LAT with the μ vSSM | Conferencia en Fifth Workshop on Theory, Phenomenology and Experiments in Flavour Physics - Capri 2014', 22--28 May 2014, Villa Orlandi, Anacapri, Capri Island, Italy | Carlos Muñoz |
| Search for μ vSSM gravitino dark matter in the Fermi-LAT data | Conferencia en IBS-MultiDark Focus Program on 'WIMPs and Axions', October 10-21, 2014, Daejeon, Korea | Carlos Muñoz |
| Gravitino Dark Matter: Model and Searches | Conferencia en International Workshop on The Dark Side of the Universe DSU2014', 15--23 November 2014, University of Cape Town, South Africa | Carlos Muñoz |
| Searching evidences of new physics in the light of extended supersymmetric models | Conferencia en VI CPAN days - Centro Nacional de Física de Partículas, Astropartículas y Nuclear, Sevilla, Spain, October 20th, 2014 | Pradipta Ghosh |
| Searching evidences of new physics in the light of the μ vSSM | Conferencia en Physics Challenges in the face of LHC-14", Instituto de Física Teórica, Universidad Autónoma de Madrid, Spain, September 25th, 2014 | Pradipta Ghosh |

| | | |
|--|---|----------------------|
| Searching evidences of new physics in the light of extended supersymmetric models | Conferencia en SUSY 2014" - 22nd International Conference on Supersymmetry and Unification of Fundamental Interactions, School of Physics and Astronomy, University of Manchester, Manchester, United Kingdom, July 24th, 2014. | Pradipta Ghosh |
| Searching evidences of new physics in the light of the μ vSSM | Conferencia en PASCOS 2014 - 20th International Symposium on Particles, Strings and Cosmology, | Pradipta Ghosh |
| | Faculty of Physics, University of Warsaw, Warsaw, Poland, June 24th, 2014 | |
| SuperCDMS: recent results on low mass WIMPs | Conferencia en 10th MultiDark Consolider Workshop. Valencia del 2 al 4 de Abril de 2014 | Leyre Esteban Otano |
| Recent results of SuperCDMS | Conferencia en 11th MultiDark Consolider Workshop. Santiago de Compostela del 26 al 28 de Noviembre de 2014. | Leyre Esteban Otano |
| Direct detection of light supersymmetric dark matter | Conferencia en 10th MultiDark Consolider Workshop. Valencia del 2 al 4 de Abril de 2014 | Miguel Peiró García |
| Complementarity in direct dark matter searches | Conferencia en Astroparticle Physics 2014, a joint TEVPA/IDM Conference. Amsterdam, del 22 al 28 de Junio de 2014 | Miguel Peiró García |
| Displaced Vertices and long-lived charged particles in the NMSSM with Right-Handed Sneutrino Dark Matter | Conferencia en 10th MultiDark Consolider Workshop. Valencia del 2 al 4 de Abril de 2014 | Víctor Martín Lozano |
| Shape transitions from a mean field perspective: potential energy surfaces and quantum fluctuations | Conferencia en Quantum Phase Transitions Nuclear 2014, Sevilla, España 12 Marzo 2014 | Luis Robledo |
| Clustering in atomic nuclei: a mean field perspective | Conferencia en SOTANCP 14, Yokohama, Japón 26 Mayo 2014 | Luis Robledo |
| Pfaffians in nuclear structure theory | Conferencia en Computational challenges in Nuclear and Many-body Physics, Estocolmo, Suecia 16 Sept. 2014 | Luis Robledo |
| Computational challenges in (nuclear) energy density functional theory | Conferencia en Computational challenges in Nuclear and Many-body Physics, Estocolmo, Suecia 23 Sept. 2014 | Luis Robledo |
| Expociencia 2014 | Actividad de divulgación: IFIC and other institutes around are open with guided exhibitions for the general public | |

| | | |
|--|--|-----------------------------------|
| V Jornadas de Jóvenes Investigadores de la Universidad de Alcalá | Organización de actividad de divulgación en Alcalá de Henares. 1-3th December, 2014 | G. Ros |
| Viaje didáctico por el Universo | Organización de actividad de divulgación en XIV Semana de la Ciencia. Universidad de Alcalá.10-12th November, 2014 | SPAS-UAH group |
| Observations of hard spectrum Unassociated Fermi Objects with MAGIC | Conferencia en 34th International Cosmic Ray Conference, The Hague, The Netherlands, 2015 | K. Satalecka et al. (MAGIC coll.) |
| Using UV-pass filters for bright Moon observations with MAGIC | Conferencia en 34th International Cosmic Ray Conference, The Hague, The Netherlands, 2015 | D. Guberman et al. (MAGIC coll.) |
| Constraining the Dark Matter decay lifetime with very deep observations of the Perseus cluster with the MAGIC telescopes | Conferencia en 34th International Cosmic Ray Conference, The Hague, The Netherlands, 2015 | J. Palacio et al. (MAGIC coll.) |
| Development of the photomultiplier tube readout system for the first Large-Sized Telescope of the Cherenkov Telescope Array | Conferencia en 34th International Cosmic Ray Conference, The Hague, The Netherlands, 2015 | S. Mashuda et al. (CTA coll.) |
| NectarCAM: a camera for the medium size telescopes of the Cherenkov Telescope Array | Conferencia en 34th International Cosmic Ray Conference, The Hague, The Netherlands, 2015 | F. Glicenstein et al. (CTA coll.) |
| Dark Matter search results with MAGIC and prospects with CTA | Conferencia en IBS-Multidark Joint Workshop. Madrid, Spain 2015 | J.A. Barrio |
| MAGIC observations of the February 2014 flare of 1ES 1011+496 applied to the measurement of the extragalactic background light | Conferencia en TeV Particle Astrophysics 2015, Kashiwa, Japan. October 2015 | A Moralejo |
| Radiative neutrino mass generation from WIMP dark matter | Conferencia en TAUP 2015, Torino, Italy. September, 2015 | R. A. Lineros |
| The battlegrounds of gamma-ray detection of dark matter: the Galactic center and dwarf galaxies | Conferencia en COSMO 15, Warsaw, Poland, September 2015 | M. A. Sánchez-Conde |

| | | |
|--|--|---------------------|
| The search for cosmological annihilation signals with the Fermi LAT | Conferencia en APS meeting, Djurönäset, Sweden, September 2015 | M. A. Sánchez-Conde |
| Recent results on indirect dark matter searches | Conferencia en XXVII Symposium on Lepton-Photon interactions at High Energies, Ljubljana, Slovenia, August 2015 | M. A. Sánchez-Conde |
| The future of indirect dark matter searches | Conferencia en Weak Interactions and Neutrinos (WIN) 2015, Heidelberg, Germany, June 2015 | M. A. Sánchez-Conde |
| The search for cosmological annihilation signals with the Fermi LAT | Conferencia en Oskar Klein Centre dark matter meetings, June 2015 | M. A. Sánchez-Conde |
| Limits on DM annihilation from the Fermi-LAT 4-yr measurement of the Isotropic Gamma-ray Bacground | Conferencia en Identification of Dark Matter with a Cross-Disciplinary Approach, IFT-UAM/CSIC, Madrid, Spain, May 2015 | M. A. Sánchez-Conde |
| The hunt for axion-like particles with gamma rays | Conferencia en Off-the-Beaten-Track Dark Matter and Astrophysical Probes of Fundamental Physics, ICTP-Trieste, Italy, April 2015 | M. A. Sánchez-Conde |
| Search for gamma rays in dwarf galaxies with the Fermi LAT | Conferencia en LatinAmerican Webinars, April 2015 | M. A. Sánchez-Conde |
| Search for gamma rays in dwarf galaxies with the Fermi LAT | Conferencia en SuperCDMS science seminar, April 2015 | M. A. Sánchez-Conde |
| Particle dark matter searches through cross correlations anisotropies | Conferencia en Exploring the Dark Sector KIAS, Seoul – 19.03.2015 | N. Fornengo |
| Particle dark matter searches through anisotropies and cross correlations | Conferencia en University of Warsaw 27.04.2015 | N. Fornengo |
| Particle dark matter signals in the anisotropic sky: a cross correlation approach | Conferencia en Neutrino and Dark Matter in Nuclear Physics (NDM 2015) Jyväskylä (Finland) – 04.06.2015 | N. Fornengo |
| Particle dark matter signals: a multimessenger approach | Conferencia en Virgo EGO-Virgo site, Cascina (PI) – 16.10.2015 | N. Fornengo |
| Dark Matter Searches through Anisotropic and Cross Correlations | Conferencia en IBS – MultiDark Workshop 2015 IFT/UAM Madrid (Spain) – 24.11.2015 | N. Fornengo |

| | | |
|--|--|------------------------|
| Status of the WIMP "miracle" | Conferencia en "Challenges in the Dark Sector: alternatives to the WIMP paradigm" Laboratori Nazionali di Frascati – 16.12.2015 | N. Fornengo |
| Dark Matters | Conferencia de divulgación en Fysikalisk afton, Stockholm University, Sweden, April 2015 | M. A. Sánchez-Conde |
| Astronomía gamma de muy alta energía: MAGIC y CTA | Conferencia de divulgación en Agrupación astronómica de Sabadell, February 3, 2016 | Abelardo Moralejo |
| The Universe as a Particle Physics Laboratory | Conferencia de divulgación para estudiantes de secundaria en University of Torino, Italia, March 2015 | N. Fornengo |
| The secrets of dark matter | Conferencia de divulgación para público general en Torino, Italia, April 2015 | N. Fornengo |
| The indirect search for dark matter with the ANTARES neutrino telescope | Conferencia en The 11 th International Workshop on the Dark Side of the Universe, Kyoto, Japan, December, 2015 | C. Tönnis |
| Searches for dark matter with neutrino telescopes | Conferencia en 2nd Korean Institute of Basic Science-MultiDark Workshop, Madrid, November 2015 | J. D. Zornoza |
| The indirect search for dark matter with the ANTARES neutrino telescope | Conferencia en 34th International Cosmic Ray Conference, The Hague, The Netherlands, August 2015 | C. Tönnis |
| Indirect search for dark matter with neutrino telescopes | Conferencia en 14th Marcel Grossmann Meeting, Rome, July 2015 | J. D. Zornoza |
| Dark matter: indirect searches | Conferencia en ISAPP – International School on Astroparticle Physics, Paris, June 2015 | J. D. Zornoza |
| ANTARES and KM3NeT: the sight of the neutrino sky from the Mediterranean | Conferencia en ULB/VUB Series of Seminars, Brussels, June 2015 | J. D. Zornoza |
| Status Report of the IceCube, ANTARES and the KM3NeT Projects | Conferencia en The XLII International Meeting on Fundamental Physics, Benasque, Spain, March, 2015 | J. D. Zornoza |
| The Digital Optical Module Electronics of KM3NeT | Conferencia en The International Workshop on Prospects of Particle Physics: Neutrino Physics and Astrophysics, Valday, Russia, February 2015 | D. Real |
| Constraining Secluded Dark Matter models with the ANTARES neutrino telescope | Poster. ICRC 2015, The Hague (Netherlands) 2015 | M. Ardid and C. Tönnis |

| | | |
|--|--|-------------------|
| Indirect detection of Dark Matter with the ANTARES Neutrino Telescope | Conferencia en VLVnT 2015, Roma (Italy), 2015 | M. Ardid |
| A compact array calibrator to study the feasibility of the acoustic neutrino detection | Conferencia en VLVnT 2015, Roma (Italy), 2015 | M. Ardid et al. |
| Acoustic beacon for the positioning system of the underwater neutrino telescope KM3NeT | Conferencia en Tecniacustica, Valencia (Spain), 2015 | M. Saldaña et al. |
| New design of an acoustic array calibrator for underwater neutrino telescopes | Conferencia en Sensors and Applications Electronic Conf., 2015 | M. Saldaña et al. |
| Dark matter searches with the ANTARES neutrino telescope | Conferencia en VII CPAN days, Segovia (Spain) 2015 | M. Ardid |
| A new physics interpretation of the IceCube data | Conferencia en 50th Rencontres de Moriond EW, La Thuile (Italy), March 2015 | M. Masip |
| Interpretation of the high energy IceCube data | Conferencia en Invisibles15, Madrid, June 2015 | J.I. Illana |
| The Spanish Infrared Camera onboard the EUSO-BALLOON (CNES) flight on August 24, 2014 | Conferencia en 34th International Cosmic Ray Conference, The Hague, The Netherlands, August 2015 | |
| Performance of the Spanish infrared camera on board the EUSO-balloon CNES flight on August 25th, 2014 | Conferencia en 34th International Cosmic Ray Conference, The Hague, The Netherlands, August 2015 | |
| Cloud Optical Depth obtained from the Infrared Camera data and the UV Flashers mounted on a helicopter flying under the EUSO-Balloon during its flight | Conferencia en 34th International Cosmic Ray Conference, The Hague, The Netherlands, August 2015 | |
| Night Time Measurement of the UV Background by EUSO-Balloon | Conferencia en 34th International Cosmic Ray Conference, The Hague, The Netherlands, August 2015 | |
| Implementation of the JEM-EUSO Space mission infrared camera simulation and reconstruction code in the offline framework | Conferencia en 34th International Cosmic Ray Conference, The Hague, The Netherlands, August 2015 | |

| | | |
|---|---|--|
| The Atmospheric Science of JEM-EUSO | Conferencia en 34th International Cosmic Ray Conference, The Hague, The Netherlands, August 2015 | |
| Cloud Top Height Estimation from WRF model: application to the infrared camera onboard EUSO-Balloon34th | Conferencia en International Cosmic Ray Conference, The Hague, The Netherlands, August 2015 | |
| Advanced LIGO and the new era of Gravitational Wave Astronomy | Conferencia invitada en VII CPAN DAYS, Tuesday 01 December 2015 - Thursday 03 December 2015 . Segovia | Alicia M. Sintes |
| Accurate Phenomenological Waveform Models for Black Hole Coalescence in the Frequency Domain | Conferencia en Encuentros Relativistas Españoles ERE2015. http://grg.uib.es/ERE2015 . Palma de Mallorca, 7-11 September 2015 | Sascha Husa |
| Free hyperboloidal evolution in spherical symmetry | Conferencia en Encuentros Relativistas Españoles ERE2015. http://grg.uib.es/ERE2015 . Palma de Mallorca, 7-11 September 2015 | Alex Vañó-Viñuales |
| Accurate Frequency Domain IMR Waveforms | Poster en LSC-Virgo March 2015 meeting. Pasadena, March 2015 | Sebastian Khan, Mark Hannam, Sascha Husa, Michael Puerrer, Xisco Jimenez-Forteza |
| Update on the Hough all-sky search for continuous waves: Mock Data challenge-3 and computational cost | Conferencia en LSC-Virgo March 2015 meeting. Pasadena, March 2015 | Miquel Oliver, Alicia Sintes, Sascha Husa |
| The LIGO continuous wave for isolated spinning neutron stars | Iberian gravitational waves meeting. 12-14 May 2015. https://dcc.ligo.org/LIGO-G1500853 | Miquel Oliver, Alicia Sintes, Sascha Husa |
| Accurate Phenomenological Waveform Models for BH Coalescence in the Frequency Domain | Conferencia en 5th Iberian Gravitational Waves Meeting, Barcelona 2015 | Sascha Husa |
| Listening to black holes with supercomputers | Conferencia invitada en PRACEdays15. Dublin May 26-28 May 2015 | Sascha Husa |
| Exploring the Parameter Space of Coalescing Black Hole Binaries | Conferencia en 5th IBERIAN GRAVITATIONAL WAVE MEETING (IGWM2015). University of Barcelona (UB). Barcelona, Spain: 12-14 May 2015 | Francisco Jiménez Forteza, Sascha Husa, Alicia Sintes |

| | | |
|--|---|--|
| IMRPhenomD, "Phenom re-imagined" | Conferencia en LSC-Virgo March 2015 Meeting. Organized by: LIGO and Virgo Collaboration.: Pasadena, California, USA, March 16-19, 2015 | Sebastian Khan, Sascha Husa, Mark Hannam, Michael Pürrer, Frank Ohme, Francisco Jimenez Forteza |
| Free Hyperboloidal Evolution In Spherical Symmetry | Conferencia en Fourteenth Marcel Grossmann Meeting - MG14 (http://www.icra.it/mg/mg14/), University of Rome "La Sapienza", Roma, Italy: 12-18 July 2015 | Alex Vañó Viñuales |
| Hyperboloidal initial value problem in Numerical Relativity | Conferencia en Meeting UIB-ICE-IEEC, Edificio Nexus, Barcelona, Spain , 26-27 January 2015 | Alex Vañó Viñuales |
| Impact Of The Gravitational Radiation Higher Modes in Aligned Spin Searches For Binary Black Holes | Poster en Fourteenth Marcel Grossmann Meeting - MG14. University of Rome "La Sapienza", Roma, Italy, 12-18 July 2015 | Juan Calderón Bustillo, Sascha Husa, Alicia M. Sintes, Michael Pürrer |
| Accuracy of Complete Hybrid PN/NR Descriptions of The Gravitational Radiation From Non-Precessing Compact Binaries | Conferencia en Fourteenth Marcel Grossmann Meeting - MG14. University of Rome "La Sapienza", Roma, Italy 12-18 July 2015 | Juan Calderón Bustillo, Alejandro Bohé, Sascha Husa, Alicia M. Sintes, Mark Hannam, Michael Pürrer |
| Impact of higher order modes in aligned spin searches for binary black holes | Conferencia en IBERIAN GRAVITATIONAL WAVE MEETING (IGWM2015). University of Barcelona (UB). Barcelona, Spain 12-14 May | Juan Calderón Bustillo, Sascha Husa, Alicia M. Sintes |
| nIFTy Cosmology | Conferencia en Euclid CSWG meeting, Barcelona. Nov 18th, 2015 | A. Knebe |
| Piercing the Vainshtein screen | Conferencia en Institute of Astrophysics and Space Sciences (Lisbon), November 2015 | J. Beltrán Jiménez |
| Finding holes in the Vainshtein screen | Conferencia en Universitat de Valencia, November 2015 | J. Beltrán Jiménez |
| Piercing the Vainshtein screen | Conferencia en Universidad Complutense de Madrid, November 2015 | J. Beltrán Jiménez |
| Born-Infeld inspired extensions of gravity and dust inflation | Conferencia en University of Cape Town, April 2015 | J. Beltrán Jiménez |
| Dusty inflation in Born-Infeld inspired gravity | Conferencia en CosPa day. UMONS, Mons, May 20th 2015 | J. Beltrán Jiménez |
| Inflation in minimal extension of Born-Infeld gravity | Conferencia invitada en Extended theories of gravity. Nordita, Stockholm, 2-20 March 2015 | J. Beltrán Jiménez |

| | | |
|---|---|---------------------------|
| Vector fields in modified gravity and cosmology | Conferencia invitada en Extended theories of gravity. Nordita, Stockholm, 2-20 March 2015 | J. Beltrán Jiménez |
| Limitations of cosmography in extended theories of gravity | Conferencia en Dark Side of the Universe meeting DSU 2015. Yukawa Institute for Theoretical Physics, Kyoto University. Dec 14 2015 | Álvaro de la Cruz Dombriz |
| Advantages and unexpected shortcomings of extended theories of gravity. | Conferencia en Institute for Theoretical Physics, University of Heidelberg, Jun 17 2015 | Álvaro de la Cruz Dombriz |
| Cosmological perturbations of the Higgs vacuum | Conferencia en Meeting on Fundamental Cosmology, Santander, 17-19 Junio 2015 | A.L. Maroto |
| Cosmological perturbations of the Higgs VEV | Conferencia en III Russian-Spanish Congress on Particle, Nuclear, Astroparticle Physics and Cosmology, Santiago de Compostela, 8-11 septiembre 2015 | A.L. Maroto |
| Gravitational perturbations of the Higgs field | Conferencia en Instituto de Física Teórica IFT CSIC-UAM, 26 octubre de 2015 | A.L. Maroto |
| Cosmology and the dark sector | Conferencia en IBS-MultiDark Joint Workshop on Dark Matter and 13th MultiDark Consolider Workshop. Madrid, 23-28 november 2015 | A.L. Maroto |
| Neutrino cosmology after Planck | Conferencia en Meeting on Fundamental Cosmology. Santander, 17-19 June 2015 | S. Pastor |
| The effective number of neutrinos: standard and non-standard calculations | Conferencia en XXXV Reunión Bienal de la Real Sociedad Española de Física. Gijón, 13-17 July 2015 | P. Fernández de Salas |
| Bounds on very low reheating scenarios after Planck | Conferencia en IBS-MultiDark Joint Workshop on Dark Matter and 13th MultiDark Consolider Workshop. Madrid, 23-28 November 2015 | P. Fernández de Salas |
| The effective number of neutrinos: standard and non-standard calculations | Conferencia en 28th Texas Symposium on Relativistic Astrophysics. Geneva (Switzerland), 14-18 December 2015 | P. Fernández de Salas |
| Neutrino properties from cosmological observables after Planck | Conferencia en Univ. Genova (Italy), 22 October 2015 | S. Pastor |
| SUSY Dark Matter in the Light of the LHC Run I | Conferencia en 2nd IBS-MultiDark WS, Madrid, Spain, 11/15 | S. Heinemeyer |
| SUSY fits and their Implications for ILC and CLIC | Conferencia en LCWS15, Whistler, Canada, 11/15 | S. Heinemeyer |

| | | |
|---|--|---------------|
| SUSY-Higgs | Conferencia en HEP-KIT (Maggie-WS), Karlsruhe, Germany, 10/15 | S. Heinemeyer |
| Higgs to SUSY Decays at the Full One-Loop Level | Conferencia en SUSY15, Lake Tahoe, USA, 08/15 | S. Heinemeyer |
| Effects of Sfermion Mixing induced by RGE Running in the MFV CMSSM | Conferencia en SUSY15, Lake Tahoe, USA, 08/15 | S. Heinemeyer |
| FeynHiggs: Status and Perspectives | Conferencia en SUSY15, Lake Tahoe, USA, 08/15 | S. Heinemeyer |
| Higgs-mass predictions in SUSY: MSSM vs. EFT | Conferencia en LHCHXSWG workshop, CERN, 07/15 | S. Heinemeyer |
| Mini-Workshop on Precision Observables and Radiative Corrections | Conferencia introductoria en el congreso FCC-ee workshop on PO and RC, CERN, 07/15 | S. Heinemeyer |
| SUSY Dark Matter at the LHC | Conferencia en WIN15, Heidelberg, Germany, 06/15 | S. Heinemeyer |
| New Developments for SUSY Higgses | Conferencia en WIN15, Heidelberg, Germany, 06/15 | S. Heinemeyer |
| SUSY fits with MasterCode | Conferencia en Heidelberg Particle Physics Seminar, Germany, 06/15 | S. Heinemeyer |
| Higgs and Precision Observables at the ILC and TLEP/FCC-ee | Conferencia en CERN TH seminar, 06/15 | S. Heinemeyer |
| How MSSM Higgs BRs are Calculated for the LHCHXSWG | Conferencia en LHCHXSWG Exotic Higgs Decays WS, Fermilab, USA, 05/15 | S. Heinemeyer |
| Uncertainties in the lightest MSSM Higgs-Boson Mass: mt Renormalization Scheme Dependence | Conferencia en KUTS3 workshop, LPTHE Paris, France, 05/15 | S. Heinemeyer |
| Dark Matter in Unconstrained SUSY Models | Conferencia en 12th MultiDark workshop, Salamanca, 04/15 | S. Heinemeyer |
| MSSM Higgs Physics at the LHC and Beyond | Conferencia en HPNP2015, Toyama, Japan 02/15 | S. Heinemeyer |
| Phenomenology: Introduction and News | Conferencia en 9th FCC-ee meeting, Pisa, Italy, 02/15 | S. Heinemeyer |
| Higgs and Supersymmetry | Conferencia en Particle Physics Seminar, University of Helsinki Finland, 02/15 | S. Heinemeyer |
| Physics at the ILC | Conferencia en XIth meeting of the Spanish Network for Future Linear Colliders, UB Barcelona, Spain, 01/15 | S. Heinemeyer |

| | | |
|--|--|---|
| Lepton number violation, LHC and double beta decay | Conferencia en IVICFA-2015, Valencia, Spain, 18/09/15 | M. Hirsch |
| Charged Lepton Flavour Violation and neutrino mass models | Conferencia en 4th workshop on Flavour Physics in the LHC era, Valencia, Spain, 24/11/2015 | M. Hirsch |
| Neutrinos - Theory | Conferencia en 4th WIN 2015, Heidelberg, Germany, 08/06/2015 | M. Hirsch |
| Effects of Sfermion Mixing induced by RGE in the CMSSM | Conferencia en LFC15: physics prospects for Linear and other Future Colliders after the discovery of the Higgs, Trento, Italy, 09/15 | M. E. Gómez |
| SUSY Searches in GUT Models with Non-Universal scalar masses | Conferencia en IBS-MultiDark Joint Workshop on Dark Matter and 13th MultiDark Consolider Workshop, UAM-CSIC, Madrid, Spain, 11/15 | M. E. Gómez |
| SUSY in Unified Theories | Conferencia en LHCPheno 2015: Workshop on High-Energy Physics Phenomenology in the LHC era, Parc Científic, Valencia, 11/15 | M. E. Gómez |
| SUSY theories in the LHC times | Conferencia en INFN, Perugia, Italy, 03/15 | M. E. Gómez |
| Semana de la Ciencia | Participación en actividad de divulgación de la Semana de la Ciencia, Universidad de Huelva, 11/15 | M. E. Gómez |
| Theoretical Elementary Particle Physics - What is this? | Conferencia de divulgación para estudiantes de tercer año del grado en física en Universidad de Cantabria, 05/15 | M. E. Gómez |
| Status of the ANAIS experiment | Conferencia en IBS-MultiDark Joint Workshop on Dark Matter and 13th MultiDark Consolider Workshop. Madrid (Spain), 2015 | M.L.Sarsa on behalf of the ANAIS experiment |
| Status of the Anais Dark Matter project at the Canfranc Underground Laboratory | Conferencia en International Workshop on Topics in Astroparticle and Underground Physics (TAUP 2015). Torino (Italy), 2015 | M.L. Sarsa on behalf of the ANAIS experiment |
| Latest results in ANAIS | Conferencia en LSC Scientific Advisory Committee Meeting. Canfranc (Spain), 2015 | M.L. Sarsa on behalf of the ANAIS experiment |
| ANAIS planning | Conferencia en LSC Scientific Advisory Committee Meeting. Canfranc (Spain), 2015 | E. García on behalf of the ANAIS experiment |
| The ANAIS Dark Matter Project: Status and Prospects | Conferencia en 14th Marcel Grossmann Meeting. Roma (Italy), 2015 | M. Martínez on behalf of the ANAIS experiment |
| Background model of NaI(Tl) detectors for the ANAIS dark matter project | Poster en 11th AxionWIMP conference (Patras workshop). Zaragoza (Spain), 2015 | P. Villar on behalf of the ANAIS experiment |

| | | |
|--|---|--|
| Latest progress in ANAIS-25 and preliminary results of ANAIS-37 | Conferencia en 12th MultiDark Consolider Workshop. Salamanca (Spain), 2015 | P. Villar on behalf of the ANAIS experiment |
| Background analysis and status of the ANAIS dark matter project | Conferencia en Low Radioactive Techniques Workshop. Seattle (USA), 2015 | C. Cuesta on behalf of the ANAIS experiment |
| Status report of ANAIS | Conferencia en LSC Scientific Advisory Committee Meeting. Canfranc (Spain), 2015 | M.L. Sarsa on behalf of the ANAIS experiment |
| If it squawks as a chicken and walks as a chicken... | Conferencia en SuperCDMS Collaboration meeting, PNNL, Richland, US. 8-11 Jan. 2016 | D.G. Cerdeño |
| On Taxonomy, Taxidermy and Dark Matter | Conferencia en XXI Xmas Workshop, IFT UAM-CSIC, Madrid, Spain. 9-11 Dec. 2015 | D.G. Cerdeño |
| Dark Matter Direct Searches | Conferencia en UK HEP Forum 2015: Anomalies and Deviations, Cosener's House, Abingdon, UK. 5-6 Nov. 2015 | D.G. Cerdeño |
| Hidden Sector Searches | Conferencia en PIC 2015: Physics in Collision, University of Warwick, UK. 15-19 Sep. 2015 | D.G. Cerdeño |
| On WIMPs and Chimeras | Conferencia en 11th Patras Workshop on Axions, WIMPs and WISPs, Zaragoza University, Spain. 22-26 Jun. 2015 | D.G. Cerdeño |
| Towards the Identification of Dark Matter | Conferencia en UK Dark Matter Collaboration meeting, Liverpool University, UK. 8 Jun. 2015 | D.G. Cerdeño |
| Towards the Identification of Dark Matter | Conferencia en Rencontres de Blois 2015, Blois, France. 31 May-5 Jun 2015 | D.G. Cerdeño |
| Status of PICO Experiment | Conferencia en IBS-MultiDark Joint Workshop on Dark Matter, Madrid 2015 | M. Ardid on behalf of the PICO Collaboration |
| MOSCAB: direct dark matter search using the geyser technique | Poster en IBS-MultiDark Joint Workshop on Dark Matter, Madrid 2015 | I. Felis et al. |
| R&D studies for the development of acoustic sensors for dark matter bubble chamber detectors | Conferencia en 2nd International Electronic Conference on Sensors and Applications, 2015 | I. Felis et al. |
| Update on PICO and MOSCAB Activities and Results | Conferencia en 13th MultiDark Consolider Workshop, Madrid 2015. | I. Felis et al. |

| | | |
|--|--|------------------------------------|
| Multilayer design of acoustic sensors for dark matter bubble chamber detectors | Conferencia en Tecniacústica, Valencia 2015. | D.G. Cerdeño |
| A la caza de astropartículas: materia oscura | Actividad de divulgación en “La Noche de los Investigadores”, Carpa CAI, Zaragoza | I. Felis et al. |
| Einstein: los límites del genio | Actividad de divulgación en Centro Penitenciario de Daroca, Daroca, Zaragoza, 2015. | |
| El Universo Invisible. ¿Dónde está el 96% del Universo? | Actividad de divulgación en El Sótano Mágico, Festival Pink of Science España, Zaragoza, 2015. | |
| Los científicos cuentan ... en 300 palabras | Artículo de divulgación publicado en la Revista “Muy interesante”, Febrero 2015 | María Luisa Sarsa |
| Los Rayos Cósmicos | Libro de divulgación publicado en la editorial RBA | M. Masip |
| Ondas gravitacionales: mensajeras del universo | ISSN: 0213-862X, Revista Española de Física, Vol 29, No 4 (2015) pp 14-18 | Gabriela González, Alicia M Sintes |
| Gravitino Dark Matter: Model and Searches | Conferencia en X Iberian Cosmology Meeting IberiCOS 2015, March 30--April 1, 2015, Aranjuez, Madrid | Carlos Muñoz |
| Dark Matter Detection | Conferencia en Meeting on Fundamental Cosmology IMFP14, 17--19 June 2015, Santander, Spain | Carlos Muñoz |
| Searching for SUSY and decaying gravitino dark matter at the LHC and Fermi-LAT with the μ vSSM | Conferencia en XI Intern. Workshop on The Dark Side of the Universe DSU2015, 14--18 Dec., Kyoto, Japan | Carlos Muñoz |
| Isospin violating dark matter in Stueckelberg portal scenarios | Conferencia en TAUP 2015 Torino, Italy, 7-11 September 2015 | M. Peiró |
| Singlet Higgs and Double Higgs Production | Conferencia en VII CPAN Days, Segovia, Spain, 1-3 Nov. 2015 | Víctor Martín Lozano |
| Isospin Violating Dark Matter in Stückelberg Portals | Conferencia en PASCOS 2015: ICTP, Trieste, Italy, 29 Junio-3 Julio 2015 | Víctor Martín Lozano |
| Phenomenology of intersecting D6-branes with Stückelberg portal scenarios | Conferencia en String Pheno 2015, IFT-UAM/CSIC, Madrid, Spain, 8-12 Junio 2015 | Víctor Martín Lozano |
| Dark matter phenomenology of intersecting D6-branes with a Stückelberg portal | Conferencia en 18th International Conference PLANCK, Ioannina, Greece, 25-29 Mayo 2015 | Víctor Martín Lozano |

| | | |
|---|--|------------------------|
| Isospin violating dark matter in Stückelberg portal scenarios | Conferencia en 12th Multidark Consolider Workshop, 15-17 Abril 2015 | Víctor Martín Lozano |
| SuperCDMS: the experiment and latest results from the low-mass WIMP search | Conferencia en Durham University, Durham, United Kingdom, 23/10/2015 | Elías López-Asamar |
| SuperCDMS: current status and plans | Conferencia en 12th MultiDark Consolider Workshop, Salamanca, Spain, 16/04/2015 | Elías López-Asamar |
| SuperCDMS: latest results from CDMSlite and SuperCDMS SNOLAB | Conferencia en 13th MultiDark Consolider Workshop, Madrid, Spain, 27/11/2015 | Elías López-Asamar |
| Diffuse Emission at the Galactic Center: Signal Sensitivity and Measure of Systematics for Dark Matter Search | Conferencia en CTA Consortium Meeting, September 14-18, 2015, University of Liverpool, UK | Germán A. Gómez-Vargas |
| Dark Matter and the Galaxy Power Spectrum | Conferencia en Dark Matter in the State of Sao Paulo, May 8, 2015, ICTP South American Institute for Fundamental Research, Sao Paulo, Brazil | Germán A. Gómez-Vargas |
| Status of the Galactic Center excess | Conferencia en Fermi LAT Collaboration Meeting, March 16-20, 2015, SLAC National Accelerator Laboratory Menlo Park, CA, USA | Germán A. Gómez-Vargas |
| Mean field studies of odd mass nuclei with the Gogny force | Conferencia en Nuclear Structure and Dynamics III, Portoroz, Slovenia 14-19 Junio 2015 | Luis Robledo |
| Octupole correlations beyond the mean field | Conferencia en Reflections on the Atomic Nucleus, Liverpool, UK, 27-29 Julio 2015 | Luis Robledo |
| Octupole dynamics of super-heavy nuclei | Conferencia en ESNT Workshop on Super-Heavy nuclei, Saclay, Francia 16-19 Noviembre 2015 | Luis Robledo |
| The Gogny force at Madrid: an adventure lasting for more than thirty years | Conferencia en First Gogny Conference: Tribute day, Bruyeres Le Chatel, Francia 8 Diciembre 2015 | Luis Robledo |
| Lights and shadows on the implementation of beyond mean field approaches with the Gogny force | Conferencia en First Gogny Conference: Workshop on finite range forces in nuclear physics, Bruyeres Le Chatel, Francia 9-11 Diciembre 2015 | Luis Robledo |
| What is the Universe made of? (from elementary particles to dark matter) | Conferencia de divulgación en 'X Iberian Cosmology meeting' (IberiCOS 2015), Aranjuez, Madrid, 30 March 2015 | Carlos Muñoz |

| | | |
|---|--|-----------------------------------|
| Física de Partículas y Cosmología | Conferencia de divulgación en IES Sagrada Familia de Urgel, Madrid, Spain. 18 Noviembre 2015 | Víctor Martín Lozano |
| Descubriendo el bosón de Higgs | Conferencia de divulgación en Noche Europea de los Investigadores, Universidad Autónoma de Madrid, Madrid, Spain. 25 Septiembre 2015 | Víctor Martín Lozano, Carlos Pena |
| Física de Partículas y Cosmología | Conferencia de divulgación en IES Nuestra Señora de la Providencia, Madrid, Spain. 14 Enero 2015 | Víctor Martín Lozano |
| Masterclass Interactiva de Física de Partículas | Actividad de divulgación dentro de la Semana de la Ciencia, IES Ramiro de Maeztu, Madrid, Spain.03/11/2015 | Víctor Martín Lozano, Carlos Pena |
| Hands on Particle Physics, Masterclass 2015 | Actividad de divulgación en IFT-UAM/CSIC, Madrid, Spain. 27 Marzo 2015 | Víctor Martín Lozano, Carlos Pena |
| SUSY Higgs Bosons in the Light of LHC Data | Particle physics seminar given at LMU (Munich, Germany), 12/16 | S. Heinemeyer |
| Dark Matter in the pMSSM | Invited talk given at IBS/MultiDark workshop (Durham, UK), 11/16 | S. Heinemeyer |
| SUSY and its Higgs Bosons in the Light of LHC Data | Seminar given at IFIC (Valencia, Spain), 11/16 | S. Heinemeyer |
| Precision Calculations for FCC-ee EW Observables | Talk given at the FCC-ee physics meeting (CERN), 10/16 | S. Heinemeyer |
| LHC result interpretation in multi-Higgs SUSY models: MSSM, NMSSM, hMSSM, ... | plenary talk given at the Charged Higgs workshop (Uppsala, Sweden), 10/16 | S. Heinemeyer |
| Insights/Updates in the MSSM: Impact on Higgs Boson Searches | Talk given at the LHCHXSWG workshop (CERN), 10/16 | S. Heinemeyer |
| Higgs and SUSY at the LHC | Talk given at the Particle Physics Seminar, Dresden University, Germany, 07/16 | S. Heinemeyer |
| Higgs to SUSY Decays at the Full One-Loop Level | Talk given at SUSY 16 (Melbourne, Australia), 07/16 | S. Heinemeyer |
| New SUSY fits with MasterCode | Talk given at SUSY 16 (Melbourne, Australia), 07/16 | S. Heinemeyer |
| FeynHiggs: New and Improved Predictions in the (N)MSSM | Talk given at SUSY 16 (Melbourne, Australia), 07/16 | S. Heinemeyer |

| | | |
|--|---|---------------|
| Container Technology for Phenomenology Tools | Talk given at SUSY 16 (Melbourne, Australia), 07/16 | S. Heinemeyer |
| Dark Matter Predictions in SUSY Models | Talk given at "Dark Matter 2016: From the smallest to the largest scales" (Santander, Spain), 06/16 | S. Heinemeyer |
| Neutral and Charged Higgs Boson Production Cross Sections in the complex MSSM | Talk given at the ECFA LC Workshop (Santander, Spain), 06/16 | S. Heinemeyer |
| Higgs to SUSY Decays at the Full One-Loop Level | Talk given at the ECFA LC Workshop (Santander, Spain), 06/16 | S. Heinemeyer |
| SUSY fits and their Implications for ILC and CLIC | Talk given at the ECFA LC Workshop (Santander, Spain), 06/16 | S. Heinemeyer |
| Precision Studies of SM-like signatures: EW, QCD, Higgs, top | Talk given at KET workshop: "e+e- Colliders - the next generation" MPI Munich, Germany, 05/16 | S. Heinemeyer |
| SUSY Higgs-mass predictions: MSSM vs.\ EFT Approach | Plenary talk given at Loops and Legs 2016, Leipzig, Germany, 04/16 | S. Heinemeyer |
| Higgs production from SUSY decays at the LHC -- Higgs production at ILC/CLIC in the cMSSM at NLO | Talk given at the 2nd Annual HiggsTools Meeting, Granada, Spain, 04/16 | S. Heinemeyer |
| FCC-ee: Precision Calculations Summary | Talk given at the FCC week 2016, Rome, Italy, 04/16 | S. Heinemeyer |
| Precision EW Calculations (ILC/FCC-ee) | Talk given at the FCC week 2016, Rome, Italy, 04/16 | S. Heinemeyer |
| Higgs and SUSY at the LHC | Talk given at the Fritzsch workshop, Singapur, 02/16 | S. Heinemeyer |
| SUSY fits with MasterCode: Predictions for the LHC and DM | Talk given at the Particle Physics Seminar, Roma I, Italy, 02/16 | S. Heinemeyer |
| SUSY fits and their Implications for ILC and CLIC | Talk given at the Spanish LC network meeting, 01/16 | S. Heinemeyer |
| Majorana neutrino masses - A story of trees and loops | 6th Int. Workshop on High Energy Physics in the LHC Era, Valparaiso (Chile), 6-12 enero | M. Hirsch |
| Neutrinos theory | XLIV International Meeting on Fundamental Physics, IFT Madrid, 4-7 abril | M. Hirsch |

| | | |
|---|---|---|
| Lepton Flavor Higher Orden Correction to EW observables | Seminar Given at the INFN, Perugia, Italy, 04/16 | M. Gómez Santamaría |
| SUSY scenarios in GUT Models with Non-Universal Scalar Masses | 12th International Work Shop on the Dark Side of the Universe. 25-29 July 2016, University of Bergen, Norway | M. Gómez Santamaría |
| Dark Matter in Supersymmetry in GUT Models. Planck 2016 | From the Planck Scale to the Electroweak scale. 23-27 May 2016, Valencia | M. Gómez Santamaría |
| Nuestro Conocimiento Fundamental de la Naturaleza: El Futuro es Lineal | Public outreach talk given at the ECFA LC Workshop (Santander, Spain), 06/16 | S. Heinemeyer |
| La Fórmula que describe el Mundo - The Formula that describes the World | Public talk given at CSIC (Madrid, Spain), 11/16 | S. Heinemeyer |
| El milagro de la materia que nos rodea, los bloques elementales de la materia | IES Fernando de Herrera, Sevilla, 12/16/2016 | M. Gómez Santamaría |
| Semana de la Ciencia | Participation in the "Semana de la Ciencia", Universidad de Huelva, Nov. 2016 | M. Gómez Santamaría |
| Dark matter detection with neutrinos | 3rd IBS-MultiDark-IPPP Workshop: Dark Matter from aeV to ZeV, November 2016, Durham, UK | J. D. Zornoza |
| Dark matter searches in ANTARES | Beyond the Standard Model with Neutrino Detectors Workshop, Suwon, South Korea, July 2016 | J. D. Zornoza |
| Neutrino telescopes | School on Recent Discoveries in Particle Physics, Suwon, South Korea, July 2016 | J. D. Zornoza |
| Indirect Search of Dark Matter | School on Recent Discoveries in Particle Physics, Suwon, South Korea, July 2016 | J. D. Zornoza |
| Dark matter searches with neutrino telescope | Dark Matter 2016 Conference, Santander Spain, July, 2016 | J.J. Hernández-Rey |
| Results on dark matter searches with the ANTARES neutrino telescope | XXVII International Conference on Neutrino Physics and Astrophysics (Neutrino 2016), London, July 2016 | J.D. Zornoza and C. Tönnis |
| The indirect search for dark matter with the ANTARES neutrino telescope | 6th Roma International Conference on Astroparticle Physics (RICAP16), Rome, June 2016 | C. Tönnis |
| Dark matter and the neutrino portal paradigm | XV Mexican Workshop on Particles and Fields, Mexico DF, 2-6 Feb. 2016. J. Phys. Conf. Serv. 761 (2016) 012082 | V. González-Macías, J.I. Illana, J. Wudka |

| | | |
|---|--|-------------|
| Indirect detection of Dark Matter with the ANTARES Neutrino Telescope | PLANCK 2016, Valencia, 23-27 May 2016 | M. Ardid |
| Measurement and interpretation of the Fermi-LAT angular power spectrum of gamma-ray anisotropies | IPPP, Durham, November 2016 | M. Fornasa |
| The angular power spectrum of the diffuse gamma-ray emission as measured by the Fermi LAT and constraints on its Dark Matter interpretation | Latin American Webinars of Physics, September 2016 | M. Fornasa |
| The angular power spectrum of the diffuse gamma-ray emission as measured by the Fermi LAT and constraints on its Dark Matter interpretation | Fermi Collaboration meeting, September 2016 | M. Fornasa |
| Model independent interpretation of the Fermi LAT measurement of gamma-ray anisotropies | APS meeting, August 2106 | M. Fornasa |
| The angular power spectrum of the diffuse gamma-ray emission as measured by the Fermi LAT and constraints on its Dark Matter interpretation | RICAP 2016, June 2016 | M. Fornasa |
| The angular power spectrum of the diffuse gamma-ray emission as measured by the Fermi LAT and constraints on its Dark Matter interpretation | CCAPP, Ohio State University, March 2016 | M. Fornasa |
| Dark Matter searches: status and prospects | Seminar at University of Padova, 30 November 2016, Padova, Italy | Marco Taoso |
| Sommerfeld enhancement and bound state formation | Dark Matter from aeV to ZeV: IBS-Multidark-IPP workshop. 21-25 November 2016, Durham, UK | Marco Taoso |
| Phenomenology of DM electroweak multiplets | PASCOS 2016, 10-16 July 2016, Quy-Nhon, Vietnam | Marco Taoso |

| | | |
|---|--|--------------------|
| Dark matter and the galactic center GeV excess | Frontier Objects in Astrophysics and Particle Physics, 22-28 May 2016, Sicily, Italy | Marco Taoso |
| Measuring the Extragalactic Background Light with gamma-ray telescopes | June 30, 2016, Dipartimento di Fisica, Padova University, Italy | A. Moralejo |
| Exploring the physics frontier with the MAGIC Telescopes: Indirect dark matter searches | Identification of Dark Matter, J. Palacio, Sheffield (UK), July 18-22, 2016 | M. Fornasa |
| The search for cosmological annihilation signals with the Fermi LAT | Dark matter from aeV to ZeV, Durham, UK, November 2016 | M.A. Sánchez-Conde |
| Indirect detection, simulations and data | Dark Matter in the Milky Way, Mainz, Germany, May 2016 | M.A. Sánchez-Conde |
| Indirect dark matter searches circa 2016. A brief review | April APS meeting, Salt Lake City, USA, April 2016 | M.A. Sánchez-Conde |
| Characterization of subhalo structural properties and implications for dark matter annihilation signals | 2nd anisotropic universe, GRAPPA, Amsterdam, The Netherlands, April 2016 | M.A. Sánchez-Conde |
| Diffusion of dark matter in a dense nuclear medium | Dark matter from aeV to ZeV, Durham, UK, November 2016 | Marina Cermeño |
| The CTA-North Observatory in La Palma | RIA-SpaceTec Workshop, Madrid, February 2016 | J.A. Barrio |
| Neutrino oscillations in the galactic DM halo | PLANCK 2016, Valencia, Spain. May 2016 | R. Lineros |
| Neutrino propagation in the galactic DM halo | RICAP 2016, Frascati, Italy. June 2016 | R. Lineros |
| Reviewing dark matter searches with radio waves | Dark Matter from aeV to ZeV: 3rd IBS-MultiDark-IPPP workshop, Lumley Castle, United Kingdom. November 2016 | R. Lineros |
| Dark Matter effects on oscillations of high energy neutrinos | CINVESTAV, Mexico City, Mexico. August 2016 | R. Lineros |
| The Third Catalog of Hard Fermi-LAT Sources (3FHL) | TeV Particle Astrophysics, CERN, Geneva, Switzerland, September 2016 | A. Domínguez |

| | | |
|--|---|---|
| Latest Fermi-LAT results on EBL gamma-ray attenuation | Perspective on the Extragalactic Frontier, Trieste, Italy, Mayo 2016 | A. Domínguez |
| All the light there ever was | Colloquium at the Oskar Klein Centre, Stockholm, Sweden, Marzo 2016 | A. Domínguez |
| The gamma-ray sky | Outreach talk. Forskarfredag, Stockholm University, Sweden, September 2016 | M.A. Sánchez-Conde |
| Searching for WIMP Dark Matter with astroparticles | Cátedra Augusto García González, CINVESTAV, Mexico city, Mexico. August 2016 | |
| Status of the ANAIS experiment | UCLA dark matter 2016, 17-20 February 2016, UCLA, CA, US | C. Cuesta on behalf of the ANAIS experiment |
| Dark Matter: experimental techniques and issues | Oral invited contribution. XLIV International Meeting on Fundamental Physics, Instituto de Física Teórica IFT-UAM/CSIC, Madrid, España, 4-8 April 2016. | M.L. Sarsa |
| Status and Prospects of ANAIS-112 at the Canfranc Underground Laboratory | Dark Matter 2016: From the smallest to the largest scales, 27 June-1 July 2016, Santander, Spain | S. Cebrián on behalf of the ANAIS experiment |
| Status and Prospects of ANAIS-112 at the Canfranc Underground Laboratory | Identification of Dark Matter 2016, 11th International Conference, IDM2016, 18 – 22 July 2016, Sheffield, UK | M.L. Sarsa on behalf of the ANAIS experiment |
| Testing DAMA/LIBRA with ANAIS-112 | IBS-MultiDark-IPPP Workshop on Dark Matter from aeV to ZeV, Lumley Castle, UK, 21-25 November 2016 | M. Martínez on behalf of the ANAIS experiment |
| Commissioning and prospects of the ANAIS-112 experiment | VIII CPAN DAYS, 28-30 November 2016, Paraninfo, Universidad de Zaragoza, Zaragoza, Spain | P. Villar on behalf of the ANAIS experiment |
| PICO dark matter detectors: activities and results | PLANCK 2016, Valencia, 23-27 May 2016. | I. Felis on behalf of the PICO experiment |
| PICO: dark matter detection with bubble chamber detectors | IBS-MultiDark-IPPP Workshop on Dark Matter from aeV to ZeV, Lumley Castle, UK, 21-25 November 2016 | M. Ardid on behalf of the PICO experiment |
| A walleyed perspective to the dark matter problem | International Meeting on furndamental Physics, Madrid, Spain 11 April 2016 | David Cerdeño |
| 51th Rencontres de Moriond, Results from the second CDMSlite run and plans for SuperCDMS | SNOLAB, 18th of March 2016, La Thuile (Italy). | David Cerdeño |

| | | |
|---|--|-----------------------------|
| Identification of Dark Matter 2016, Background studies in SuperCDMS | 20th of July 2016, Sheffield (United Kingdom) | David Cerdeño |
| Applied Antineutrino Physics 2016, SuperCDMS SNOLAB: status and prospects for measuring the CNS | 2nd of December 2016, Liverpool (United Kingdom) | David Cerdeño |
| A la caza de astropartículas: material oscura | Presentation at the "Researchers night". 30 September 2016, Caixa-Forum, Zaragoza | |
| Cazadores de sombras | Presentation at Pint of Science Festival 2016, 24 May 2016, El Sótano Mágico, Zaragoza | |
| La caja B | Presentation on the VII conferences on Scientific Outreach of the University of Zaragoza: RISArchers monologues. 25 February 2016, Zaragoza, Spain. The monologue was also presented in several RISArchers performances along 2016, in particular in the IV Innovative Outreach conference, 22 October 2016, Etopía, Zaragoza. | M.L. Sarsa |
| Tesis en 3 minutos | Presentation in the Campus Iberus contest. November 2016. Second prize. | P. Villar |
| nIFTy Cosmology 2014: "compaCT Clusters" | Organization of follow-up workshop to nIFTy Cosmology 2014: "compaCT Clusters" at the University of the Western Cape, Cape Town, South Africa, July 7-15, 2016 | A.Knebe |
| Lund University Dark Matter School | Lecturing at the Lund University Dark Matter School during the period 26-30 September 2016 (Lund, Sweden). | José Alberto Ruiz Cembranos |
| Beyond LCDM Concordance Model meeting | Member of the scientific organizing committee of the Beyond LCDM Concordance Model meeting (http://beyondconcordance.com), 60 participants, November 28 2016 - December 02 2016, UCT Cosmology and gravity group, University of Cape Town, South Africa. | A. de la Cruz-Dombriz |
| Moderation of a session "Q&A: Urgent questions 1" | 7th Einstein Telescope Symposium: first joint ET-LIGO 3G meeting http://events.ego-gw.it/indico/conferenceDisplay.py?confId=34 . Florence, Italy, 02.-03.02.2016 | Alicia Sintes |

| | | |
|--|--|---|
| Results of the S6 All-sky Mock Data Challenge | 2016 LSC-Virgo Collaboration Meeting y LVC March 2016 Meeting. Pasadena, USA, 12.-18.03.2016 | Alicia M Sintes, Miquel Oliver, Sinead Walsh, Keith Riles, Andrzej Krolak, Cristiano Palomba, Sabrina D'Antonio, Orion Sauter, Vladimir Dergachev, Maria Alessandra Papa, Michal Bejger, Matthew Pitkin |
| Gravitational waves | XLIV International Meeting on Fundamental Physics https://workshops.ift.uam-csic.es/IMFP16 . Madrid, 04.-08.04.2016 | Sascha Husa |
| Recent results from LIGO | 6th Iberian Gravitational-Wave Meeting https://workshops.ift.uam-csic.es/IGWM2016 . Madrid, 11.-13.04.2016 | Alicia Sintes |
| The Phenomenological waveform modelling program | 6th Iberian Gravitational-Wave Meeting https://workshops.ift.uam-csic.es/IGWM2016 . Madrid, 11.-13.04.2016 | Sascha Husa |
| The new era of gravitational wave astronomy | PLANCK2016: 19th International Conference From the Planck Scale to the Electroweak Scale http://congresos.adeituv.es/planck2016/ficha.en.html . Valencia, 23-27 May 2016 | Alicia Sintes |
| Einstein Toolkit Eu 2016 School and Workshop | Einstein Toolkit Eu 2016 School and Workshop http://events.unitn.it/en/et-eu2016 . Trento, Italy, 13.-17.06.2016 | Sascha Husa |
| Results from Advanced LIGO's First Observing run | Meeting on Fundamental Cosmology http://icc.ub.edu/congress/Cosmology2016/index.php . Institute of Cosmos Sciences, Barcelona, June 15th - 17th, 2016 | Alicia Sintes |
| Improved all-sky Hough search for continuous gravitational waves | 21st International Conference on Relativity and Gravitation. July 10-15 2016. New York. USA | M. Oliver, P. Covas, L. Keitel, A.M. Sintes |
| Systematic NR fits to GW Peak Luminosity and Final States of BBH Mergers | 21st International Conference on Relativity and Gravitation. July 10-15 2016. New York. USA | Xisco Jiménez Forteza, Sascha Husa, David Keitel |
| Gravitational waves detected 100 years after Einstein's prediction | Invited Talk at XII Reunión Científica de la Sociedad Española de Astronomía http://www.sea-astronomia.es/drupal/SEA2016 . Bilbao 18.-22.07.2016 | Alicia Sintes |
| Gravitational Waves and Black Hole Binary modelling | XII Reunión Científica de la Sociedad Española de Astronomía. Bilbao 18.-22.07.2016 | Xisco Jiménez Forteza, Sascha Husa, David Keitel |

| | | |
|---|---|---|
| An Update on the O1 sky-Hough all-sky isolated-star search | LSC-Virgo August 2016 Meeting. August 29-Sept 1, 2016. Glasgow UK | M. Oliver, P. Covas, L. Keitel, A.M. Sintes |
| CW Searches Overview | Plenary talk. LSC-Virgo August 2016 Meeting. August 29-Sept 1, 2016. Glasgow UK | Alicia M Sintes for the LVC-CW working group |
| BBH final state fits: A hierarchical approach | LSC-Virgo August 2016 Meeting. August 29-Sept 1, 2016. Glasgow UK | Xisco Jiménez Forteza, David Keitel, Sascha Husa, Mark Hannam, Sebastian Khan, Michael Pürrer Alicia Sintes |
| Gravitational Waves: The novel messengers of the Universe | Invited talk at Dark Matter from aeV to ZeV: 3rd IBS-MultiDark-IPPP workshop, Lumley Castle, Durham (United Kingdom) 21-25 November 2016 | Alicia Sintes |
| Neutron stars in f(R) gravities as gravitational waves sources | Plenary presentation at South African Gravity Society meeting 2016. Astrophysics Cosmology Research Unit (ACRU), School of Mathematics, Statistics and Computer Science, University of KwaZulu-Natal, Durban, South Africa, May 3 2016. | Álvaro de la Cruz Dombriz |
| Peeping through the Vainshtein shelter | Departamento de Fisica Matematica, Universidade de Sao Paulo. Oct. 4th, 2016. | Jose Beltrán Jiménez |
| Peeking behind the Vainshtein screen | Institute of Theoretical Astrophysics, University of Oslo, September 7th, 2016. | Jose Beltrán Jiménez |
| Gravity Born-Infeldized | IAP, (Paris), March 7th, 2016 | Jose Beltrán Jiménez |
| Hiding and seeking dark energy | APC, (Paris), February 6th 2016. | Jose Beltrán Jiménez |
| Ultralight bosonic Dark Matter with arbitrary spin | "3rd IBS-MultiDark-IPPP Workshop: Dark Matter from aeV to ZeV" giving the talk ", in Durham, United Kingdom (20/11/2016-26/11/2016). | José Alberto Ruiz Cembranos |
| Coherent fields in cosmology | The 12th International Workshop Dark Side of the Universe, Bergen (Norway), July 25-29 (2016) | Antonio López Maroto |
| El primer descubrimiento de Advanced LIGO: Las ondas gravitacionales detectadas 100 años después de la predicción de Einstein | 22 February 2016: Public talk. 19:00 h, Club Diario de Mallorca | Alicia Sintes, Sascha Husa, Miquel Borrás |

| | | |
|---|--|----------------------------|
| Gravitational waves detected after 100 years of Einstein's prediction | 29 February 2016: Public talk. 19:00 h, DIPC Donostia (Kutxa Andia Hall) | Alicia Sintes, Sascha Husa |
| Las ondas gravitacionales: La sinfonía del universo | 3 March 2016: Conferencia. 14:30 h, Sheraton Mallorca Arabella Golf Hotel | Alicia Sintes, Sascha Husa |
| Les ones gravitacionals: les noves missatgeres de l'Univers | 9 March 2016: Public talk. 19:30 h, Auditori Santiago Grisolía del Museu de Ciéncies de la Ciutat les arts i les ciéncies, Valéncia | Alicia Sintes |
| Gravitational Waves: The novel messengers of the Universe | 10 March 2016: Colloquia. 12:45 h, Parc Científic (Salón de Actos Edificio de Cabecera), Valéncia | Alicia Sintes |
| Las ondas gravitatorias: las nuevas mensajeras del universo | 29 March 2016: RSEF outreach conference in collaboration with the Fundación Ramón Areces and conference cycle "Hablemos de física" of the UCM "Facultad de Ciencias Físicas". 13:00 h, Salón de Actos Julio Rey Pastor, Facultad de Ciencias Matemáticas UCM, Madrid | Alicia Sintes |
| Las ondas gravitatorias: las nuevas mensajeras del universo | 30 March 2016: Seminar. 12:00 h, Auditorio del Centro de Astrobiología (CSIC-INTA), Instituto Nacional de Técnica Aeroespacial, Madrid | Alicia Sintes |
| La nueva era de la astronomía de ondas gravitacionales | 27 April 2016: Conference. 18:30 h, Real Academia de Ciencias, Valverde, 22 - 28004, Madrid | Alicia Sintes |
| Las ondas gravitatorias: las nuevas mensajeras del universo | 28 April 2016: Colloquium. 15:00 h, Facultad de ciencias UAM, Madrid | Alicia Sintes |
| III Jornades de Ciència | 5,6 Maig 2016, Participació en les III Jornades de Ciència per a Tothom. UIB | Grupo UIB |
| La detección experimental de las ondas gravitacionales en Advanced Ligo | 17 May 2016: Colloquium. 15:30 h, Universidad de Zaragoza, Facultad de Ciencias | Alicia Sintes |
| Ondas gravitacionales: las nuevas mensajeras del universo | 17 May 2016: Conference from the cycle "Nuevas ventanas al Universo. Estudiando fenómenos extremos del cosmos". 19:00 h, CaixaForum Zaragoza, Av. José Anselmo Clavé, 4, 50004 Zaragoza | Alicia Sintes |
| La nueva era de la astronomía de ondas gravitacionales | 4 June 2016: Conference. 13:30 h, Cercle d'Economia de Menorca, Ciutadella, Menorca | Alicia Sintes |
| Ondas gravitacionales: las nuevas mensajeras del universo | 17 May 2016: Conference from the cycle "Nuevas ventanas al Universo. Estudiando fenómenos extremos del cosmos". 19:00 h, CaixaForum Zaragoza, Av. José Anselmo Clavé, 4, 50004 Zaragoza | Alicia Sintes |

| | | |
|---|--|---------------------------------------|
| Les ones gravitacionals: les noves missatgeres de l'univers | 15 June 2016: Conference. 19:30 h, Òmnium Cultural Terrassa | Alicia Sintes |
| Nuevos resultados sobre Ondas Gravitacionales del experimento observacional LIGO | 27 Junio 2016: Coloquio en el CIEMAT, Madrid | Alicia Sintes |
| Las ondas gravitacionales: las nuevas mensajeras del universo | 20 Julio 2016: Charla pública en la XII Reunión Científica de la Sociedad Española de Astronomía Bizkaia Aretoa de la Universidad del País Vasco | Alicia Sintes |
| Juega con las ondas gravitacionales | 21-22 October 2016. Jornadas de Divulgación Innovadora D+I Centro de Arte y Tecnología Etopia, Zaragoza | Alicia Sintes y Pep Covas |
| Les ones gravitacionals, noves missatgeres de l'univers | 28 Octubre 2016 , Conferencia pública. 20 H. Club Diario de Ibiza | Alicia Sintes |
| Models of Supersymmetry for Dark Matter | Review Talk: `19th International Conference From the Planck Scale to the Electroweak Scale PLANCK 2016', 23-27 May 2016, Valencia, Spain | Carlos Muñoz |
| Models of Supersymmetry for Dark Matter | Review Talk: `6th Roma International Conference on Astro-particle Physics RICAP. 16', 21-24 June 2016, Frascati, Italy | Carlos Muñoz |
| Hunting for SUSY and decaying gravitino DM with the munuSSM | Conference: `XII International Workshop on The Dark Side of the Universe DSU2016', 25-29 July 2016, Bergen, Norway | Carlos Muñoz |
| SUSY models and symmetries in the era of the LHC | Review Talk: `DISCRETE 2016: Fifth Symposium on Prospects in the Physics of Discrete Symmetries', 20 November-3 December 2016, Warsaw, Poland | Carlos Muñoz |
| El IFT se hace Youtuber | Conferencia de divulgación. 22 de Octubre de 2016. Jornadas de Divulgación Innovadora D+i. Centro de Arte y Tecnología ETOPIA. Zaragoza | Susana Hernández y José Luis Crespo |
| Canfranc Underground Laboratory (part II): ANAIS and the dark matter hunters | Blog entry in "Astrobitos" entitled "Laboratorio Subterráneo de Canfranc (parte II): ANAIS y los cazadores de materia oscura" | Experimento ANAIS |
| La primera observación de ondas gravitacionales provenientes de la fusión de agujeros negros con LIGO | Boletín SEA-Verano 2016. http://www.seastronomia.es/drupal/content/boletin-electronico | Alicia M Sintes, Miriam Cabero Müller |

| | | |
|--|---|------------------|
| El albor de la astronomía de ondas gravitacionales | Revista Española de Física ISSN: 0213-862X, Vol 30, No 2 (2016) | Alicia M. Sintes |
| Where to find SUSY?! | Parallel talk given at PASCOS 2017 (IFT Madrid, Spain), 06/17 | S. Heinemeyer |
| SUSY and its Higgs Bosons at the LHC | Talk given at the Particle Physics Seminar, Padua University (Italy), 06/17 | S. Heinemeyer |
| Precision Observables at FCC-ee: Status and Future | Talk given at the FCC week 2017 (Berlin Germany), 05/17 | S. Heinemeyer |
| SUSY Dark Matter at the LHC - a 7.5 Years Summary | Talk given at the final MultiDark Meeting (IFT, Madrid, Spain), 05/17 | S. Heinemeyer |
| Direct detection prospects for SUSY DM - a 7.5 Years Summary | Talk given at the final MultiDark Meeting (IFT, Madrid, Spain), 05/17 | S. Heinemeyer |
| Keith and the MasterCode (Dark Matter in SUSY) | Talk given at the "OliveFest", Minneapolis university (USA), 05/17 | S. Heinemeyer |
| Flavor Violation Effects/Analysis in the CMSSM | Talk given at the 2nd MasterCode Meeting (Bristol, UK), 05/17 | S. Heinemeyer |
| SUSY and its Higgs Bosons at the LHC | Talk given at the Particle Physics Seminar, Basel University (Switzerland), 04/17 | S. Heinemeyer |
| SUSY and its Higgs Bosons at the LHC and the ILC | Talk given at the DESY Colloquium (Hamburg/Zeuthen, Germany), 03/17 | S. Heinemeyer |
| SUSY Higgs Bosons in the Light of LHC Data | Talk given at HPNP workshop (Toyama, Japan), 03/17 | S. Heinemeyer |
| NMSSM Benchmark Planes | Talk given at the LHCHXSWG NMSSM meeting (vidyo), 02/17 | S. Heinemeyer |
| Theory Calculations of/for the W Boson Mass | Talk given at the M_W workshop at Mainz university (Germany), 02/17 | S. Heinemeyer |
| SUSY and its Higgs Bosons at the LHC | Talk given at the GK seminar at Freiburg university (Germany), 02/17 | S. Heinemeyer |
| Physics Motivatin for the ILC | Talk given at the (spanish) "Red ILC" workshop (Zaragoza, Spain), 01/17 | S. Heinemeyer |

| | | |
|--|---|---|
| Electroweak Precision Observables: Theory Future | Talk given at the 1st FCC physics workshop (CERN), 01/17 | S. Heinemeyer |
| Electroweak Precision Observables: Theory Status | Talk given at the 1st FCC physics workshop (CERN), 01/17 | S. Heinemeyer |
| Low scale seesaw, left-right symmetry and LHC | Talk given at “Jorge Romao Fest”, 12/07/2017, Lisbon | M. Hirsch |
| Neutrinoless double beta decay: Beyond the mass mechanism | Talk given at MEDEX-17, 30/05/2017 | M. Hirsch |
| Two short comments on lepton number violation searches at the LHC | Talk at “Neutrino Theory Workshop”, CERN, Geneva, Switzerland, 28/03/2017 | M. Hirsch |
| Neutrinoless double beta decay: The quest for a new physics scale | Talk at “Neutrino Theory Workshop, CERN, Geneva, Switzerland, 30/03/2017 | M. Hirsch |
| GUT inspired SUSY scenarios: Dark Matter versus LHC searches | Parallel talk given at PASCOS 2017 (IFT Madrid, Spain), 06/17 | M. E. Gómez |
| SUSY Dark Matter at the LHC - a 7.5 Years Summary | Talk given at the final MultiDark Meeting (IFT, Madrid, Spain), 05/17 | M. E. Gómez |
| ¿Por qué hay algo en lugar de nada? | Outreach book. Ed. RBA (in print) | Mario E. Gómez y José Rodríguez-Quintero |
| La Materia Visible: El Modelo Estándar de las Interacciones Fundamentales | Conferencia de divulgación en las Jornadas Almonte-Ciencia, Almonte, Huelva, 24 de abril de 2017 | M. E. Gómez |
| ¿Es materia solo lo que reluce? El porqué de la materia oscura | Conferencia de divulgación en Matalascañas, Huelva, 08 de junio de 2017 | M. E. Gómez |
| Modelling the dynamics and gravitational wave signal of coalescing black holes | Invited talk at Iberian Gravitation Waves meeting, May 17 2017, Bilbao | S. Husa |
| Advanced LIGO status and prospects | Invited Plenary Talk: 7th Iberian GW Meeting. Bizkaia Aretoa, Bilbao, Spain. 15/05/2017 - 17/05/2017 | Alicia Sintes |
| Hierarchical data-driven approach to fitting waveform models for non-precessing binary black holes to numerical data | Poster presented by Sascha at GWPW 2017, 30 May 2017, Annecy, France. https://dcc.ligo.org/LIGO-G1701007 | G. Pratten, S. Husa, M. Colleoni, F. Forteza, D. Keitel, C. Garcia, Quiros, A. Ramos Buades |

| | | |
|---|---|----------------------------------|
| A simple procedure for eccentricity reduction in Numerical Relativity simulations | 7th Iberian GW Meeting. Bizkaia Aretoa, Bilbao, Spain. 15/05/2017 - 17/05/2017 | Antoni Ramos Buades, Sascha Husa |
| The effective number of neutrinos: standard and non-standard calculations | 12th Iberian Cosmology Meeting (IberiCOS 2017). Valencia, 10-12 April 2017 | S. Pastor |
| Local density of relic neutrinos with minimal mass | 12th Iberian Cosmology Meeting (IberiCOS 2017) | P.F. de Salas |
| Local density of relic neutrinos with minimal mass | 14th Multidark Consolider Workshop. IFT, Madrid, 24-26 May 2017 | P.F. de Salas |
| Neutrinos in Cosmology | Course for PhD students (3 h). ISAPP 2017 school: Neutrinos in Physics, Astrophysics and Cosmology. Arenzano (Italy), 13-24 June 2017 | S. Pastor |
| Cosmology with arbitrary spin coherent fields | Quantum Vacuum and Gravitation: Testing General Relativity in Cosmology. Mainz Institute for Theoretical Physics, Johannes Gutenberg University (Germany), 13-24 March 2017 | A.L. Maroto |
| Piercing the Vanishtein screen with gravitational waves | Avignon, 24 - 28 April 2017 | J. Beltrán Jiménez |
| Inflationary scenarios within Born-Infeld gravity | Iberian Cosmology Meeting 2017. Valencia, 10 - 12 April 2017 | J. Beltrán Jiménez |
| Las ondas gravitacionales: las nuevas mensajeras del universo | 24 May 2017, 12:00 h, Aula Màster del Campus Nord, UPC, Barcelona | Alicia Sintes |
| Charla sobre ondas gravitatorias y el experimento LIGO | 19 January 2017. 15:00 h, Fundacion UNIR Universidad internacional de La Rioja | Alicia Sintes |
| Ondas gravitacionales: ¡así suena el universo... por fin! | 13 June 2017. 19:00 h, Instituto Cervantes, Bélgica | Alicia Sintes |
| Ondas gravitacionales: mensajeras del universo | 12 May 2017. 19:00 h, Sofia Tech Park, Boulevard 'Tsarigradsko shose' 111B 1784 Sofia (Bulgaria) | Alicia Sintes |
| Ondas gravitacionales: ¡así suena el universo... por fin! | 26 April 2017, 19:00 h, Instituto Cervantes, 211 E 49th St 10017 Nueva York (Estados Unidos) | Alicia Sintes |
| Gravitationswellen. So klingt das Universum... endlich! | 21 March 2017. 19:00 h, Instituto Cervantes - das Spanische Kulturinstitut, Bremen | Alicia Sintes |

| | | |
|--|--|--|
| UIB Ciència per a Tothom 2017 | 11-13 May 2017. http://seras.uib.es/ciencia | Alicia Sintes |
| Job Shadowing: Colegio San Cayetano | 10 April 2017. 10:00 h, Sala de Reunions, Edifici Científico-tècnic, UIB | Alicia Sintes |
| Nombramiento de Sascha Husa y Alicia Sintes como Ciudadanos Europeos del año 2017 | Asociación de Ciudadanos Europeos de Baleares | Sascha Husa y Alicia Sintes |
| La observación de ondas gravitacionales con LIGO | Artículo de divulgación en Investigación y Ciencia, N 26 (February 2017) | Alicia M. Sintes, Borja Sorazu |
| Ondas Gravitacionales. ¡Por fin podemos escuchar el universo con LIGO! | Artículo de divulgación en http://www.cicnetwork.es/revista/ | Alicia Sintes |
| Ones Gravitacionals i Rock Psicodèlic | Colaboración con artistas para divulgar ciencia con el grupo Els Navegants, grupo de rock psicodélico en catalán | Alicia Sintes |
| Observacion de ondas gravitacionales procedentes de la fusion de un sistema binario de agujeros negros | Translations into Spanish of summary pages and official LIGO pages. https://wiki.ligo.org/EPO/DiscoveryTranslations | Alicia Sintes, Pep Coves, X. Jimenez-Forteza, Miriam Cabrero |
| Constraints to the dark matter lifetime with 250 hours of observations of the Perseus cluster with the MAGIC telescopes | 35th ICRC, Busan, South Korea, 2017 | J. Palacio |
| Deep observations of Cas A with MAGIC indicate it is not a PeVatron | 35th ICRC, Busan, South Korea, 2017 | D. Guberman |
| Measurement of the EBL through a combined likelihood analysis of gamma-ray observations of blazars with the MAGIC telescopes | 35th ICRC, Busan, South Korea, 2017 | A. Moralejo |
| Cosmic-rays models and gamma-rays observations | Multidark-IPPP workshop, 24-26 May 2017, Madrid, Spain | M. Taoso |
| Sommerfeld effect and bound state formation in dark matter models | South American Dark Matter workshop, 10-12 May 2017, San Paolo, Brasil | M. Taoso |
| CTA prospects for the study of dark matter and cosmic rays in galaxy clusters | CTA Phys WG face-to-face meeting, 6-8 March 2017 | M. Fornasa |

| | | |
|--|---|--|
| Confronting cosmic-rays models with gamma-rays observations | Seminar at ICTP-San Paolo, 8 May 2017, San Paolo, Brasil | M. Taoso |
| Light-Trap: A SiPM Upgrade for VHE Astronomy and Beyond | Conference: New Developments in Photodetection, Tours, France, July 3-7, 2017 | Daniel Guberman, Juan Cortina, John E. Ward |
| Dark Matter searches: status and prospects | Seminar at University of Torino, 09 Marzo 2017, Torino, Italy | M. Taoso |
| Prospects on the search for gamma-ray signatures from dark matter with MAGIC | MAGIC physics Spring meeting, CERN, Switzerland, April 2017 | Miguel A. Sánchez-Conde |
| Unveiling the nature of the dark matter with gamma rays | Seminar at the Department of Theoretical Physics, Universidad Autónoma de Madrid, May 2017, Madrid, Spain | Miguel A. Sánchez-Conde |
| Halo substructure and implications for dark matter annihilation signals | PASCOS 2017, June 2017, Madrid, Spain | Miguel A. Sánchez-Conde |
| Desvelando los misterios del Universo | Conferencia de divulgación en el C.E.I.P. Espronceda, Almendralejo, Spain, April 2017 | Miguel A. Sánchez-Conde |
| Desvelando los misterios del Universo | Conferencia de divulgación en el I.E.S. Carolina Coronado, Almendralejo, Spain, April 2017 | Miguel A. Sánchez-Conde |
| Overview of dark matter searches with ANTARES | Talk ICRC 2017, PoS(ICRC2017) 913 | C. Tönnis on behalf of the ANTARES collaboration |
| Combined Search for Neutrinos from Dark Matter Annihilation in the Galactic Center using IceCube and ANTARES | J.D. Zornoza on behalf of the IceCube and ANTARES collaborations, poster ICRC 2017, PoS(ICRC2017) 911 | J.A. Aguilar, N. Iovine, C. Tönnis |
| Neutrinos from Cosmic Ray Interactions in the Sun as background for dark matter searches | Poster ICRC 2017, POS (ICRC2017) 907. | M. Ardid, I. Felis, M. Lotze and C. Tönnis, on behalf of the ANTARES Collaboration |
| Otra forma de mirar el cielo: telescopios de neutrinos | Métode, n.92, 84-93 | J. Zúñiga, J.D. Zornoza, J.J. Hernández-Rey |
| Dark Matter Search Results from the PICO-60 C3F8 Bubble Chamber | 14th Multidark Workshop, Madrid, May 2017 | I. Felis, M. Ardid |

| PhD dissertations finalized related to the project: 42 | | | | |
|---|----------------------------|--|---------------------------------------|--------------------|
| | Name | Title | Supervisor/s | Group of MultiDark |
| 1 | Ysrael R. Ortigoza | Caracterización de un bolómetro centelleador de BGO (Bi ₄ Ge ₃ O ₁₂) para su aplicación en la búsqueda directa de materia oscura | Eduardo García | UZ |
| 2 | Álvaro de la Cruz Dombriz | Some cosmological and astrophysical aspects of modified gravity theories | Antonio Dobado & Antonio López Maroto | UCM-Th |
| 3 | Antonio J. Cuesta | The virialized properties of dark matter halos: signals from the large-scale structure | Francisco Prada | IAA |
| 4 | Alberto Domínguez Díaz | Extragalactic background light and its implications for galaxy evolution and gamma-ray astronomy | Francisco Prada & Manuel Lozano Leiva | IAA |
| 5 | Manuel Bou Cabo | Acoustics for underwater neutrino telescopes | Miguel Ardid & Víctor Espinosa | UPV |
| 6 | Roberto Barceló Aguilar | The Higgs boson and new physics at the TeV scale | Manuel Masip Mellado | UAM/IFT (UGR) |
| 7 | Miquel Trias Cornellana | Gravitational wave observation of compact binaries: detection, parameter estimation and template accuracy | Alicia M. Sintes Olives | U5 (UIB) |
| 8 | Javier Fidalgo Prieto | Phenomenology of a new supersymmetric standard model, the μ vSSM | Carlos Muñoz López | UAM/IFT |
| 9 | Urbano Lopes França | Cosmological implications of some nonstandard particle physics scenarios | Sergio Pastor Carpi | IFIC-AHEP |
| 10 | Giuseppina Larosa | Design and Development of an acoustic positioning system for a cubic kilometre underwater neutrino telescope | Miguel Ardid Ramírez | UPV |
| 11 | Fabio Zandanel | High Energy Phenomena in Clusters of Galaxies | Francisco Prada | IAA |
| 12 | Daniel Nieto Castaño | Dark matter constraints from high energy astrophysical observations | Juan Abel Barrio Uña | UCM-Th |
| 13 | Germán Arturo Gómez Vargas | Dark Matter Searches in the Gamma-ray Sky with the FermiLAT Space Telescope | Luis Labarga & Carlos Muñoz | UAM/IFT |
| 14 | Jelena Aleksic | Optimized Dark Matter Searches in Deep Observations of Segue 1 with MAGIC | Manel Martínez & F. Javier Rico | IFAE |
| 15 | Clara Cuesta Soria | ANAIS-0: Feasibility study for a 250 kg NaI(Tl) dark matter search experiment at the Canfranc Underground Laboratory | María Luisa Sarsa | UZ |

| | | | | |
|----|-----------------------------|--|--------------------------------------|---------------|
| 16 | Valentina De Romeri | New models in particle and astroparticle physics: consequences for Dark Matter and LHC | F. Donato & M. Hirsch & J.W.F. Valle | IFIC-AHEP |
| 17 | Tomás Alberto Rolón Cabrera | Detección de neutrones con bolómetros centellantes de fluoruro de litio y zafiro y su aplicación en experimentos de búsqueda de materia oscura | Jorge Mario Puimedón Santolaria | UZ |
| 18 | Carlos Ginestra Díaz | Characterization of scintillating bolometers for particle detection and installation of a bolometric test facility in the University of Zaragoza | Eduardo García Abancéns | UZ |
| 19 | Arianna Di Cintio | The LCDM model at small scales: Milky Way's satellites and the cusp-core crisis | Alexander Knebe | UAM/IFT |
| 20 | Edoardo Carlesi | Simulating cosmologies beyond the standard model | Alexander Knebe | UAM/IFT |
| 21 | Miguel Peiró García | A complementary approach for the identification of Dark Matter | David G. Cerdeño | UAM/IFT |
| 22 | Federico Sembolini | Large scale simulations of the Sunyaev-Zel'dovich Effect: the next generation tool for Precision Cosmology | Gustavo Yepes & Marco de Petris | UAM/IFT |
| 23 | Laslo Reichert | LHC Phenomenology and Neutrino Physics in GUT inspired SUSY models | Martin Hirsch & José W.F. Valle | IFIC-AHEP |
| 24 | Sofiane Boucenna | Neutrino physics and Dark Matter | José W.F. Valle Stefano Morisi | IFIC-AHEP |
| 25 | Luis Ángel Tejedor Álvarez | A new analog trigger system for the cherenkov telescope array | Juan Abel Barrio José Ignacio Alonso | UCM-GAE |
| 26 | Joaquín Castellano Simón | Galactic Magnetic Fields and Cosmic Ray Anisotropies | Manuel Masip y Eduardo Battaner | UAM/IFT (UGR) |
| 27 | Viviana Gammaldi | Indirect detection of TeV Dark Matter | Antonio L. Maroto y J.A.R. Cembranos | UCM-Th |
| 28 | Adiv González | Measurement of the gamma-ray opacity of the Universe with the MAGIC telescopes | Abelardo Moralejo | IFAE |
| 29 | Tarek Hassan | Characterization of the performance of the Cherenkov telescope Array | J.L. Contreras | UCM-GAE |
| 30 | Silvia Adrián Martínez | Design and Development of an Acoustic Calibrator for Deep-Sea Neutrino Telescopes and First Search for Secluded Dark Matter with ANTARES | Miguel Ardid & Manuel Bou Cabo | UPV |
| 31 | Guadalupe Sáez Cano | Discriminación de radiación cósmica de ultra-alta energía a | M.D. Rodríguez Frías | U5 (UAH) |

| | | | | |
|----|-------------------------|--|---|----------------------|
| | | partir de la implementación del código de nubes en el software de la misión espacial JEM-EUSO | & Luis del Peral & J. J. Martínez Herraiz | |
| 32 | Alex H. Vañó Viñuales | Free evolution of the hyperboloidal initial value problem in spherical symmetry | Alicia M. Sintes Olives y Sascha Husa | U5 (UIB) |
| 33 | Juan Calderón Bustillo | Sub-dominant modes of the gravitational radiation from compact binary coalescences: construction of hybrid waveforms and impact on gravitational wave searches | Alicia M. Sintes Olives y Sascha Husa | U5 (UIB) |
| 34 | Muhammad Rehman | Flavor Mixing Phenomenology in Supersymmetric Models | Sven Heinemeyer & M.E. Gómez | UAM/IFT (IFCA) & UHU |
| 35 | Patricia Villar Gómez | Monte Carlo simulation of ANAIS | María Luisa Sarsa & Susana Cebrián | UZ |
| 36 | Ginevra Favole | Cosmology with the BOSS spectroscopic survey | Francisco Prada | UAM/IFT |
| 37 | Héctor Prieto Alfonso | Contribución al proceso de pruebas de modelos software de sistemas del telescopio espacial JEM-EUSO | M.D. Rodríguez Frías & Luis del Peral & J. R. Hilera González | U5 (UAH) |
| 38 | Víctor Martín Lozano | Exotic signals of DM models at the LHC | David G. Cerdeño | UAM/IFT |
| 39 | Santos J. Núñez Jareño | Coherent fields in cosmology | Antonio L. Maroto & J.A.R. Cembranos | UCM-Th |
| 40 | Christoph Tönnis | The indirect search for dark matter in the Sun and the Galactic Centre with the ANTARES neutrino telescope | Juan de D. Zornoza & J. J. Hernández-Rey | IFIC-Exp |
| 41 | María Saldaña Coscollar | Acoustic System Development for Neutrino Underwater Detectors | Miguel Ardid & Juan Antonio Martínez Mora | UPV |
| 42 | Ivan Felis Enguix | Tecnologías acústicas para la detección de Materia Oscura. Diseño y desarrollo de un detector Geyser | Miguel Ardid & Manuel Bou-Cabo | UPV |

| PhD theses in progress related to the project: 25 | | | | |
|---|---------------------------|--|--|------------------|
| | Name | Title | Supervisor/s | Group |
| 1 | Doris Stoppacher | Semi-Analytical Galaxies in MultiDark Universes | Alexander Knebe | UAM/IFT |
| 2 | Robert Mostoghiu | Galaxies in MultiDark Universes: Full Physics simulations vs. Semi-Analytical Modelling | Alexander Knebe | UAM/IFT |
| 3 | Sergio Rodríguez | Baryonic Acoustic Oscillations in nature and simulations | Francisco Prada | UAM/IFT |
| 4 | Essodjolo Kpatcha | Signals of the μ vSSM at the LHC from decays of supersymmetric particles | Carlos Muñoz | UAM/IFT |
| 5 | Iñaki Lara | Probing the μ vSSM at the LHC through decays of standard-model particles | Carlos Muñoz | UAM/IFT |
| 6 | Thomas Biekotter | Theory predictions for precision observables in the μ vSSM | Sven Heinemeyer & Carlos Muñoz | UAM/IFT |
| 7 | Andrew Cheek | Tools for direct dark matter searches | David G. Cerdeño | UAM/IFT |
| 8 | Franco Albareti Tarantino | Higgs field and cosmology | Francisco Prada (UAM&IFT), Antonio L. Maroto (UCM) | UAM/IFT & UCM-Th |
| 9 | Marina Cermeño Gavilán | Procesos de dispersión en la corteza de estrellas densas al paso de materia oscura | M. Angeles Perez-García | UAM/IFT (USAL) |
| 10 | Pablo Fernández de Salas | Neutrino physics from cosmological observables | Sergio Pastor | IFIC-AHEP |
| 11 | Héctor Villarrubia Rojo | Modified gravity and the dark sector | Antonio L. Maroto & J.A.R. Cembranos | UCM-Th |
| 12 | Miguel Aparicio Resco | Structure formation in modified gravity theories | Antonio L. Maroto | UCM-Th |
| 13 | Avishek Dusoye | Inflation and measurement of inflationary parameters in extended theories of gravity | Álvaro de la Cruz-Dombriz | UCM-Th |
| 14 | Sulona Kandhai | Large-scale structure constraints for scalar-tensor theories of gravity | Álvaro de la Cruz-Dombriz | UCM-Th |
| 15 | Miguel Méndez-Isla | Indirect detection of dark matter in the radio frequencies by use of the Square Kilometre Array (SKA) telescopes | Álvaro de la Cruz-Dombriz | UCM-Th |
| 16 | Joaquim Palacio | DM searches with Cherenkov Telescopes: MAGIC & CTA | Javier Rico Castro | IFAE |
| 17 | Daniel Guberman | Using UV filters to observe the shadowing of the cosmic ray electron flux by the Moon with the MAGIC telescopes | Abelardo Moralejo & Juan Cortina Blanco | IFAE |

| | | | | |
|----|----------------------------------|--|---|----------|
| 18 | Miguel Nievas | Study of the Extragalactic Background Light and its impact on the Cosmological Standard Model based on the observation of distant AGNs with the MAGIC Cherenkov Telescopes | J.L. Contreras | UCM-GAE |
| 19 | Moritz Lotze | Searches for dark matter with the ANTARES and KM3NeT neutrino telescopes | Juan de Dios Zornoza & Juan José Hernández-Rey | IFIC-Exp |
| 20 | José Alberto Morales de los Ríos | Aportaciones a la investigación espacial a través de software de simulación aplicable a la cámara IR del telescopio espacial JEM-EUSO para su implementación en ESAF | M. D. Rodríguez Frías & Luis del Peral & José Antonio Gutiérrez | U5 (UAH) |
| 21 | Jesús Hernández Carretero | Software de simulación y análisis para la Misión Espacial JEM-EUSO: simulación de la Cámara Infrarroja en el entorno Offline | M. D. Rodríguez Frías & Luis del Peral | U5 (UAH) |
| 22 | Francisco Jiménez Forteza | Numerical and Phenomenological Modelling of Binary Black Hole mergers' | Sascha Husa & Alicia Sintes | U5 (UIB) |
| 23 | Miquel Oliver Almiñana | Searches for continuous gravitational wave signals | Alicia Sintes & Sascha Husa | U5 (UIB) |
| 24 | Josep Covas Vidal | Characterization of the Hough all-sky search for continuous gravitational wave signals using LIGO data | Alicia Sintes | U5 (UIB) |
| 25 | Xisco Jimenez Forteza | Hierarchical data-driven modelling of binary black hole mergers | Sascha Husa & Alicia Sintes | U5 (UIB) |

| Participations established through MultiDark in international projects | | | |
|--|--|---|---|
| | Reference | Title | Entidad |
| 12 | Collaboration with INFN, U. Milano-Biccoca & CTU. Praga | MOSCAB. A detector of dark matter based on “super heated liquids” | U. Politècnica de València/ MultiDark |
| 11 | Agreement to collaborate in the direct detection of dark matter | CUORE - Cryogenic Underground Observatory for Rare Events | U. Zaragoza / MultiDark |
| 10 | Agreement to support the participation during 2015 of the UAH group in AUGER | AUGER. Giant air shower array for detecting UHECR's | U. Alcalá/MultiDark |
| 9 | Agreement to build de infrared camera for the instrument installed on board of a Gondola | EUSO-Balloon. A pathfinder for detecting UHECR's from the edge of space | U. Alcalá/MultiDark |
| 8 | Agreement with GRAPPA to cooperate in their respective efforts to advance Astroparticle Physics in general and the research into Dark Matter in particular. | GRAPPA - Gravitation Astroparticle Physics Amsterdam Institute | MultiDark |
| 7 | Agreement with HAP to cooperate in their respective efforts to advance Astroparticle Physics in general and the research into Dark Matter in particular. | HAP - Helmholtz Alliance for Astroparticle Physics | MultiDark |
| 6 | Agreement to participate in the COUPP experiment (now known as PICO) | PICO. An experiment for the direct detection of dark matter that uses the bubble chamber technique – It is the result of the unión of the experiments COUPP and PICASSO | U. Politècnica de València / MultiDark |
| 5 | Agreement to participate in the CDMS experiment for the direct detection of dark matter | CDMS - Cryogenic Dark Matter Search | U. Autónoma de Madrid & IFT / MultiDark |
| 4 | Participation in the Granada-Madrid-Tenerife group in DESI | DESI. Survey of the deep Universe | IAA & IFT/MultiDark |
| 3 | Agreement to participate in the SDSS-III collaboration | SDSS-III - Sloan Digital Sky Survey III | IAA/ MultiDark |
| 2 | Agreement with the Astrophysikalisches Institut Potsdam to develop a new cosmological database containing the MultiDark suite of large volume simulations and the Bolshoi simulation | MultiDark database | MultiDark |
| 1 | MultiDark researches have carried out several collaborations with the Fermi-LAT | Fermi-Large Area Telescope | MultiDark |

