

IEEC ANNUAL REPORT 2017



Els Pilars de la Creació, foto del mes de juny de l'Observatori Astronòmic del Montsec <https://goo.gl/M37v4A>

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IEEC - THE INSTITUTE

The IEEC (Institut d'Estudis Espacials de Catalunya) is a research institute that studies all areas of space and space sciences, including astrophysics, cosmology, planetary science, Earth observation, and space engineering. Its mission is to push the frontiers of space research from the scientific and technological domains for the ultimate benefit of society.

The specific objectives are to:

- Promote astronomical and space research
- Become an internationally recognized center in order to attract talent and foster collaborations both locally and worldwide
- Be an efficient agent of knowledge, innovation and technology transfer in its field
- Carry out science awareness to society by communicating scientific culture

The IEEC ranks among the best international research centers, producing a large number of high-impact publications and leading key world-class projects. This is the result of over twenty years of top-quality research work in collaboration with the top international institutions. The IEEC also develops instrumentation for multiple space missions thanks to a team of engineers with extensive experience in the aerospace sector and in sectors with a high value in innovation. As a private non-profit foundation, the IEEC can have a versatile relationship with private industries and companies that ultimately fabricate the qualified flight hardware.

The IEEC was established in February 1996 to foster space R&D in Catalonia. It currently has a Board of Trustees composed of the Generalitat de Catalunya, the University of Barcelona (UB), the Autonomous University of Barcelona (UAB), the Polytechnic University of Catalonia (UPC), and the Spanish Research Council (CSIC). The IEEC also belongs to the Institució CERCA - Centres de Recerca de Catalunya. The IEEC is structured in the form of four Research Units, which constitute the core of the R&D activity. Each of these units was created and is governed by the rules of one of the academic institutions that are members of the Board of Trustees. The Research Units are:

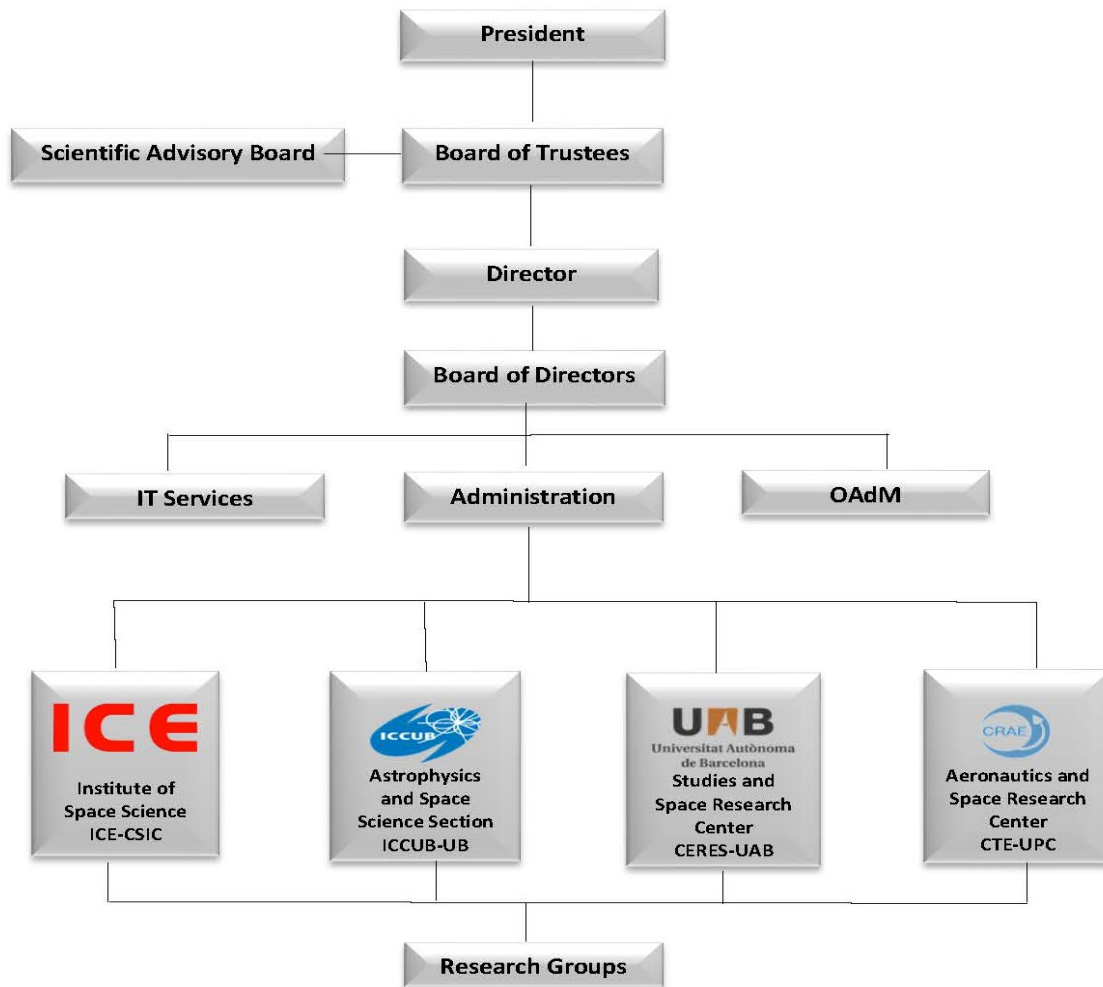
- Institute of Cosmos Sciences - ICCUB (UB)
- Center of Space Studies and Research - CERES (UAB)
- Research Group in Space Sciences and Technologies - CTE (UPC)
- Institute of Space Sciences - ICE (CSIC)

The agreements between the IEEC and the academic institutions in the Board of Trustees allow for the exchange of personnel and funds. Scientists and technicians from the Research Units can simultaneously act as members of their institutions and as members of the IEEC upon their approved affiliation.

The IEEC has a Director, nominated by the Board of Trustees, who is assisted by a Management Team. In line with a confederate structure, the organization of each Research Unit is independent and the four directors are members of the Board of Directors. Further, an external Scientific Advisory Board (SAB) is nominated by the Board of Trustees. Its role is to evaluate the quality of the scientific and technical outputs of the institute and advise on the strategic planning of the institute as well as the overall organization

PEOPLE

ORGANIZATION CHART



BOARD OF TRUSTEES

The IEEC is governed by the Board of Trustees, composed by the Minister of the Department responsible of research, the General Director of Research, the General Secretary of Industry, from the Catalan Government, the Rectors of the Barcelona University, Barcelona Autonomous University and Catalonia Polytechnic University, and the president of the Spanish Research Council. The Board of Trustees is chaired by the Minister of the Department of Research.

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The Scientific Advisory Committee is nominated by the Board of Trustees and its tasks is to inform about the quality of scientific and technical production of the institute, the adequacy of the strategic plans and to advice about the acceptance of new members and the permanence of older ones.

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STAFF

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Colomé, Josep	Project Manager and Ktt
Guerrero, Josep	It Services
Minguell, Bernat	Administration
Montes, Pilar	Manager
Notario, Eva	Administration

OADM

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Sanz, Josep	Technician
Vilardell, Francesc	Astronomer

ICCUB (IEEC-UB)

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Antoja, Teresa	Postdoc - Other
Aran, Àngels	Postdoc - Other
Ariño, Andreu	Postdoc - Other
Badenes, Carles	Invited researcher
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Bernal, José Luís	Student - PhD
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Torres Torres, Francesc	Catedràtic Universitari
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Pezzotta, Andrea	Postdoc
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Títol: A Compact Detector Module Design based on FlexToT ASICs for Time-of-Flight PET-MR

Autor: José Manuel Cela, Lluís Freixas, Juan Ignacio Lagares, Jesús Marín, Gustavo Martínez, Javier Navarrete, Juan Carlos Oller, José Manuel Pérez, Pedro Rato, Iciar Sarasola, Oscar Vela, José Manuel Fernández -Varea, David Gascón, Sérgio Gómez, Ricardo Graciani, Joan Mauricio, David Sánchez, Andreu Sanuy, Oscar de la Torre, David Badia (Contributed talk)

Congrés: PSMR 2017 (Lisbon, Portugal)"

Títol: A lower bound to Lambda

Autor: Jiménez, R. (Conferència invitada)

Congrés: The vacuum of the Universe: from cosmology to particle physics (Barcelona, ESP - ESPANYA)"

Títol: Accretion/ejection coupling in black hole HMXBs at low luminosities through the study of Be/BH systems

Autor: Ribó, M. (Presentació comunicació)

Congrés: From Quiescence to Outburst: when Microquasars go Wild (Porquerolles, FRA - FRANÇA)"

Títol: Accretion/ejection coupling in HMXBs at low luminosities through the study of Be/BH systems

Autor: Ribó, M. (Presentació comunicació)

Congrés: European Week of Astronomy and Space Science 2017, Symposium S04: Astrophysical Jets and Outflows - Synergies from compact objects to protostars (Prague, CZE - REPÚBLICA TXECA)

Títol: Accretion/ejection coupling in MWC 656 through X-ray and radio observations

Autor: Paredes, J. M. (Conferència invitada)

Congrés: Variable Galactic Gamma-Ray sources (IV) Rikkyo University (Tokyo), July 4-7, 2017 (Tokyo, JPN - JAPÓ)"

Títol: Active wetting of epithelial tissues

Autor: Alert, R.; Pérez-González, C.; Blanch-Mercader, C.; Trepas, X.; Casademunt, J (Poster)

Congrés: Biology of Physics: Is there new physics in living matter? Parc de Recerca Biomèdica de Barcelona, January 16-18 (2017) (Barcelona, ESP - ESPANYA)"

Títol: AGN and star formation activity in the lower-luminosity LIRGs from GOALS

Autor: Torres-Albà, N.; Iwasawa, K.; Chu, J.; Díaz-Santos, T.; Sanders, D. (Contributed talk)

Congrés: The X-ray Universe 2017 (Rome, Italy)"

Títol: AGN and star formation activity in the lower-luminosity LIRGs from GOALS

Autor: Torres-Albà, N.; Iwasawa, K.; Chu, J.; Díaz-Santos, T.; Sanders, D. (Presentació comunicació)

Congrés: The X-ray Universe 2017 (Rome, ITA - ITÀLIA)"

Títol: Application of SiPM arrays for the readout of a scintillator based time-of-flight detector

Autor: Alexander Korzenev, Christopher Betancourt, David Gascon, Sergio Gomez Fernandez, Philippe Mermod, Nicola Serra, Barbara Storaci (Poster Presentation)

Data: Palazzo del Cinema and Palazzo del Casinò

Congrés: EPS-HEP 2017 (Venice, Italy)"

Títol: Astrometry in the future

Autor: C. Jordi (Presidència de sessió)

Congrés: 2017 ESO Calibration Workshop: the second generation VLT instruments and friends (Santiago de Chile, CHL - XILE)"

Títol: CASTOR: An in-situ instrument for small debris detection

Autor: Manuel Carmona; José Bosch; Albert Casas; Atila Herms; David Roma; Fernando Aguado; Antonio Castro; José M. Gómez (Presentació comunicació)

Congrés: 1st IAA Conference on Space Situational Awareness (ICSSA) Orlando, FL, USA (, USA - ESTATS UNITS D'AMÈRICA)"

Títol: CASTOR: Characterization, Analysis, Surveyance and Tracking of Orbiting remains

Autor: Carmona, M.; Bosch, J.; Casas, A.; Roma, D.; Castro, A.; Gómez, J.M. (Presentació comunicació)

Congrés: II Congreso de Ingeniería Espacial (Madrid, ESP - ESPANYA)"

Títol: Catalogue on the Dynamics of a Solar Sail around L1 and L2

Autor: Farrés, A. (Presentació comunicació)

Congrés: 4th International Symposium on Solar Sailing (Kyoto, JPN - JAPÓ)"

Títol: Chemical abundances of Open Clusters from OCCASO survey: The case of NGC6705

Autor: L. Casamiquela; R. Carrera; L. Balaguer-Núñez; C. Jordi; C. Chiappini (Presentació comunicació)

Congrés: Gaia-ESO Survey, Fourth Science Meeting (Catania, ITA - ITÀLIA)"

Títol: Chemical abundances of Open Clusters from OCCASO survey: The case of NGC6705

Autor: L. Casamiquela; R. Carrera; L. Balaguer-Núñez; C. Jordi; C. Chiappini. (Presentació comunicació)

Congrés: Rediscovering Our Galaxy, IAU Symposium 334 (Postdam, DEU - ALEMANYA)"

Títol: Chemical abundances of the Milky Way disk from OCCASO survey

Autor: L. Casamiquela; R. Carrera; C. Jordi; L. Balaguer-Núñez; E. Pancino; S. Blanco-Cuaresma (Presentació comunicació)

Congrés: XII Scientific Meeting of the Spanish Astronomical Society (SEA), held on July 18-22, 2016 (Bilbao, ESP - ESPANYA)"

Títol: Clusterix 2.0 for Gaia

Autor: L. Balaguer-Núñez; D. Galadí-Enríquez; C. Jordi; M. López; E. Solano (Presentació comunicació)

Congrés: XII Scientific Meeting of the Spanish Astronomical Society (SEA), held on July 18-22, 2016 (Bilbao, ESP - ESPANYA)"

Títol: Clusterix 2.0 for Gaia

Autor: E. Solano; L. Balaguer-Núñez; M. López del Fresno; P. Massanac; D. Galadí-Enríquez; C. Jordi; E. Masana; T. Sézima; E. Paunzen (Presentació comunicació)

Congrés: EWASS2017, 1st Gaia Data, New Science, New Opportunities, Synergies with Radio Astrometry - the Gaia Research for European Astronomy Training (GREAT) Network (Praga, CZE - REPÚBLICA TXECA)"

Títol: Contributions to real time and near real time Ionosphere Monitoring by IAG's RTIM-WG.

Autor: García-Rigo, A.; Roma-Dollase, D.; Hernández-Pajares, M.; Lyu, H.; Li, Z.; Wang, N.; Terkildsen, M.; Olivares, G.; Ghoddousi-Fard, R.; Dettmering, D.; Erdogan, E.; Haralambous, H.; Béniguel, Y.; Berdermann, J.; Kriegel, M.; Krypiak-Gregorczyk, A.; Gulyaeva, T.; Komjathy, A.; Vergados, P.; Feltens, J.; Zandbergen, R.; Fuller-Rowell, T.; Altadill, D.; Blanch, E.; Bergeot, N.; Chevalier, JM.; Krankowski, A.; Agrotis, L.; Galkin, I.; Orus-Perez, R.; Prol, F. (Presentació comunicació)

Congrés: IAG-IASPEI Joint Scientific Assembly 2017 (Kobe, JPN - JAPÓ)"

Títol: Detailed studies of three open clusters from Gaia ESO Survey (GES)

Autor: L. Balaguer-Núñez; L. Casamiquela; N. Jordana; P. Massana; C. Jordi; E. Masana (Poster)

Congrés: XII Scientific Meeting of the Spanish Astronomical Society (SEA), held on July 18-22, 2016 (Bilbao, ESP - ESPANYA)"

Títol: Determining the Local Dark Matter Density with SDSS G-dwarf data

Autor: Silverwood, H. (Contributed talk)

Congrés: IAU Symposium 330: Astrometry and Astrophysics in the Gaia Sky (Nice, France)"

Títol: Development of a general purpose robot for teaching embedded systems

Autor: Bosch, J; Roma, D; Serre, C; Carmona, M; Casas, A; Gómez, J.M.; Moruno, M.; Sanuy, A. ; Herms, A.
Presentació comunicació)

Congrés: Design of Circuits and Integrated Systems Conference (Barcelona, ESP - ESPANYA)"

Títol: e-ASTROGAM contribution to Unidentified Gamma-ray Sources

Autor: Josep M. Paredes (Conferència invitada)

Congrés: Second Astrogam Workshop: towards a White Book on MeV Gamma-ray Astrophysics 13-14
October 2017 (Munich, DEU - ALEMANYA)"

Títol: Effective computation of the dynamics near a periodic orbit

Autor: A. Jorba, E.M. Pérez-Núñez (Conferència invitada)

Congrés: 10th CHAOS 2017 International Conference (Barcelona, ESP - ESPANYA)"

Títol: Environmental Dependence of the SFR in MCs

Autor: Padoan, P. (Contributed talk)

Data: Faculty of Law of the Charles University

Congrés: EWASS 2017 (Prague, Czech Republic)"

Títol: Evaluation of MOX Sensor Characteristics in Ultra-Low Power Operation Modes: Application to a Semi-Passive RFID Tag for Food Logistics

Autor: Palacio, Francisco; Gómez, José María; Burgués, Javier; Pruna, Raquel; López, Manel; Scorzoni, Andrea; Zampolli, Stefano; Marco, Santiago (Poster)

Congrés: EuroSensors 2017 (, FRA - FRANÇA)"

Títol: Evolution of a 2D self-assembly sheet of amphiphilic porphyrins towards nanoparticles of different morphology

Autor: El-Hachemi, Z.; Crusats, J.; Ribó, J.M (Poster)

Congrés: XXXVI Reunión Bienal de la Real Sociedad Española de Química (, ESP - ESPANYA)"

Títol: Fluidization and active thinning by molecular kinetics in active gels

Autor: Alert, R.; Oriola, D.; Casademunt, J (Poster)

Congrés: Biology for Physics: Is there new Physics in living matter?, Parc de Recerca Biomèdica de Barcelona, January 16-18 (2017) (Barcelona, ESP - ESPANYA)"

Títol: G/BP/RP fluxes coherence

Autor: C. Jordi (Presentació comunicació)

Congrés: 6th Gaia CU9 validation plenary (Paris, FRA - FRANÇA)"

Títol: Gaia Photometric Data: DR1 results and DR2 expectations

Autor: D.W. Evans; M. Riello; F. De Angeli; G. Busso; F. van Leeuwen; L. Eyser; C. Jordi; C. Fabricius; J.M. Carrasco; M. Weiler; P. Montegriffo; C. Cacciari; E. Pancino (Presentació comunicació)

Congrés: Astrometry and Astrophysics in the Gaia Sky, IAU Symposium No. 330 (Niza, FRA - FRANÇA)"

Títol: Gaia, an all-sky survey for standard photometry

Autor: J.M. Carrasco; M. Weiler; C. Jordi; C. Fabricius (Presentació comunicació)

Congrés: XII Scientific Meeting of the Spanish Astronomical Society (SEA), held on July 18-22, 2016 (Bilbao, ESP - ESPANYA)"

Títol: Gaia: 3000 years of Big Data

Autor: Luri, X. (Conferència invitada)

Congrés: Basel computational biology conference (Basilea, CHE - SUÏSSA)"

Títol: Gamma rays from microquasars Cygnus X-1 and Cygnus X-3

Autor: Fernández-Barral, A.; Blanch, O.; de Oña Wilhelmi, E. et al. (Bosch-Ramon, V.) (Presentació comunicació)

Congrés: 35th International Cosmic Ray Conference (ICRC 2017) (KOR - REPÚBLICA DE COREA)"

Títol: Gamma-loud binaries

Autor: Bosch-Ramon, V. (Conferència invitada)

Congrés: High-energy phenomena in relativistic outflows VI (Moscow, RUS - RÚSSIA)"

Títol: Gamma-ray binaries

Autor: Paredes, J. M. (Conferència invitada)

Congrés: A decade of AGILE: results, challenges and prospects of gamma-ray astrophysics December 11-13, 2017 Academia dei Lincei and ASI headquarters Rome (Roma, ITA - ITÀLIA)"

Títol: GLE Inversion Software – Assessment of Source and Transport Parameters Based on Neutron Monitor Data

Autor: R. Büttiker, N. Agueda, B. Heber, J. Labrenz, R. Vainio (Contributed talk)

Congrés: Hesperia Workshop (Paris, France)"

Títol: GRBs II & Jets and the Disk-Jet Connection I

Autor: Josep M. Paredes (Presidència de sessió)

Congrés: 29th International Texas Symposium on Relativistic Astrophysics 3-8 December 2017, CTICC, Cape Town, South Africa (, ZAF - SUD-ÀFRICA)

Títol: High order approximation of 1D and 2D invariant manifolds of fixed points of Poincaré maps

Autor: A. Farrés, G. Gimeno, A. Jorba, M. Jorba-Cusco, N. Miguel, M. Zou (Conferència invitada)

Congrés: IV Encuentro Conjunto RSME-SMM (Valladolid, ESP - ESPANYA)"

Títol: Internal validation of XP spectra : some ideas

Autor: C. Jordi; M. Weiler; JM. Carrasco; C. Fabricius (Presentació comunicació)

Congrés: Gaia CU5 Plenary meeting #18 (Cambridge, GBR - REGNE UNIT)

Títol: Interplanetary Transport of Solar Electron Events Detected Over a Narrow Range of Heliolongitudes

Autor: D. Pacheco, R. Gómez-Herrero, N. Agueda and A. Aran (Contributed talk)

Congrés: Hesperia Workshop (Paris, France)

Títol: JAXA's Trojan Asteroids Mission: Trajectory Design of the Solar Power Sail and its Lander

Autor: Farrés, A.; Soldini, S.; Tsuda, J.; (Presentació comunicació)

Congrés: 4th International Symposium on Solar Sailing (Kyoto, JPN - JAPÓ)

Títol: La ullera de passos de la RACAB i l'hora oficial a Barcelona

Autor: Marzoa, A., Vallmitjana, S; Núñez, (Presentació comunicació)

Congrés: VII Jornada d'història de la Astronomia i la Meteorologia (Vic, Barcelona, ESP - ESPANYA)

Títol: LOBO: A SmallSat Mission for ADR of Debris Fragment with Large Area-to-Mass Ratios

Autor: Manuel Carmona; David Roma; José Bosch; Albert Casas; Josep Sabater; Norman Fitz-Coy; Stephen Eikenberry; Janise McNair; José M. Gómez (Presentació comunicació)

Congrés: 1st IAA Conference on Space Situational Awareness (ICSSA) Orlando, FL, USA (, USA - ESTATS UNITS D'AMÈRICA)"

Títol: MAGIC binaries: what gamma rays can tell us?

Autor: Bosch-Ramon, V. (Invited Talk)

Data: CERN

Congrés: MAGIC Physics Spring Meeting 2017 (Geneva, Switzerland)"

Títol: MCs from SN-Driven Turbulence: Observations Versus Simulations
Autor: Padoan, P. (Invited talk)
Data: Faculty of Law of the Charles University
Congrés: EWASS 2017 (Prague, Czech Republic)"

Títol: Measuring DLA bias
Autor: Pérez-Ràfols, I. (Presentació comunicació)
Congrés: WEAVE-QSO Meeting (Marsella, FRA - FRANÇA)

Títol: meso-Sulfonatoarylporphyrins leading to chiral two-dimensional aggregates obtained by self-assembly
Autor: Arlegui, A.; Soler, B.; Moyano, A.; Ribó, J.M.; El-Hachemi, Z.; Crusats J. (Poster)
Congrés: XXXVI Reunión Bienal de la Real Sociedad Española de Química (Sitges, ESP - ESPANYA)

Títol: Modeling of solar near-relativistic electron events measured by STEREO-A and -B over a narrow range of heliolongitudes
Autor: Pacheco, D.; Gómez-Herrero, R.; Agueda, N.; Aran, A. (Poster)
Congrés: 7th Solar Orbiter Workshop: Exploring the solar environs (Granada, ESP - ESPANYA)"

Títol: Modeling of solar near-relativistic electron events measured by STEREO-A and -B over a narrow range of heliolongitudes
Autor: D. Pacheco, R. Gómez-Herrero, N. Agueda, A. Aran (Contributed talk / Poster)
Congrés: 7th Solar Orbiter Workshop: Exploring the solar environs (Granada, Spain)"

Títol: Modelling solar energetic particle propagation in 3D heliospheric solar wind conditions
Autor: Wijzen, N; Aran, A.; Poedts, S; Pomoell, J. (Poster)
Congrés: 14th European Space Weather Week (Oostende, BEL - BÈLGICA)"

Títol: Modelling solar energetic particle propagation in realistic heliospheric solar wind conditions using a combined MHD and stochastic differential equation approach
Autor: Wijzen, N; Aran, A.; Poedts, S; Pomoell, J. (Poster)
Congrés: AGU Fall Meeting (New Orleans, USA - ESTATS UNITS D'AMÈRICA)"

Títol: Modelling The 2012 January 23 and 2012 May 17 SEP Events With The Shock-And-Particle Model
Autor: A. Aran, A. Afanasiev, R. Vainio, B. Sanahuja, J. Pomoell, D. Lario, O. Malandraki, P. Kühl (Contributed talk)
Congrés: Hesperia Workshop (Paris, France)"

Títol: Multi-spacecraft analysis of maximum intensities of solar energetic particle events at heliocentric distances < 1 AU
Autor: A. Aran, M. Laurenza, G. Consolini, D. Lario, B. Sanahuja, R. Gómez-Herrero, J. Rodríguez-Pacheco, J.J. Blanco (Contributed talk / Poster)
Congrés: 7th Solar Orbiter Workshop: Exploring the solar environs (Granada, Spain)"
Títol: Multi-spacecraft analysis of maximum intensities of solar energetic particle events at heliocentric distances < 1 AU
Autor: Aran, A.; Laurenza, M.; Consolini, G.; Lario, D.; Sanahuja, B.; Gómez-Herrero, R.; Rodríguez-Pacheco, J.; Blanco, J. J. (Poster)
Congrés: VI Spanish Meeting of Solar and Heliospheric Physics (Mérida, ESP - ESPANYA)"

Títol: Multi-spacecraft modeling of solar near-relativistic electron events in 2014
Autor: Pacheco, D.; Gómez-Herreó, R.; Agueda, N.; Aran, A. (Poster)
Congrés: VI Spanish Meeting of Solar and Heliospheric Physics (Mérida, ESP - ESPANYA)"
Títol: Non-thermal emission from the interaction of extragalactic jets with stars
Autor: Vieyro, F.L.; Torres, N.; Bosch-Ramon, V. (Contributed talk)
Congrés: ICCUB Winter Meeting (Barcelona, Spain)"

Títol: On the computation of high order power expansions of Poincaré maps
Autor: A. Farrés, G. Gimeno, A. Jorba, M. Jorba-Cusco, N. Miguel, M. Zou (Conferència invitada)
Congrés: The Seventh International Meeting on Celestial Mechanics - CELMEC VII (San Martino al Cimino, ITA - ITÀLIA)"

Títol: Open clusters with Gaia
Autor: C. Jordi (Conferència invitada)
Congrés: The science of Gaia and future challenges (Lund, SWE - SUÈCIA)"

Títol: PACIFIC: SiPM Readout ASIC for LHCb Upgrade
Autor: José Mazorra de Cos, Hervé Chanal, Albert Comerma Montells, David Gascón Fora, Sergio Gómez Fernández, Xiouxue Han, Nicolas Pillet, Richard Vandaelle (Contributed talk)
Congrés: NDIP 2017: New Developments in Photodetection (Tours, France)"

Títol: PhD prize talk
Autor: Frimann, S. (Contributed talk)
Congrés: Annual Danish Astronomy Meeting (Nyborg, Denmark)"

Títol: Photometry in DR2
Autor: C. Jordi (Presentació comunicació)
Congrés: Gaia Science Team meeting#55 (Noordwijk, NLD - PAÏSOS BAIXOS)"

Títol: Quasar identification and redshift estimation with SQUEzE
Autor: Pérez-Ràfols, I. (Presentació comunicació)
Congrés: eBOSS Collaboration Meeting (Garching, DEU - ALEMANYA)"

Títol: Real-Time Splinter Meeting
Autor: Roma, D (Taula rodona)
Congrés: IGS Workshop 2017 (París, FRA - FRANÇA)"

Títol: Reducibility and fractalization of invariant curve
Autor: Jorba, A. (Conferència invitada)
Congrés: New Directions in Nonautonomous Dynamical Systems, Florencia, Italia, del 31 de enero al 3 de febrero, 2017 (Florencia, ITA - ITÀLIA)"

Títol: Simultaneous Chandra/VLA observations of MWC 656: constraining the accretion/ejection coupling in BH HMXBs
Autor: Josep M. Paredes (Presentació comunicació)
Congrés: 29th International Texas Symposium on Relativistic Astrophysics 3-8 December 2017, CTICC, Cape Town, South Africa (, ZAF - SUD-ÀFRICA)"

Títol: Spontaneous mirror symmetry breaking in hypercyclic replicators
Autor: Ribó, J.M.; Crusats, J.; El-Hachemi, J.; Moyano A.; Hochberg, D. (Poster)
Congrés: 9th International Conference, Engineering of Chemical Complexity, Chemical Networks Symposium (Vilanova i la Geltrú, ESP - ESPANYA)"

Títol: St. Patrick's Day 2015 geomagnetic storm analysis based on Real Time Ionosphere Monitoring
Autor: Garcia-Rigo, A.; Roma, D.; Hernandez, M.; Li, Z.; Terkildsen, M.; Olivares, G.; Ghoddousi-Fard, R.; Dettmering, D.; Erdogan, E.; Haralambous, H.; Beniguel, Y.; Berdermann, J.; Kriegel, M.; Krypiak-Gregorczyk, A.; Gulyaeva, T.; Komjathy, A.; Vergados, P.; Feltens, J.; Zandbergen, R.; Fuller-Rowell, T.; Altadill, D.; Bergeot, N.; Krankowski, A.; Agrotis, L.; Galkin, I.; Orús, R. (Presentació comunicació)
Congrés: 19th EGU General Assembly (Vienna, AUT - ÀUSTRIA)"

Títol: Stellar winds interacting with relativistic outflows in binary systems

Autor: Bosch-Ramon, V. (Invited Talk)

Data: Hotel La Torre

Congrés: FRASCATI WORKSHOP 2017; Multifrequency Behaviour of High Energy Cosmic Sources - XII (Palermo, Italy)"

Títol: Stellar winds interacting with relativistic outflows in binary systems

Autor: Bosch-Ramon, V. (Conferència invitada)

Congrés: FRASCATI WORKSHOP 2017; Multifrequency Behaviour of High Energy Cosmic Sources - XII (Palermo, ITA - ITÀLIA)"

Títol: Symmetry breaking in chemical reactions and the prebiotic origin of biological homochirality: Concepts and models

Autor: Ribó, J. M.; Moyano, A. (Conferència invitada)

Congrés: Bienal de la Real Sociedad Española de Química (Sitges, 25 - 29 de Junio, ESP - ESPANYA)"

Títol: Systematic study of the connections between the collinear libration points of a coherent Sun-Earth-Moon restricted four-body model

Autor: Le Bihan, B.; Masdemont, J. J.; Gómez, G. ; Lizy-Destrez, S. (Presentació comunicació)

Congrés: International Astronautical Congress 2017 (, AUS - AUSTRÀLIA)"

Títol: Testing the shock origin of protons responsible for solar long-duration gamma-ray events

Autor: A. Afanasiev, R. Vainio, A. Aran, A. Rouillard, G. Share, S. Barcewicz, R. Siipola, M. Battarbee, J. Pomoell, B. Sanahuja (Contributed talk)

Congrés: Hesperia Workshop (Paris, France)"

Títol: The chemical evolution of the Galactic disk through Open Clusters

Autor: Casamiquela, L (Presentació comunicació)

Congrés: ICCUB Winter Meeting (, ESP - ESPANYA)"

Títol: The Gaia astrometric space mission and its deliveries

Autor: Jordi, C. (Invited Talk)

Congrés: ESO Calibration Workshop: the second generation VLT instruments and friends (Santiago, Chile)"

Títol: The Gaia astrometric space mission and its deliveries

Autor: C. Jordi (Conferència invitada)

Congrés: 2017 ESO Calibration Workshop: the second generation VLT instruments and friends (Santiago de Chile, CHL - XILE)"

Títol: The Gaia mission delivers its first data release

Autor: C. Jordi (Conferència invitada)

Congrés: XII Reunión Científica de la Sociedad Española de Astronomía (Bilbao, ESP - ESPANYA)"

Títol: The gamma-ray candidate and Be/BH binary MWC 656 in context: discovery, evolution and recent results

Autor: Ribó, M. (Conferència invitada)

Congrés: Variable Galactic Gamma-ray Sources IV (Tokyo, JPN - JAPÓ)"

Títol: The HESPERIA Project: An overview

Autor: O. Malandraki, K-L Klein, R. Vainio, N. Agueda, M. Núñez, B. Heber, R. Bütikofer, C. Sarlanis, N. Crosby (Contributed talk)

Congrés: Hesperia Workshop (Paris, France)"

Títol: The hydrodynamics behind the high-energy emission of high-mass binaries with pulsar

Autor: Bosch-Ramon, V. (Conferència invitada)

Congrés: Variable Galactic Gamma-Ray Sources IV (Tokyo, JPN - JAPÓ)"

Títol: The intermediate and old age Open Clusters science case for high-resolution spectroscopy

Autor: C. Jordi; R. Carrera; L. Balaguer-Núñez; L. Casamiquela (Poster)

Congrés: XII Scientific Meeting of the Spanish Astronomical Society (SEA), held on July 18-22, 2016 (Bilbao, ESP - ESPANYA)"

Títol: The Montsec Observatory and the Gaia science alerts

Autor: J.M. Carrasco; U. Burgaz; F. Vilardell; C. Jordi (Presentació comunicació)

Congrés: XII Scientific Meeting of the Spanish Astronomical Society (SEA), held on July 18-22, 2016 (Bilbao, ESP - ESPANYA)"

Títol: The open clusters case for MEGARA

Autor: L. Balaguer-Núñez; L. Casamiquela; R. Carrera; C. Jordi (Presentació comunicació)

Congrés: Jornada abierta sobre el instrumento MEGARA para GTC (Madrid, ESP - ESPANYA)"

Títol: The Origin of Massive Stars

Autor: Padoan, P. (Invited talk)

Data: IRAP, Toulouse

Congrés: Cold Cores 2017 (Toulouse, France)

Títol: The parametrization method on Poincaré sections

Autor: A. Farrés, G. Gimeno, A. Jorba, M. Jorba-Cusó, N. Miguel, M. Zou (Conferència invitada)

Congrés: LLAVEFEST: A broad perspective on finite and infinite dimensional dynamical systems (Barcelona, ESP - ESPANYA)"

Títol: The SDSS-DR12 large-scale cross-correlation of Damped Lyman Alpha Systems with the Lyman Alpha Forest

Autor: Pérez-Ràfols, I. (Presentació comunicació)

Congrés: EBOSS/DESI France collaboration meeting (Marsella, FRA - FRANÇA)"

Títol: The Spanish network for Gaia Science Exploitation

Autor: F. Figueras; C. Jordi; X. Luri; J. Torra. (Poster)

Congrés: XII Scientific Meeting of the Spanish Astronomical Society (SEA), held on July 18-22, 2016 (Bilbao, ESP - ESPANYA)"

Títol: Tracing protostellar accretion with chemistry

Autor: Frimann, S. (Contributed talk)

Congrés: Star formation from cores to clusters (Santiago, Chile)"

Títol: Unidentified gamma-ray sources and e-ASTROGAM

Autor: Paredes, J. M. (Conferència invitada)

Congrés: e-ASTROGAM workshop: the extreme Universe Tuesday 28 February 2017 - Thursday 02 March 2017 (Pàdua, ITA - ITÀLIA)"

Títol: UPC real-time Global Ionospheric Maps: recent improvements and performance

Autor: Roma-Dollase, D.; Hernández-Pajares, M.; García-Rigo, A. (Conferència invitada)

Congrés: 32nd International Union of Radio Science General Assembly & Scientific Symposium (Montreal, CAN - CANADÀ)"

CTE (IEEC-UPC)

1. Balasch, J.; García-Rodríguez, D.; Tuset, J.; Ruiz, J.; Rodríguez-Ochoa, R.; Jacquet, E.; Barriendos, M.; Castelltort, X.; **Pino, D.** , Hydrological and sedimentary analysis of two recent flash floods in a Mediterranean basin with major changes in land uses and channel shape (Sió River, NE Iberian Peninsula), European Geosciences Union General Assembly, p. 1, 2017-04-24
2. Balasch, J.; **Pino, D.**; Valero, J.; Ruiz, J.; Barriendos, M.; Tuset, J.; Castelltort, X.; Mazon, J. , Non-stationarity in the evolution of major floods in the Ebro River (NE Iberian Peninsula), Past Global Changes Open Science Meeting, p. 174, 2017-05-11
3. Balasch, J.; Ruiz, J.; Tuset, J.; Rodríguez, R.; García, D.; Castelltort, X.; Barriendos, M.; **Pino, D.** , Indirect estimation from paleoflood evidences of the liquid and solid loads of the November 2015 and 2016 flash floods in the Sió River (NE Iberian Peninsula), Past Global Changes Open Science Meeting, p. 174-175, 2017-05-11
4. **Barragan, R.**; **Rocadenbosch, F.**; Waldinger, J.; Frasier, S.; Turner, D.; Dawson, D.; Tanamachi, R. , Ceilometer-based Rainfall Rate estimates in the framework of VORTEX-SE campaign: a discussion, European Geosciences Union General Assembly, p. 1-2, 2017-04
5. Castelltort, X.; Balasch, J.; Colombo, F.; Cirés, J.; Ruiz, J.; Tuset, J.; Barriendos, M.; **Pino, D.**; Mazon, J. , Pleistocene sediments in the NE of Ebro Basin. An example of coarse deposits produced by flash floods, Past Global Changes Open Science Meeting, p. 198-199, 2017-05-11
6. Fernández-Prades, C.; Majoral, M.; Arribas, J.; **Garcia-Rigo, A.**; **Hernandez, M.**; Vilà-Valls, J., An open path from the antenna to scientific-grade GNSS products, International Colloquium Scientific and Fundamental Aspects of the Galileo Programme, p. 1, 2017-10
7. **Garcia-Rigo, A.**; **Hernandez, M.** , GNSS-based ionospheric determination and precise navigation, key to enable a variety of applications, Baltic Geodetic Congress: Gdansk, Poland: June 22-25, 2017, 2017-06
8. **Garcia-Rigo, A.**; **Hernandez, M.** , GNSS-based ionospheric determination and precise navigation, key to enable a variety of applications, Baltic Geodetic Congress, 2017-06
9. **Garcia-Rigo, A.**; **Hernandez, M.**; Kauristie, K.; Orús, R.; Monte, E. , SISTED & GSFLAI solar flare nowcasting products based on GNSS ionospheric monitoring, part of SSA's Ionospheric Weather ESC and ESA's MONITOR service, International GNSS Service Workshop, , 2017-07-05
10. **Garcia-Rigo, A.**; Roma Dollase, D.; **Hernandez, M.**; Lyu, H.; Li, Z.; Wang, N.; Terkildsen, M.; Olivares, G.; Ghoddousi-Fard, R.; Dettmering, D.; Erdogan, E.; Haralambous, H.; Beniguel, Y.; Berdermann, J.; Kriegel, M.; Krypiak-Gregorczyk, A.; Gulyaeva, T.; Fuller-Rowell, T.; Altadill, D.; Blanch, E.; Bergeot, N.; Chevalier, J.M.; Krankowski, A.; Agrotis, L.; Galkin, I.; Orús, R.; Prol, F. , Contributions to real time and near real time ionosphere monitoring by IAG's RTIM-WG, Joint Scientific Assembly of the International Association of Geodesy and International Association of Seismology and Physics of the Earth's Interior, , 2017-08-02
11. **Garcia-Rigo, A.**; Roma, D.; **Hernandez, M.**; Li, Z.; Terkildsen, M.; Ghoddousi-Fard, R.; Dettmering, D.; Erdogan, E.; Haralambous, H.; Beniguel, Y.; Berdermann, J.; Kriegel, M.; Krypiak-Gregorczyk, A.; Gulyaeva, T.; Komjathy, A.; Vergados, P.; Feltens, J.; Zandbergen, R.; Olivares, G.; Fuller-Rowell, T.; Altadill, D.; Blanch, E.; Bergeot, N.; Krankowski, A.; Agrotis, L.; Galkin, I.; Orus-Perez, R.; Prol, F., St. Patrick's day 2015 geomagnetic storm analysis based on real time ionosphere monitoring , European Geosciences Union General Assembly, , 2017-04
12. Garcia-Taberner, L.; **Masdemont, J.J.** , A stroboscopic control for the confinement of swarms in a spherical domain around the Earth, International Workshop on Satellite Constellations and Formation Flight, p. 1-11, 2017-06-20

13. Graffigna, V.; **Hernandez, M.**; **Garcia-Rigo, A.**; Gende, M. , Consistency of different tropospheric models and mapping functions for precise GNSS processing, European Geosciences Union General Assembly, p. 1, 2017-04-27
14. Graffigna, V.; **Hernandez, M.**; Gende, M. , Towards precise GNSS tropospheric modeling with TOMION Software, International GNSS Service Workshop, p. 1, 2017-07,
15. Gutierrez, M.; Tiana-Alsina, J.; **Rocadenbosch, F.**; Sospedra, J.; Aghabi, R.; González-Marco, D. , A wind-lidar buoy for offshore wind measurements: first commissioning test-phase results, IEEE International Geoscience and Remote Sensing Symposium, p. 1607-1610, 2017-07-25,
16. **Hernandez, M.**; Garcia-Fernandez, M.; Rius, A.; Notarpietro, R.; von Engel, A. , Ionospheric Radio-Occultation Profiling Evaluation and Test Data Generation (ROPE): ionospheric techniques and datasets EUMETSAT (Darmstadt), RO SAG, p. 1-30, 2017-05-31
17. **Hernandez, M.**; **Garcia-Rigo, A.**; Roma Dollase, D.; Fernandez, C.; Arribas, J.; Majoral, M.; Vilà, J. , Some applications of ionospheric and geodetic models supported by real-time GNSS measurements, Reunión Sistema de Referencia Geocéntrico para Las Américas, p. 1-37, 2017-11-27
18. **Hernandez, M.**; Roma Dollase, D.; **Garcia-Rigo, A.** , Examples of IGS real-time Ionospheric information benefits: space weather monitoring, precise farming and RT-GIMs, International GNSS Service Workshop, p. 1-19, 2017-07
19. **Hernandez, M.**; Roma Dollase, D.; **Garcia-Rigo, A.** , Examples of IGS real-time Ionospheric information benefits: space weather monitoring, precise farming and RT-GIMs, International GNSS Service Workshop, p. 1-19, 2017-07
20. Hoque, M.; **Garcia-Rigo, A.**; Erdogan, E.; Cueto, M.; Jakowski, N.; Berdermann, J.; **Hernandez, M.**; Schmidt, M.; Wilken, V. , Ionosphere monitoring and forecast activities within the IAG working group "Ionosphere Prediction", European Geosciences Union General Assembly, , 2017-04,
21. Juan, J.; Sanz, J.; Gonzalez-Casado, G.; Barbosa, J.; **Camps, A.**; Riba, J.; Blanch, E.; Altadill, D.; Orús, R.; Vazquez, G. , Analysis and modeling of high and low frequency ionospheric disturbances and its impact on navigation, International Colloquium Scientific and Fundamental Aspects of the Galileo Programme, p. 1-19, 2017-10-25
22. Le Bihan, B.; **Masdemont, J.J.**; Gomez Muntané, Gerard; Lizy-Destrez, S. , Systematic study of the dynamics about and between the libration points of the Sun-Earth-Moon System, International Symposium on Space Flight Dynamics, p. 1-10, 2017-06-07
23. Le Bihan, B.; **Masdemont, J.J.**; Gomez Muntané, Gerard; Lizy-Destrez, S. , Systematic study of the connections between the collinear libration points of a coherent Sun-Earth-Moon restricted four-body model, International Astronautical Congress, p. 1-14, 2017-09-29
24. Lyu, H.; **Hernandez, M.**; Monte, E. , Derivation and applicability of 3D electron content and decorrelation lengths obtained from ground- and LEO-based GNSS models, URSI General Assembly and Scientific Symposium, p. 1-46, 2017-08-24
25. Lyu, H.; **Hernandez, M.**; Nohutcu, M.; **Garcia-Rigo, A.** , The new Barcelona Ionospheric Mapping Function (BIMF), International Colloquium Scientific and Fundamental Aspects of the Galileo Programme, p. 1-26, 2017-10,
26. Lyu, H.; **Hernandez, M.**; Nohutcu, M.; **Garcia-Rigo, A.** , The New Barcelona Ionospheric Mapping Function for North Mid Latitude GNSS applications, International GNSS Service Workshop, p. 1, 2017-07,
27. Martín, M.; Oliva, R.; Corbella, I.; **Torres, F.**; **Duffo, N.**; Duran, I.; Kainulainen, J.; Closa, J.; Zurita, A.M.; Cabot, F.; Khazaal, A.; Anterrieu, E.; Barbosa, J.; Tenerelli, J. , SMOS instrument performance and calibration after 6 years in orbit , IEEE International Geoscience and Remote Sensing Symposium, p. 2040-2042, 2017-07-10, DOI: 10.1109/IGARSS.2016.7729526

28. Mazon, J.; **Pino, D.** , Cold outbreaks from Mistral wind in the western mediterranean basin, Annual Meeting European Meteorological Society organised with European Conference on Applications of Meteorology, p. 1, 2017-09-04
29. Muñoz, C.; Comeron, A.; **Sicard, M.**; Rodriguez-Gomez, A.; **Rocadenbosch, F.**; **Barragan, R.**; Garcia, D., Diffuse sunlight based calibration of the water vapor channel in the UPC Raman lidar, International Laser Radar Conference, p. 1-4, 2017-06-29
30. Olivares, G.; **Hernandez, M.**; Garcia-Fernandez, M.; Rius, A.; Notarpietro, R.; von Engeln, A.; Aragon-Angel, A.; **Garcia-Rigo, A.** , A linear Vary-Chap ionospheric model for electron density extrapolation above the F2 peak, Australian Research Space Conference, p. 1, 2017-11
31. Ribe, M.; Castelltort, X.; Blade, E.; Balasch, J.; Ruiz, J.; Tuset, J.; Barriendos, M.; **Pino, D.**; Mazon, J. , 2D numerical flow modelling of a river reach near to its mouth to assess results of backwater effect, European Geosciences Union General Assembly, p. 1, 2017-04-24
32. Rodriguez-Gomez, A.; **Sicard, M.**; Muñoz, C.; **Barragan, R.**; Comeron, A.; **Rocadenbosch, F.**; Vidal, E., Depolarization channel for Barcelona lidar. Implementation and preliminary measurements, International Laser Radar Conference, 2017-06-26
33. Rodriguez-Gomez, A.; **Sicard, M.**; Muñoz, C.; **Barragan, R.**; Comeron, A.; **Rocadenbosch, F.**; Vidal, E., Depolarization channel for Barcelona lidar. Implementation and preliminary measurements, The 28th International Laser Radar Conference, 1029, 2017-06-26
34. Roma Dollase, D.; **Hernandez, M.**; **Garcia-Rigo, A.** , Some GNSS ionospheric monitoring techniques implemented in real-time and rapid latencies at global and polar scales, Mutual benefits between atmospheric research and radio based science over polar regions, p. 1-56, 2017-12-04
35. Roma Dollase, D.; **Hernandez, M.**; **Garcia-Rigo, A.**, UPC real-time Global Ionospheric Maps: recent improvements and performance, URSI General Assembly and Scientific Symposium, p. 1-40, 2017-08-25
36. Rossato, L.; Barbosa, H.; **Vall-Ilossera, M.**; Sakuragi, J.; Angelis, C.; Marengo, J. , An early warning for soil moisture in Brazil, using radar data and normalized difference vegetation index, Congresso Internacional de Riscos, p. 144, 2017-05-24
37. Rossato, L.; **Vall-Ilossera, M.**; **Camps, A.**; Piles, M.; Portal, G.; **Chaparro, D.**; Alvalá, R. , Validation of the SMOS-BEC products in different networks, Satellite Soil Moisture and Application Workshop, p. 86-87, 2017-09-19
38. Saeed, U.; **Rocadenbosch, F.** , Analysis of mixing-layer height retrieval methods using backscatter lidar returns and microwave-radiometer temperature observations in the context of synergy, European Geosciences Union General Assembly, 2017-04
39. Saeed, U.; **Rocadenbosch, F.** , Estimation of stable boundary-layer height using variance processing of backscatter lidar data, European Geosciences Union General Assembly, 2017-04
40. Sala, G., The SSS classical nova V5116 Sgr, The X-ray Universe, , 2017-06-06
41. Schmidt, M.; **Garcia-Rigo, A.**; Erdogan, E.; Gross, A.; Roma Dollase, D.; **Hernandez, M.** , Assessment and comparisons of ionospheric vertical total electron content products, Joint Scientific Assembly of the International Association of Geodesy and International Association of Seismology and Physics of the Earth's Interior, , 2017-08-02
42. Tiana-Alsina, J.; **Rocadenbosch, F.**; Gutierrez, M., Vertical Azimuth Display simulator for wind-Doppler lidar error assessment, IEEE International Geoscience and Remote Sensing Symposium, p. 1614-1617, 2017-07-25

CERES (IEEC-UAB)

1. À. Haro, J.M. Mondelo. The parameterization method for the computation of invariant manifolds around equilibrium points of vector fields. KePASSA 2017: International Workshop on Key Topics in Orbit

- Propagation Applied to Space Situational Awareness, ESTEC, Noordwijk, Holanda, 25-27 de junio de 2017. Contributed talk.
2. D. Egea-Roca, G. Seco-Granados, J. A. Lopez-Salcedo, "Sequential Change Detection for Next-Generation RAIM Algorithms", *Proc. ION GNSS+*, Sep 2017, Portland (EEUU).
 3. D. Gomez-Casco, J. A. Lopez-Salcedo, G. Seco-Granados, "Optimal Fractional Non-Coherent Detector for High-Sensitivity GNSS Receivers Robust against Residual Frequency Offset and Unknown Bits", *Proc. IEEE Workshop on Positioning, Navigation and Communications (WPNC)*, Oct 25 2017, Bremen (Alemania).
 4. Gaug, Markus; CTA Atmospheric Calibration. International Workshop on ATmospheric MONitoring for High Energy Astroparticle Detectors (AtmoHEAD) Olomouc, CZECH REPUBLIC SEP 12-14, 2016. ATMOSPHERIC MONITORING FOR HIGH ENERGY ASTROPARTICLE DETECTORS (ATMOHEAD) 2016 Book Series: EPJ Web of Conferences Volume: 144 Article Number: UNSP 01010 Published: 2017. **Gold open access.**
 5. Gaug, Markus; Font, Lluís; Maggio, Camilla. Site Characterization of the Northern Site of the Cherenkov Telescope Array. International Workshop on ATmospheric MONitoring for High Energy Astroparticle Detectors (AtmoHEAD) Olomouc, CZECH REPUBLIC SEP 12-14, 2016. ATMOSPHERIC MONITORING FOR HIGH ENERGY ASTROPARTICLE DETECTORS (ATMOHEAD) 2016 Book Series: EPJ Web of Conferences Volume: 144 Article Number: UNSP 01010 Published: 2017. **Gold open access.**
 6. Gaug, Markus; Garrido, Daniel: Constraining Lorentz invariance violations using the Crab pulsar TeV emission; 35th International Cosmic Ray Conference, Busan, (Korea), 12-20 July, 2017, PoS(ICRC2017)704. Contributed Talk
 7. J. Ebr, T. Bulik, L. Font, M. Gaug, P. Janecek, J. Jurysek, D. Mandat, S. Stefanik, L. Valore, G. Vasileiadis and on behalf of the CTA Consortium; J. Ebr, T. Bulik, L. Font, M. Gaug, P. Janecek, J. Jurysek, D. Mandat, S. Stefanik, L. Valore, G. Vasileiadis and on behalf of the CTA Consortium; 35th International Cosmic Ray Conference, Busan, (Korea), 12-20 July, 2017, PoS(ICRC2017)833. Contributed Talk
 8. L. Nogués, T.T.Y. Lin, C. Perennes, A.E. Gent, J. Bolmont, M. Gaug, A. Jacholkowska, M. Martinez, A.N. Otte, R. Wagner, J.E. Ward, B. Zitzer and for the LIV Consortium, First combined studies on Lorentz Invariance Violation from observations of astrophysical sources, 35th International Cosmic Ray Conference, Busan, (Korea), 12-20 July, 2017, PoS(ICRC2017)646. Contributed Talk
 9. L. Romero-Holguin, V. Lucas-Sabola, J. A. del Peral-Rosado, G. Seco-Granados, J. A. Lopez-Salcedo, J. A. Garcia-Molina, "Prototype of IoT GNSS Sensor for Cloud GNSS Signal Processing", *Proc. 6th International Colloquium on Scientific and Fundamental Aspects of GNSS / Galileo*, Oct 2017, València (Espanya).
 10. L. Valore, C. Aramo, B.M. Dinelli, F. Di Pierro, G. Dughera, M. Gaug, M. Iarlori, M. Marengo, E. Papandrea, E. Pietropaolo, V. Rizi, P. Vallania, C.F. Vigorito and on behalf of the CTA Consortium; The ARCADE Raman Lidar and atmospheric simulations for the Cherenkov Telescope Array; 35th International Cosmic Ray Conference, Busan, (Korea), 12-20 July, 2017, PoS(ICRC2017)763. Contributed Talk
 11. Ll. Font, M. Gaug, C. Maggio, V. Moreno, P. Munar-Adrover. Very High Energy Gamma-ray astronomy with Cherenkov Telescopes. Invited talk. 27th International Conference on Nuclear Tracks and Radiation Measurements. August 27- September 1, 2017 Strasbourg, (France).
 12. M. Gaug, Atmospheric Monitoring for CTA, Armenia – Brandenburg Workshop on Scientific Collaboration and Common Interests in the Physical Sciences, 23-24 May, 2017, Nor Amberd, (Armenia).
 13. M. Gaug, LIV studies with gamma rays (AGN/GRB flares and pulsars), MAGIC Physics Spring Meeting, 26-28 April, 2017, CERN, (Switzerland), Invited Talk
 14. M.C. Maccarone, D. Parsons, M. Gaug, R. Reyes and on behalf of the CTA Consortium, Tools and Procedures for the CTA Array Calibration, 35th International Cosmic Ray Conference, Busan, (Korea), 12-20 July, 2017, PoS(ICRC2017)854. Contributed Talk
 15. P. Munar-Adrover, M. Tavani, A. Cavaliere, A. Argan. The BL-Lac PG 1553+113 as a binary system. Contributed talk. A Decade of AGILE: results, challenges and prospects of gamma-ray astrophysics. December 11-13, 2017, Rome (Italy)
 16. P. Munar-Adrover. The Black-Hole Binary MWC 656. Contributed talk. 15th AGILE Workshop: AGILE is 10. May 23-24, 2017, Rome (Italy)
 17. S. Locubiche, D. Gomez-Casco, A. Gusi, J. A. Lopez-Salcedo, G. Seco-Granados, J. A. Garcia-Molina, "Positioning Performance Analysis of High-Order BOC Signals in Advanced Multi-constellation High-

Sensitivity GNSS Receivers", Proc. 6th International Colloquium on Scientific and Fundamental Aspects of GNSS / Galileo, Oct 2017, València (Espanya).

18. V. Lucas-Sabola, G. Seco-Granados, J. A. Lopez-Salcedo, J. A. Garcia-Molina, M. Crisci, "Efficiency Analysis of Cloud GNSS Signal Processing for IoT Applications", *Proc. ION GNSS+*, Sep 2017, Portland (EEUU).

PROVISIONAL

SEMINARS

ICE (IEEC-CSIC)

Seminar List

Talks at ICE

1. Carlton Baugh, Galaxy formation in the Planck Millennium, 19/01/2017
2. Jonas Chaves Montero, Addressing systematic effects in the new generation of galaxy surveys, 23/01/2017
3. Markus Rau, Photometric redshift estimation for precision cosmology, 24/01/2017
4. Andrea Pezzotta, Redshift-space distortions - Measuring the growth rate of structures from the final VIPERS dataset, 26/01/2017
5. Istvan Szapudi, Sufficient Statistics for Cosmology, 16/02/2017
6. Francisco Villaescusa-Navarro, Modeling the distribution of HI in the post-reionization era: Cosmology with SKA, 01/03/2017
7. Sergey Vernov, Ekaterina Pozdeeva, MSSM-inspired multifield inflation, 27/09/2017
8. Manuel Hohmann, Geometric Foundations of Gravity - An overview of research in Tartu, 19/10/2017
9. Fiorenzo Bastianelli, On the trace anomaly of a Weyl fermion, 31/10/2017
10. Shinichi Nojiri, Cosmological Constant and Renormalization of Gravity, 31/10/2017
11. Anna Ferré-Mateu, Let there be light – faint galaxies and their pathways of formation, 21/12/2017

Pizza-Lunch Seminars

1. Dr. Guillem Anglada Escudé, Proxima b: small planets around red dwarfs and the search for life beyond the Solar system, 13/01/2017
2. Antoine Bret, Kinetic inhibition of shock formation in the presence of a parallel magnetic field, 20/01/2017
3. Diego Rubiera-Garcia, How I run into a black hole but found a way out, 27/01/2017
4. Angelo F. Gambino, Timing analysis of the Low Mass X-ray Binary system 4U 1323-619, 03/02/2017
5. Dr. Paolo Esposito, Periodic signals from very (ultra) luminous X-ray sources, 10/02/2017
6. Nofrarias, M., LISA Pathfinder: one year in free-fall, 17/02/2017
7. Galvez, J., ICE's Radiation Laboratory, 24/02/2017
8. Sierra-Roig, C., Telescope Control Unit design for ARIEL mission, 03/03/2017
9. Matt Darnley, Accrete, accrete, accrete... Bang! (and repeat): The Remarkable Recurrent Novae, 10/03/2017
10. Henze, M., Breaking the Habit - The peculiar 2016 eruption of the remarkable recurrent nova in M31, 17/03/2017
11. Torres, D. F., Understanding the first magnetar nebula, 24/03/2017
12. Blot, L., An introduction to cosmological simulations, 31/03/2017
13. Ramprasad Rao, Science with the Upgraded SMA in the Next Decade, 07/04/2017
14. Sopena, C., LISA: Past, Present, and Future, 21/04/2017
15. Jorge Carretero, CosmoHub on Hadoop: a web portal to analyze and distribute massive cosmological data, 28/04/2017
16. Saez-Chillón Gómez, D., Singularities in cosmology: theory and observations, 12/05/2017
17. Chan, K. C., Clustering of halos in Lagrangian Space, 19/05/2017
18. Nancy Elias-Rosa, Supernova or impostor?, 26/05/2017
19. Sopena, C., Challenges in Gravitational Wave Astronomy, 02/06/2017
20. Padulles, R., Obtaining precipitation information from Polarimetric GNSS radio occultation observables, 09/06/2017

21. Busquet, G., Anatomy of the archetypal protostellar shock L1157-B1, 16/06/2017
22. Coti Zelati, F., Magnetars: recent discoveries and a catalogue of their outbursts, 23/06/2017
23. Trigo-Rodriguez, J. M., The flux of chondritic meteorites reaching the Earth over time and its astro-biological implications, 20/10/2017
24. Cardellach, E., GNSS Transpolar Earth Reflectometry exploriNg system (G-TERN): a proposal for ESA EE9 co-led by ICE-CSIC/IEEC, 27/10/2017
25. Isern, J., Collapse and Explosion of electron degenerate stellar cores, 03/11/2017
26. Mezcua, M., Growing black holes: from the first seeds to active galactic nuclei, 10/11/2017
27. Carles Badenes, Finding the double sunsets: close binary stars and large spectroscopic surveys, 17/11/2017
28. Martin Folger, Integrated Web Interface for PAU Survey, 24/11/2017
29. Stefano Carignano, Dense matter in compact stars, 01/12/2017

Colloquiums

1. Lourdes Verdes-Montenegro , The Spanish participation in the SKA, 13/03/2017
2. Dainis Dravins, Cherenkov Telescope Arrays for Optical Astronomy: Intensity interferometry and imaging of stellar surfaces, 31/05/2017
3. Jose Pons, Neutron Stars: Physics Labs in extreme conditions, 05/07/2017
4. Luciano Rezzolla, The physics and astrophysics of merging neutron-star binaries , 26/07/2017
5. Nial Tanvir, Merging neutron stars: past, present and future, 02/11/2017

Christmas off-topic special seminar

1. Inés Domingo, Rupestre art in Iberia, 15/12/2017

ICCUB (IEEC-UB)

Internal Seminars

Lisa Randall (Harvard University)
Darkly-Charged Dark Matter
ICCUB Colloquium

Mark Gieles (University of Surrey, UK)
Hunting for black holes and dark matter with globular clusters
ICCUB Seminar

Andrei Mesinger (Scuola Normale Superiore, Pisa)
What can we learn from the Cosmic Dawn and Reionization?
ICCUB Seminar

Nick Gnedin (University of Chicago and Fermilab)
Cosmic Reionization
ICCUB Seminar

Guillem Anglada-Escudé (Queen Mary University of London)
Proxima b: small planets around red dwarfs and the search for life beyond the Solar system
ICCUB Colloquium

Tom Broadhurst (University of the Basque Country, Bilbao)
The First Axionic Dark Matter Simulations for the "no-WIMP Era"
ICCUB Seminar

Anthony Meilland (Observatoire de la Côte d'Azur)
An interferometric journey around massive stars: a decade of amazing results
ICCUB Seminar

Bryan Terrazas (University of Michigan)
Supermassive black holes as the regulators of star formation in central galaxies
ICCUB Seminar

Ricardo Carrera (IAC / Osservatorio Astronomico di Padova)
The Magellanic Inter-Cloud Project: First spectroscopic evidence of a dwarf stripping a dwarf
ICCUB Seminar

Haifeng Wang (National Astronomical Observatories, CAS)
Mapping the Milky Way outer disk with LAMOST
ICCUB Seminar

Nadejda Blagoródnova (CalTech)
Tidal disruption events and the peculiar case of iPTF16fni
ICCUB Seminar

Åke Nordlund (Niels Bohr Institute and Centre for Star and Planet Formation, University of Copenhagen)
Break-Through Opportunities in Modeling Star and Planet Formation with DISPATCH
ICCUB Seminar

David H. Weinberg (Ohio State University)
Equilibrium and Dimensionality in Chemical Evolution
ICCUB Colloquium

Nicolás Busca (APC, Université Paris-Diderot, Paris)
New results on BAO cosmology measurements using the Ly α forest at $z \sim 2.3$, and future prospects
ICCUB Seminar

Troels Haugbølle (University of Copenhagen, Denmark)
The formation and dynamics of the first solids in the solar system
ICCUB Seminar

Julio Navarro (University of Victoria, Canada)
The Alleged Small-Scale Problems of LambdaCDM
ICCUB Seminar

Seminaris externs (fets a altres institucions)

Títol: Orbital Dynamics and Control for Solar Sails around Libration Points
Autor: Ariadna Farrés (ICCUB)
Data: 12/01/2017 (Seminar at JAXA's Institute of Space and Astronautical Science)

Títol: J.-L. Lagrange: un matemàtic de la Il·lustració
Autor: Gerard Gomez Muntane (ICCUB)
Data: 15/02/2017 (Cicle conferències Agrupació Astronòmica de Sabadell)

Títol: El Paper de les Varietats Invariants en l'Anàlisi de les Missions Espacials
Autor: Gerard Gomez Muntane (ICCUB)
Data: 23/02/2017 (Treball de torn a la Reial Acadèmia de Ciències i Arts de Barcelona)

Títol: Black hole fusion made easy

Autor: Roberto Emparan (ICCUB)

Data: 08/02/2017 (Max Planck Institute for Gravitational Physics (Albert Einstein Institute), Potsdam)

Títol: Precision cosmology and beyond

Autor: Licia Verde (ICCUB)

Data: 1/2017 (New Directions in Theoretical Physics 2 Higgs, Centre for Theoretical Physics)

Títol: Inelastic interactions of fast charged particles in matter

Autor: Francesc Salvat (ICCUB)

Data: 18/01/2017 (Research lecture)

Títol: First compelling hints of dynamical vacuum energy in the expanding Universe

Autor: Joan Solà (ICCUB)

Data: 31/05/2017 (Cosmology Seminar, Institute fuer Theoretische Physik, Heidelberg University,

Títol: The history of new Higgs inflation: from inflation to reheating

Autor: Cristiano Germani (ICCUB)

Data: 3/2017

Títol: Quantum corrections to Galilean dark energy

Autor: Cristiano Germani (ICCUB)

Data: 3/2017

Títol: On primordial black holes from an inflection point

Autor: Cristiano Germani (ICCUB)

Data: 6/2017

Títol: Playing with the wooden part of Einstein equations: Higgs inflation

Autor: Cristiano Germani (ICCUB)

Data: 3/2017 (Colloquium for the Oskar Klein Centre for theoretical physics (OKC))

Títol: 100 years of the cosmological constant in Einstein's equations

Autor: Joan Solà (ICCUB)

Data: 18/10/2017 (Seminar at the Department of Theoretical Particle Physics, Arnold Sommerfeld Center, Ludwig Maximilian Universität München (LMU))

Títol: 100 years of the cosmological constant in Einstein's equations: is Lambda really constant in the light of observations?

Autor: Joan Solà (ICCUB)

Data: 19/10/2017 (Maier Leibnitz Laboratory, Kolloquium, at Garching, Ludwig Maximilian Universität (LMU))

Títol: Viatge al fred quàntic

Autor: Bruno Julià (ICCUB)

Data: 16/05/2017 (Festival 'Birra amb Ciència', Sant Feliu de Llobregat)

Títol: El mètode científic en la vida quotidiana

Autor: Xavier Luri (ICCUB)

Data: 16/11/2017 (Xerrada de divulgació del programa 'Toc Toc' de la Universitat de Barcelona)

Títol: La matèria fosca

Autor: Xavier Luri (ICCUB)

Data: 15/11/2017 (Xerrada de divulgació del programa 'Toc Toc' de la Universitat de Barcelona)

Títol: El mètode científic en la vida quotidiana

Autor: Xavier Luri (ICCUB)

Data: 18/05/2017 (Xerrada de divulgació del programa 'Toc Toc' de la Universitat de Barcelona)

Títol: The first data release of the Gaia astrometric space mission

Autor: Carme Jordi (ICCUB)

Data: 20/02/2017 (Ciclo IFAE - colloquia)

Títol: The Gaia space mission unravels the history of the Milky Way

Autor: Carme Jordi (ICCUB)

Data: 14/11/2017 (Students and Post-Doc IGF network's days)

Títol: Be/BH binaries

Autor: Marc Ribó (ICCUB)

Data: 04/05/2017 (Weekly seminars, Joint Institute for VLBI ERIC)

Títol: Evolution of a 2D self-assembly sheet of amphiphilic porphyrins towards nanoparticles of different morphology

Autor: Zoubir El-Hachemi (ICCUB)

Data: 25/06/2017 (XXXVI Biennial Meeting of the Spanish Royal Society of Chemistry)

Títol: Precision cosmology and beyond

Autor: Licia Verde (ICCUB)

Data: 1/2017 (New Directions in Theoretical Physics 2 Higgs Centre for Theoretical Physics)

Títol: Beyond precision cosmology: some examples

Autor: Licia Verde (ICCUB)

Data: 2/2017 (Seminar Yale University)

Títol: Neutrino properties from Cosmology

Autor: Licia Verde (ICCUB)

Data: 5/2017 (Origins of Mass 2017)

Títol: Fine tuning and betting odds in the dark sector: from the cosmological constant to neutrinos.

Autor: Licia Verde (ICCUB)

Data: 6/2017 (The Physics of Fine Tuning)

Títol: Neutrino properties from cosmology

Autor: Licia Verde (ICCUB)

Data: 8/2017 (Cosmo17)

Títol: What does Bayes has to say about neutrino hierarchy and tensions in cosmology?

Autor: Licia Verde (ICCUB)

Data: 9/2017 (Bayes forum, Max Planck Institute for Astrophysics)

Títol: Beyond precision Cosmology and the trouble with H_0

Autor: Licia Verde (ICCUB)

Data: 10/2017 (Colloquium, MPIKP)

Títol: Neutrinos and cosmological observations

Autor: Licia Verde (ICCUB)

Data: 4/2017 (Colloquium, University of Oxford, Physics Department)

Títol: Comprender el Universo
Autor: Licia Verde (ICCUB)
Data: 11/2017 (Sopar amb Estrelles)

Títol: Observando la luz del Universo mas lejano
Autor: Licia Verde (ICCUB)
Data: 4/2017 (Cosmocaixa)

CERES (IEEC-UAB)

1. P. Munar-Adrover, M. Gaug. Molecular profiles above La Palma. MAGIC Collaboration meeting. June 12-16, 2017. Split (Croatia)
2. M. Gaug, Status of the paper "Constraining LIV using the Crab pulsar emission" MAGIC Collaboration meeting. June 12-16, 2017. Split (Croatia)
3. M. Gaug, Overview of Work-package Status and Activities: Central Calibration Facilities. 58th CTA Project Committee, 24 July 2017, Bologna (Italy)
4. P. Munar-Adrover, M. Gaug. Molecular profiles at the CTA sites. Contributed talk. CCF general meeting. October 2-5, 2017, Barcelona (Spain)
5. M. Gaug, Interfaces: Central Calibration Facility. 60th CTA Project Committee, 23 Oct. 2017, Bologna (Italy)
6. M. Gaug, Interfaces: TMT Laser Report. 60th CTA Project Committee, 23 Oct. 2017, Bologna (Italy)
7. M. Gaug, Update from the CCF-meeting, CTA Consortium Meeting, 6-11. Nov. 2017, La Palma, Canary Islands (Spain)
8. M. Gaug, Lasers TMT Lasers and CTA. SUCOSIP Meeting, 15 Nov. 2017, La Palma, Canary Islands (Spain)
9. M. Gaug, Interfaces: TMT Laser Coordination/Update. 61st CTA Project Committee, 4 Dec. 2017, Bologna (Italy)

THESIS

PHD THESES READ IN 2017

ICE (IEEC/CSIC)

Nuria Vinyoles Vergés.

Title: 'The Sun as a laboratory of particlephysics'. Supervisor: Aldo Serenelli.

Doctoral School: Universitat Autònoma de Barcelona. Date of Defense: 29th May.

Ramon Padullés.

Title: 'Precipitation measurements with Polarimetric Radio Occultations'. Supervisor: Estel Cardellach.

Doctoral School: Universitat de Barcelona. Date of Defense: 22th June.

Carmen Juárez Rodríguez.

Title: 'Collapse scenarios in magnetized star-forming regions'. Supervisor: Josep M. Girart, Aina Palau.

Doctoral School: Universitat de Barcelona. Date of Defense: 26th June.

Carles Eduard Moyano Cambero.

Title: 'Physico-chemical properties of chondritic meteorites: clues on the origin and evolution of their parent bodies'.

Supervisor: Josep Maria Trigo- Rodríguez.

Doctoral School: Universitat Autònoma de Barcelona. Date of Defense: 6th July.

Daniel Santos Olivan.

Title: 'Numerical relativity studies in Anti-de Sitter spacetimes: Gravitational Collapse and the AdS/CFT correspondence'.

Supervisor: Carlos Fernandez Sopena. Doctoral School: Universitat de Barcelona. Date of Defense: 12th July.

Nataly Ospina.

Title: 'The accretion flow onto white dwarfs and its X-ray emission properties'. Supervisor: Margarida Hernanz.

Doctoral School: Universitat Autònoma de Barcelona. Date of Defense: 21th September.

Laura Delgado.

Title: 'High energy emission from classical and recurrent novae'. Supervisor: Margarida Hernanz

Doctoral School: Universitat Autònoma de Barcelona. Date of Defense: 9th October.

CERES (IEEC-UAB)

D. Egea-Roca, "Change Detection Techniques for GNSS Signal-Level Integrity", Directors: J. A. López-Salcedo, G. Seco-Granados, llegida el 08/09/2017.

CTE (IEEC-UPC)

Duran, I., Contribution to advanced sensor development for passive imaging of the Earth. Universidad Politècnica de Catalunya. 2017-11-20. Directors: **Duffo, N., Torres, F.**

Le Bihan, B., Study of dynamics about and between libration points of Sun-Earth-Moon coherent models, Institute Supérieur de l'Aéronautique et de l'Espace. 2017-12-19. Directors: **Masdemont, J.J., Matignon, D.**

Païta, Fabrizio, Novel consensus strategies applied to spacecraft formation flight. Universidad Politècnica de Catalunya. 2017-09-04. Directors: **Masdemont, J.J., Gómez Muntané, G.**

ICCUB (IEEC-UB)

Títol: Coupling Fluid-dynamics and Non-thermal Processes to Study Sources of High-Energy Emission

Autor: Víctor Moreno De la Cita

Director/s: Valentí Bosch-Ramon, Dmitry Khangulyan (Rikkyo University)

Data: 28/04/2017

Títol: Chemical and dynamical analysis of Open Clusters in the context of the Milky Way disc

Autor: Laia Casamiquela Floriach

Director/s: Carme Jordi, Ricardo Carrera (IAC/Osservatorio Astronomico di Padova)

Data: 23/06/2017

Títol: Collapse scenarios in magnetized star-forming regions

Autor: Carmen Juárez Rodríguez

Director/s: J. Miquel Girart (ICE), Aina Palau (ICE)

Data: 26/06/2017

Títol: Vacuum energy in Quantum Field Theory and Cosmology

Autor: Adrià Gómez Valent

Director/s: Joan Solà Peracaula

Data: 12/09/2017

Títol: Multipartite entanglement and quantum algorithms

Autor: Daniel Alsina Leal

Director/s: José Ignacio Latorre

Data: 18/09/2017

Títol: Meson-Baryon interactions from effective Chiral Lagrangians

Autor: Albert Feijoo Aliau

Director/s: Àngels Ramos, Volodymyr Magas

Data: 21/09/2017

Títol: Holographic collisions and non-conformal dynamics

Autor: Miquel Triana i Iglesias

Director/s: David Mateos

Data: 21/09/2017

Títol: Exploring the universe with quasar absorption spectra: correlations among tracers of the mass density field and the impact of ionizing background intensity fluctuations

Autor: Satya Gontcho A Gontcho

Director/s: Jordi Miralda Escudé

Data: 22/09/2017

Paita, Fabrizio, Novel consensus strategies applied to spacecraft formation flight. Universidad Politècnica de Catalunya. 2017-09-04. Directors: **Masdemont, J.J.**, Gómez Muntané, G.

PHD THESES ONGOING

ICE(IEEC-CSIC)

Alarcón, A., Cosmology with Galaxy Surveys. Supervisor: Gaztañaga, E.
Doctoral School: Universitat Autònoma de Barcelona.

Añez, N., Molecular cores, disk and jets: the effect of the magnetic field. Supervisor: Girart, J. M., Busquet, G.
Doctoral School: Universitat de Barcelona.

Clara Tieso Gómez, Effective field theory techniques for the study of hot and/or dense plasmas. Supervisor: Manuel, C.
Doctoral School: Universitat de Barcelona.

Lafarga Magro, M., Stellar activity and exoplanets of M dwarfs from CARMENES visible to near-infrared spectroscopy. Supervisor: Ribas, I.
Doctoral School: Universitat Autònoma de Barcelona.

Lin, T., Models of pulsar wind nebulae. Supervisor: Torres, D. F.
Doctoral School: Universitat Autònoma de Barcelona.

López-Zaragoza, J. P., Magnetic environment and magnetic-induced forces in LISA Pathfinder. Supervisor: Nofrarias, M.
Doctoral School: Universitat Autònoma de Barcelona

Mestre, E., Estudios sobre la interacción plasma-campo magnético en escenarios astrofísicos extremos. Supervisor: de Ona Wilhelmi, E., Torres, D. F.
Doctoral School: Universitat Autònoma de Barcelona.

Montana, G, Heavy Hadrons in a Hot Dense Medium, Supervisor: Tolos, L.
Doctoral School: Universitat de Barcelona.

Moyano-Camero, C. E., Physico-chemical properties of chondritic meteorites: clues on the origin and evolution of their parent bodies. Supervisor: Trigo-Rodríguez, J. M.
Doctoral School: Universitat Autònoma de Barcelona.

Oliva, R., Techniques in Observational Cosmology. Supervisor: Elizalde, E.
Doctoral School: Universitat de Barcelona.

Oltean, M., Study of the Relativistic Dynamics of Extreme-Mass-Ratio Inspirals,

Supervisor: Sopena, C.
Doctoral School: Universitat Autònoma de Barcelona

Pocino, A., Cosmology with narrowband photometric redshifts. Supervisor: Castander, F. J.
Doctoral School: Universitat Autònoma de Barcelona.

Porredon, A. M., Modeling galaxy clustering for precision cosmology. Supervisor: Crocce, M., Fosalba, P.,
Doctoral School: Universitat Autònoma de Barcelona.

Rivas, F., Thermo-elastic contributions to the acceleration noise on-board LISA Pathfinder. Supervisor: Nofrarias, M., Sopena, C.
Doctoral School: Universitat Autònoma de Barcelona.

Rosich, A., Stellar activity effects on high-precision radial velocities: theory and observations. Supervisor: Ribas, I.
Doctoral School: Universitat de Barcelona.

CERES (IEEC-UAB)

1. C. Maggio, "Dark Matter searches in M15 galactic globular cluster". Directors: Markus Gaug, Lluís Font. Data esperada de lectura (juliol 2019).
2. D. Gómez-Casco, "Processament de Senyals GNSS en Entorns Adversos", Directors: G. Seco-Granados, J. A. López-Salcedo, data esperada de lectura 02/2019.
3. S. Locubiche-Serra, "Solucions de Posicionament per a Receptors Sense Fils de Nova Generació", Directors: J. A. López-Salcedo, G. Seco-Granados, data esperada de lectura 04/2019.
4. V. Lucas-Sabola, "Processament de Senyals GNSS al Núvol", Directors: J. A. López-Salcedo, data esperada de lectura 04/2021.

VISITORS

ICE (IEEC-CSIC)

1. Algans, G., UAB-Convenio Grado, 01/03/2017 - 31/07/2017
2. Allepuz, D., Ph student UB, 27/06/2017 - 15/07/2017
3. Battich, T., Instituto de Astrofísica de La Plata, 29/09/2017 - 27/11/2017
4. Baugh, C., University of Durhan, 18/01/2017 - 20/01/2017
5. Billot, N., Obs. Geneve, 16/05/2017 - 17/05/2017
6. Borghese, A., University of Amsterdam, 06/03/2017 - 10/03/2017
7. Caillat, A., LAM, 02/10/2017 - 13/10/2017
8. Caillat, A., LAM, 23/10/2017 - 31/10/2017
9. Carignano, S., INFN, 13/03/2017 - 23/06/2017
10. Carignano, S., INFN, 06/11/2017 - 22/12/2017
11. Castro Infantes, J., Becario JAE Intro, 01/10/2017 - 31/10/2017
12. Chang, Z., PhD student China, 15/01/2017 - 15/02/2017
13. Chen, X., Pekin University, 01/10/2017 - 21/10/2017
14. Cruz, N., Universidad de Santiago de Chile, 15/11/2017 - 24/11/2017
15. Darnley, M., Liverpool John Moores University, 08/03/2017 - 10/03/2017
16. Delgado Pardo, L., , 01/08/2017 - 19/12/2017
17. Dialektopoulos, K., Universidad de Nápoles, 23/10/2017 - 16/12/2017
18. Diaz, P., UAB-Convenio grado, 08/05/2017 - 31/07/2017
19. Elias, N., , 18/04/2017 - 31/08/2017
20. Encalado, A., UAB-Convenio grado, 01/03/2017 - 30/06/2017
21. Eriksen, M., Leiden University, 28/02/2017 - 31/03/2017
22. Esposito, P., University of Amsterdam, 06/02/2017 - 10/02/2017
23. Garidel, J., LAM, 02/10/2017 - 13/10/2017
24. Gonzalez, E., Universidad de Santiago de Chile, 02/10/2017 - 02/07/2017
25. Hachisu, H., University of Tokio, 23/02/2017 - 21/03/2017
26. Healy, S., European Centre for Medium-range Weather Forecast (UK), 21/06/2017 - 21/06/2017
27. Hernández Aguirre, L., UPC-Estudiente Grado, 16/03/2017 - 28/07/2017
28. Hoffmann, K., University of Pekin, 03/07/2017 - 05/07/2017
29. Ibrahima, M., UPC-Convenio Grado, 03/07/2017 - 15/09/2017
30. Igarashi, A., San Diego State University, 06/03/2017 - 10/03/2017
31. Izard, A., Jet Propulsion Laboratory-Caltech (Pasadena), 13/06/2017 - 23/06/2017
32. Kafka, S., American Association of Variable Star Observers- Cambridge, 28/02/2017 - 03/03/2017
33. Katia Pozdeeva, S., University of Moscu, 16/09/2017 - 01/10/2017
34. Kato, M., Keio University of Japon, 23/02/2017 - 21/03/2017
35. Lauritsen, K., Danish Meteorological Institute (Copenhagen), 21/06/2017 - 21/06/2017
36. Le Flour, L., Ecole Nat. Superieure des Mines de Saint Etienne, 29/05/2017 - 18/08/2017
37. Maureira, C., Max Planck Institute for Gravitational Physics , 04/07/2017 - 07/07/2017
38. Medina, J., UAB Convenio Grado, 03/07/2017 - 19/02/2018
38. Moreno, V., UPC-Convenio Grado, 03/07/2017 - 05/09/2017
39. Moreno, V., Convenio UPC, 18/09/2017 - 09/02/2018
40. Opazo Mendez, M., UAB-Convenio grado, 30/10/2017 - 01/03/2018
41. Pereira, R., Universidad de Valencia, 26/07/2017 - 28/07/2017
42. Prieto, E., LAM, 02/10/2017 - 13/10/2017

43. Pujol, A., , 17/07/2017 - 21/07/2017
44. Pujol, A., SCLAY, 23/10/2017 - 27/10/2017
45. Rezzolla, L., University of Frankfurt, 24/07/2017 - 28/07/2017
46. Rodoreda, M., UAB-Convenio grado, 04/09/2017 - 31/12/2017
47. Rubiera Garcia, D., Universidad de Lisboa, 23/01/2017 - 27/01/2017
48. Sandri, P., LAM, 04/10/2017 - 05/10/2017
49. Shafter, A., San Diego State University, 06/03/2017 - 10/03/2017
50. Stadel, J., University of Zurich, 01/03/2017 - 03/03/2017
51. Stetina, S., Vienna University of Technology (TU Wien), 11/12/2017 - 15/12/2017
52. Tanbakouei, S., UAB - Convenio Doctorado, 13/03/2017 - 30/11/2021
53. Torres Rincón, J., University of Frankfurt, 21/02/2017 - 24/02/2017
54. Tribó, R., UPC-Convenio Grado, 03/03/2017 - 31/07/2017
55. Zoglaver, A. Space Sciences Lab. University California at Berkeley 25/04/2017 - 28/04/2017

ICCUB (IEEC-UB)

1. Ake Nordlund (Niels Bohr Institute and Centre for Star and Planet Formation, University of Copenhagen)
2. Andrei Mesinger (Scuola Normale Superiore, Pisa)
3. Anthony Meilland (Observatoire de la Côte d'Azur)
4. Bryan Terrazas (University of Michigan)
5. Cecilia Mateu ()
6. David H. Weinberg (Ohio State University)
7. Eleonora Villa (SISSA)
8. Eugene Vasiliev (Rudolf Peierls Centre for Theoretical Physics, Oxford, UK)
9. Guillem Anglada-Escudé (Queen Mary University of London)
10. Haifeng Wang (National Astronomical Observatories, CAS)
11. Julio Navarro (University of Victoria, Canada)
12. Mark Gieles (University of Surrey, UK)
13. Nadejda Blagoródnova (CalTech)
14. Nicholas Ross (Institute of Astronomy, University of Edinburgh)
15. Nick Gnedin (University of Chicago and Fermilab)
16. Nicolás Busca (APC, Université Paris-Diderot, Paris)
17. Raul Gómez ()
18. Ricardo Carrera (IAC / Osservatorio Astronomico di Padova)
19. Stephane Blondin (Aix Marseille Univ, CNRS, LAM, Laboratoire d'Astrophysique de Marseille, Marseille, France)
20. Tom Broadhurst (University of the Basque Country, Bilbao)
21. Troels Haugbolle (University of Copenhagen, Denmark)

CERES (IEEC-UAB)

1. Dr. Sanguk Lee, Electronics and Telecommunications Research Institute (ETRI), Korea, entrada el 31/07/2017, sortida el 30/07/2018.
2. Prof. Simona Lohan, Tampere University of Technology (TUT), Finlàndia, entrada el 19/06/2017, sortida el 28/07/2017.

PROVISIONAL

COMPANY'S ACTIONS

ICCUB (IEEC-UB)

Title: ***Contribución al desarrollo científico y tecnológico de la misión Gaia IV***

Reference: ESP2014-55996-C2-1-R

Funding Institution: MINECO

Amount: 1.2094.700 €

Dates: 01/01/2015 – 31/12/2016 (extended 30/09/2017)

PI: **Torra, J.**

ICE (IEEC-CSIC)

FINISHED PROJECTS

Title: **Second continuous development and operations phase of a EUMETSAT satellite application facility on radio occultation meteorology**

Reference: ROM-SAF

Funding Institution: EUMETSAT

Amount: 574.747'22€

Dates: 01/01/2012-31/12/2017

PI: **Cardellach, E.**

Title: **TGSCATT: Scientific Assessment of TDS-1 GNSS Scatterometric Measurements**

Reference: TGSCATT

Funding Institution: Satellite Oceanographic Consultants Ltd.

Amount: 80.000€

Dates: 01/05/2016-31/12/2017

PI: **Cardellach, E.**

Contracte amb SATOC

Title: **GNSS-R - Assessment of Requirements and Consolidation of Retrieval Algorithms (GARCA)**

Reference: 4000111952/14/NL/MV

Funding Institution: GFZ

Amount: 72.450€

Dates: 01/11/2014-31/12/2015 extended 31/12/2017

PI: **Cardellach, E.**

Contracte amb GFZ

OADM

Title: **Contrato para la operación y mantenimiento del telescopio TJO aportado por España al marco de apoyo de SST de la UE**

Reference: 541/2014/UE lote 2

Funding Institution: CDTI

Amount: 70.000

Dates: 01/01/2016-31/12/2017

PI: **Colomé, J.**

IEEC PROJECTS

ICCUB (IEEC-UB)

FINISHED PROJECTS

Title: **GAIA European Network for Improved Data Services (GENIUS)**
Reference: GENIUS
Funding Institution: Fundació Bosch I Gimpera
Amount: 66.243€
Dates: 01/01/2014-31/03/2017
PI: **Torra, J.**

Title: **Contribución al desarrollo científico y tecnológico de la misión Gaia IV**
Reference: ESP2014-55996-C2-1-R
Funding Institution: MINECO
Amount: 1.2094.700 €
Dates: 01/01/2015 – 31/12/2016 (extended 30/09/2017)
PI: **Torra, J.**

ONGOING PROJECTS

Title: **El medio intergaláctico: una herramienta para el estudio de la composición y el origen del universo y de las primeras estrellas**
Reference: AYA2015-71091-P
Funding Institution: MINECO
Amount: 104.302€
Dates: 01/01/2016 – 31/12/2018
PI: **Miralda, J.**

ICE (IEEC-CSIC)

FINISHED PROJECTS

Title: **GNSS-R - Assessment of Requirements and Consolidation of Retrieval Algorithms (GARCA)**
Reference: 4000111952/14/NL/MV
Funding Institution: GFZ
Amount: 72.450€
Dates: 01/11/2014-31/12/2015 extended 31/12/2017
PI: **Cardellach, E.**

Title: **Red Temática de Ondas Gravitacionales**
Reference: FPA2015-69815-REDT
Funding Institution: MINECO
Amount: 25.000€
Dates: 01/12/2015-30/11/2017
PI: **Sopuerta, C.F.**

Title: **Second continuous development and operations phase of a EUMETSAT satellite application facility on radio occultation meteorology**
Reference: ROM-SAF
Funding Institution: EUMETSAT
Amount: 574.747'22€
Dates: 01/01/2012-31/12/2017
PI: **Cardellach, E.**

Title: **TGSCATT: Scientific Assessment of TDS-1 GNSS Scatterometric Measurements**
Reference: TGSCATT
Funding Institution: Satellite Oceanographic Consultants Ltd.
Amount: 80.000€
Dates: 01/05/2016-31/12/2017
PI: **Cardellach, E.**

Title: **De LISA Pathfinder a la misión L3 de ESA: hacia la astronomía de ondas gravitatorias desde el espacio**
Reference: ESP2015-67234-P
Funding Institution: MINECO
Amount: 320.166€
Dates: 01/01/2016-31/12/2017
PI: **Fernández-Sopuerta, C.**

Title: **Multi-messenger approach to astroparticle physics (MAP)**
Reference: 2014 SGR 1073
Funding Institution: AGAUR
Amount: 30.100€
Dates: 01/01/2014-30/04/2017
PI: de Oña Wilhemi, E.

Title: **Astrofísica espacial estel·lar i planetària**
Reference: 2014 SGR 1458
Funding Institution: AGAUR
Amount: 43.000€
Dates: 01/01/2014-31/04/2017
PI: Ribas, I.

Title: **Study on a GNSS Remote Sensing Satellite Constellation**
Reference: ESA RFP/IPL/PTE/FE/yc/1157
Funding Institution: ESA
Amount: 20.000€
Dates: 01/03/2016-28/02/2017
PI: **Rius, A.**

ONGOING PROJECTS

Title: **Técnicas avanzadas en teledetección aplicada usando señales GNSS y otras señales de oportunidad**
Reference: ESP2015-70014-C2-2-R
Funding Institution: MINECO
Amount: 266.200€
Dates: 01/01/2016-31/12/2018
PI: **Cardellach, E.**
Moreover, the cost / benefit ratio of these systems is high, since the transmitters are maintained by third parties for other applications (navigation and positioning).

Title: **Astronomy ESFRI & Research Infrastructure Cluster**
Reference: ASTERICS
Funding Institution: UE
Amount: 99.950€
Dates: 2015-2019
PI: **Colomé, P.**

Title: **Cartografiados cosmológicos para el estudio de la energía oscura, preparación para EUCLID**
Reference: ESP2015-66861-C3-1-R
Funding Institution: MINECO
Amount: 661.870€
Dates: 01/01/2018-31/12/2020
PI and Co-PI: **Castander, F.J.**

Title: **Cartografiados cosmológicos para el estudio de la energía oscura, preparación para EUCLID**
Reference: ESP2017-89838-C3-1-R
Funding Institution: MINECO
Amount: 871.200€
Dates: 01/01/2016-31/12/2017 extended until 31/12/2018
PI and Co-PI: **Castander, F.J.**

Title: **Contribución española a LISA, la misión L3 de la ESA**
Reference: ESP2017-90084-P
Funding Institution: MINECO
Amount: 365.420€
Dates: 01/01/2018-31/12/2019
PI: **Fernández-Sopuerta, C.**

Title: **Poniendo la tierra y el sistema solar en contexto: ciencia y tecnología de CARMENES, CHEOPS, PLATO y ARIEL**
Reference: ESP2016-80435-C2-1-R
Funding Institution: MINECO
Amount: 387.200€
Dates: 30/12/2016-29/12/2018
PI: Ribas, I.

Title: **Estudios sobre la interacción plasma-campo magnético en escenarios astrofísicos extremos**
Reference: AYA2015-71042-P
Funding Institution: MINECO
Amount: 241.879€
Dates: 01/01/2016-31/12/2018
PI: **Torres, D. F.**

Title: **Cartografiados cosmológicos para el estudio de la energía oscura, preparación para EUCLID**
Reference: ESP2015-66861-C3-1-R
Funding Institution: MINECO

Amount: 871.200€
Dates: 01/01/2016-31/12/2017 extended until 31/12/2018
PI and Co-PI: **Castander, F.J.**

Title: **Teorías efectivas de las interacciones nucleares fuertes en condiciones extremas**
Reference: FPA2016-81114-P
Funding Institution: MINECO
Amount: 48.400
Dates: 30/12/2016-29/12/2019
PI: **Manuel, C.**

Title: **Third continuous development and operations phase of a EUMETSAT satellite application facility on radio occultation meteorology**
Reference: ROM-SAF CDOP3
Funding institution: EUMETSAT
Amount:
Dates: 2017-2022
PI: Cardellach, E.

Title: **The multi-messenger PHysics and Astrophysics of neutRON Stars**
Reference: COST ACTION 16214 (PHAROS)
Funding institution: UE
Amount:
Dates: 11.2017-11.2020

2017 SGR 247
Excellence Group Grant
Elizalde, E.
AGAUR, Generalitat de Catalunya

2017 SGR 885
Excellence Group Grant
Fosalba, P.
AGAUR, Generalitat de Catalunya

2017 SGR 1131
Excellence Group Grant
Ribas, I.
AGAUR, Generalitat de Catalunya

2017 SGR 1383
Excellence Group Grant
Rea, N.
AGAUR, Generalitat de Catalunya

2017 SGR 1469
Excellence Group Grant
Sopuerta, C.
AGAUR, Generalitat de Catalunya

CERES (IEEC-UAB)

Title: UAB & CERES-IEEC contribution to the commissioning and first science of the CTA-North Observatory
Reference: FPA2017-82729-C6-5-R
Funding Institution: MINECO
Amount: 145.200€
Dates: 01/01/2018-31/12/2019
PI: **Font, Ll.**

OADM

FINISHED PROJECTS

Title: **Contrato para la operación y mantenimiento del telescopio TJO aportado por España al marco de apoyo de SST de la UE**
Reference: 541/2014/UE lote 2
Funding Institution: CDTI
Amount: 70.000
Dates: 01/01/2016-31/12/2017
PI: **Colomé, J.**

OUTREACH

IEEC ON THE MEDIA

Tweets 1.432

Followers 1.749

Retweets: 1.305

Likes: 1.164

ICE (IEEC-CSIC)

Outreach talks

1. Sopena, C., Gravitational Waves: A new messenger of the Universe, 20/01/2017
2. Sopena, C., La Revolució de l'Astronomia d'Ones Gravitatòries, 11/02/2017
3. Sopena, C., Les Ones Gravitatòries: Una nova revolució en Astronomia, Sant Cugat, 16/02/2017
4. Isern, J., Supernoves, Departament de Física, Edifici C, UAB, 18/02/2017
5. Vilardell, F., IRAIT: un telescopi a l'Antàrtida, Observatori de Sabadell, 22/02/2017
6. Trigo-Rodríguez, J. M., Els meteorits com a bressol de la química prebiòtica i abonament de la Terra envers l'origen de la vida, Departament de Física, Edifici C, UAB, 04/03/2017
7. Hernanz, M., Els fenòmens més energètics de l'Univers desvetllats pels satèl·lits, Agrupació Astronòmica de Sabadell, 08/03/2017
8. Busquet, G., Radioastronomia i astroquímica: Desxifrant els orígens del sistema solar, Associació Astronòmica Sant Cugat-Valldoreix - Museu de Sant Cugat (Claustre), 23/03/2017
9. Sopena, C., Forats negres: Una idea que ha revolucionat la Tecnologia, Campus La Salle, Barcelona, 06/04/2017
10. Rea, N., El Universo mas explosivo: agujeros negros y estrellas de neutrones, AstroBanyoles, 07/04/2017
11. Rea, N., El Universo mas explosivo: agujeros negros y estrellas de neutrones, Barcelona, 08/04/2017
12. Trigo-Rodríguez, J. M., Las condritas carbonáceas como catalizadoras de la química prebiótica, Planetari de Castelló, 09/04/2017
13. Trigo-Rodríguez, J. M., Las propiedades catalíticas de las condritas carbonáceas bajo la acción del agua, Planetario de Castellón, Castelló de la Plana, 09/04/2017
14. Gesa, L., LISAPathfinder: Del Paper a l'Espai, UAB, Escola d'Enginyeria, Grau d'Informàtica, 09/05/2017
15. Sopena, C., Ones Gravitatòries: El so de l'espai-temps, School of Mathematics and Statistics, BarcelonaTech (UPC), Campus Diagonal Sud, Carrer de Pau Gargallo, 14, 08028 Barcelona, 22/05/2017
16. Sopena, C., El descubrimiento de las ondas gravitatorias y el comienzo de una nueva astronomía, CaixaForum Zaragoza, Zaragoza, 23/05/2017
17. Gesa, L., Space Engineering, UAB, Escola d'Enginyeria, Grau d'electrònica en telecomunicacions, 30/05/2017
18. Trigo-Rodríguez, J. M., Origen de los asteroides peligrosos e importancia del estudio de sus meteoritos, Cali, Colombia, 30/06/2017
19. Trigo-Rodríguez, J. M., L'estudi i seguiment dels asteroides perillosos des de Catalunya, Centre Cultural de Terrassa, 30/06/2017
20. Trigo-Rodríguez, J. M., Investigaciones sobre el peligro de impacto de asteroides, Observatori Astronòmic de Mallorca, Costitx, Mallorca, 05/08/2017
21. Rea, N., Las explosiones más poderosas en el Universo, Agrupació Astronòmica de Sabadell, 27/09/2017
22. Sopena, C., Ones Gravitatòries: Una nova era en Astronomia, Centre cívic Pati Llimona - Carrer del Regomir, 2 - Barcelona, 29/09/2017
23. Trigo-Rodríguez, J. M., ¡Descubre los meteoritos! Abre una puerta a distantes rincones del Sistema Solar, CosmoCaixa, Barcelona, 30/09/2017
24. Trigo-Rodríguez, J. M., Entendre la formació dels planetes i la vida a partir dels meteorits, CosmoCaixa Barcelona, 30/09/2017

25. Sopena, C., Les Ones Gravitatòries: La última revolució en Astronomia, Col·legi Casp - Sagrat Cor de Jesús. Carrer Casp, 25 de Barcelona, 04/10/2017
26. Trigo-Rodríguez, J. M., Els meteorits com a bressol de la química prebiòtica i abonament de la Terra envers l'origen de la vida, Centre Cultural Sant Josep, L'Hospitalet, 25/10/2017
27. Ribas, I., Próxima B nuestro planeta vecinopotencialmente habitable, Cosmocaixa - Barcelona, 27/10/2017
28. Casas, R., Espectroscopía (amateur) de supernovas, Cosmocaixa - Barcelona, 29/10/2017
29. Ribas, I., Diálogos de Espacio: Buscando la Tierra 2.0, Hotel Barcelo' Sants (Barcelona), 02/11/2017
30. Casas, R., Observing the Sun, In front of ICE building, 15/11/2017
31. Elizalde, E., The Universe and its origin... in a few minutes, Sala Alberto Lobo, ICE building, 15/11/2017
32. Casas, R., Observing the Sun, 17/11/2017
33. Trigo-Rodríguez, J. M., Two decades of exploration of asteroids and comets: Explaining the origin of meteorites, Sala Alberto Lobo, ICE building, 17/11/2017
34. Girart, J. M., Immensitat i bellesa: Astronomia i qualitat humana profunda, 23/11/2017
35. Girart, J. M., ALMA, la formació de sistemes planetaris, Agrupació Astronòmica de Sabadell, Sabadell, 13/12/2017
36. Sopena, C., Ones Gravitatòries: La última Revolució en Astronomia, Sala d'actes de la facultat de ciències, 13/12/2017

In the media

1. Trigo-Rodríguez, J. M., Un meteorito da pistas para alejar asteroides de la Tierra, 25/01/2017
2. Trigo-Rodríguez, J. M., ¿Cómo desviar con un misil un asteroide tipo Cheliábinsk?, 25/01/2017
3. Trigo-Rodríguez, J. M., Un Científico valenciano lidera la Investigación para evitar el choque de meteoritos con la Tierra, 25/01/2017
4. Trigo-Rodríguez, J. M., Cómo desviar un meteorito antes de que impacte en la Tierra, 25/01/2017
5. Trigo-Rodríguez, J. M., El riesgo de Armageddon es real pero no inminente, 26/01/2017
6. Trigo-Rodríguez, J. M., Las tripas de un meteorito desvelan cómo evitar un impacto con la Tierra, 26/01/2017
7. Trigo-Rodríguez, J. M., Analizar un meteorito para aprender a desviar asteroides peligrosos, 26/01/2017
8. Trigo-Rodríguez, J. M., Así es el proyecto español para que los asteroides no impacten contra la Tierra, 28/01/2017
9. Trigo-Rodríguez, J. M., Entrevista de Antena 3 Noticias sobre la misión AIM y el desvío de asteroides, 03/02/2017
10. Ribas, I., TV3 entrevista a Ignasi Ribas sobre la possibilitat que l'home viatgi a Mart, 04/02/2017
11. Ribas, I., Diversos mitjans entrevisten a Ignasi Ribas per el descobriment de set planetes al voltant d'un estel, 24/02/2017
12. Vilardell, F., El telescopi IRTAT de l'Antàrtida, 04/03/2017
13. Cardellach, E., Un experiment de l'Institut de Ciències de l'Espai per fer mesures de pluja intensa es posarà en orbita a finals del 2017, 10/03/2017
14. Cardellach, E., Un experimento espacial catalán medirá por primera vez la lluvia intensa desde un satélite, 10/03/2017
15. Cardellach, E., A grans pluges, mínimes variacions, 11/03/2017
17. Torres, D. F., Entrevista para Radio y Televisión Española (RTVE) - Programa Lab 24, 21/03/2017,
18. Sopena, C., Gravetat, una qüestió de pes, 04/04/2017
19. Rea, N., Radio Interview for RadioBanyoles on Compact Objects, 05/04/2017
20. Trigo-Rodríguez, J. M., L'asteroide 2014 JO25 a elsmatins de @tv3cat, 19/04/2017
21. Trigo-Rodríguez, J. M., Entrevista de @elperiodico sobre el asteroide 2014 JO25, 19/04/2017
22. Trigo-Rodríguez, J. M., Este fin de semana habrá lluvia de estrellas, 21/04/2017
23. Trigo-Rodríguez, J. M., La lluvia de estrellas de las Líridas llega esta medianoche, 22/04/2017
24. Trigo-Rodríguez, J. M., ¿Por qué los planetas son redondos?, 30/04/2017
25. Trigo-Rodríguez, J. M., Entrevista de elperiodico sobre el asteroide 2014 JO25, 19/04/2017
26. Torres, D. F., Ribó, S., Padullés, R., Entrevista en el programa Lab24 de RTVE., 17/05/2017
27. Sopena, C., Tercera detección de ondas gravitacionales procedentes de la fusión de dos agujeros negros, 01/06/2017

- 28.Sopuerta, C., Tertulia temàtica en RNE 24 horas, 08/06/2017
- 29.Fosalba, P., Una misión europea estudiará la energía oscura del Universo, 27/06/2017
- 30.Cardellach, E., Mirant el món amb GPS, 01/08/2017
- 31.Trigo-Rodriguez, J. M., Esta es la "Roja" de la ciencia 2017, 27/09/2017
- 32.Sopuerta, C., Premio Nobel de Física 2017 (Rainer Weiss, Barry C. Barish, Kip S. Thorne), 03/10/2017
- 33.Trigo-Rodriguez, J. M., España pierde cada día más jóvenes Científicos brillantes, 03/10/2017
- 34.Trigo-Rodriguez, J. M., La Selección Española de la Ciencia 2017 preocupada por la fuga de jóvenes Científicos brillantes, 04/10/2017
- 35.Vilardell, F., Aviones que volarán al espacio para que experimentemos la ingravidez, 17/10/2017,
- 36.Gaztañaga, E., Entrevista para la Vanguardia, 19/10/2017
- 37.Casas, R., Programa órbita Laika de TVE, 29/10/2017.
- 38.Rea, N., Serrano, S., Artículo en El Periodico. El descubrimiento del primer púlsar, estrella de neutrones, cumple 50 años, 01/12/2017
- 39.Rea, N., Serrano, S., Artículo en La Vanguardia. El descubrimiento del primer púlsar, estrella de neutrones, cumple 50 años, 01/12/2017
- 40.Trigo-Rodriguez, J. M., Aparición en el programa órbita Laika de TVE, 02/12/2017

Our twitter account: @iSpaceSci

- Tweets: 137
- Followers: 230+
- Retweets: 240+
- Likes: 320+

CERES (IEEC-UAB)

1. Ll. Font, "Els Telescopis de llum Txerenkov, una finestra a l'univers violent", X Jornada de divulgació de la Relativitat de Terrassa, Teatre Principal de Terrassa, 6 maig 2017.
2. M. Gaug, "Un petit recorregut per l'univers i l'astronomia de raigs gamma", IES Intermunicipal (Jacint Verdaguer), Sant Sadurni d'Anoia, 3 March 2017
3. G. Seco-Granados, "Channel Estimation, Achievable Rate and Efficiency in One-Bit Massive MIMO Systems", École Nationale Supérieure de l'Electronique et de ses Applications (ENSEA), Cergy, France, May 26, 2017. Host: Prof. Inbar Fijalkow.

ICCUB (IEEC-UB)

Exposicions

L'ICCUB, juntament amb el Departament de Física Quàntica i Astrofísica, custodia set exposicions itinerants. Aquestes exposicions tenen diferents versions impreses a l'Institut que anualment són exposades a diferents centres externs, com instituts, biblioteques o centres cívics. Tres d'aquestes exposicions s'han produït totalment a l'ICCUB, una d'elles incorporada aquest any. Totes les exposicions es poden consultar ambé en versió digital des del servidor de divulgació ServiAstro.

<http://serviastro.am.ub.edu/twiki/bin/view/ServiAstro/Exposicions>

"Viatge cap a l'univers fosc" <http://serviastro.am.ub.edu/twiki/bin/view/ServiAstro/UniversFosc> Attems, M.; Bellomo, N.; Bernal, J.L.; Ferreira, R.; Luna, R.; Miralda, J.; Martínez, M.; Notari, A.; Pantelidou, C.; Pérez-Ràfols, I.; Rocha, J.; Witek, H.; Zilhão, M.; Emparan, R.; Olarte, S. Exposició produïda per l'ICCUB el 2017 que proposa un recorregut per les fascinants fronteres de la cosmologia i la gravetat, que van des de la matèria fosca i l'energia fosca, als forats negres i les ones gravitacionals. Consisteix en 11 plafons informatius editats i impresos en català i disponibles també en format digital en castellà, anglès, portuguès i italià. Cada plafó té una plana web enllaçada amb material relacionat per aprofundir en l'estudi.

Itinerància 2017

- Barcelona, del 19 d'octubre al 6 de novembre de 2017, Facultat de Física de la UB
- Vilafranca del Penedès, del 9 al 30 de novembre de 2017. Escola Montagut

"Amb A d'AstrònomA" <http://serviastro.am.ub.edu/twiki/bin/view/ServiAstro/AmbA>

Balaguer-Núñez, D.; Figueras, F.; Masana, E.; Olarte, B. Versió catalana i anglesa de l'exposició "Con A de Astrónoma" dedicada a astrònoms de diferents segles i països, l'aportació a l'Astronomia de les quals ha tingut rellevància mundial. Traduïda i editada el 2010.

Itinerància 2017

- Bellaterra, del 6 de febrer al 13 de març 2017. En motiu del Dia internacional de la dona i la nena a la ciència . Facultat de Ciències (Universitat Autònoma de Bellaterra).
- Santa Perpètua de la Mogoda, del 18 d'abril al 9 de maig de 2017, INS Rovira-Forns.
- Cornellà, del 24 de juny al 3 de setembre de 2017, Museu Palau Mercader. 16/07/2017 visita guiada de Núria Miret.
- Hospitalet de Llobregat, del 29 de setembre al 30 d'octubre de 2017, Biblioteca Josep Janés.
- Teià, del 2 al 30 de novembre de 2017, Biblioteca Can Llauredor .

"Mil milions d'ulls per a mil milions d'estrelles"

<http://serviastro.am.ub.edu/twiki/bin/view/ServiAstro/ExposicioGaia>

Balaguer-Núñez, D.; Carrasco, J.M.; Fabricius, C.; Figueras, F.; Garralda, N.; Jordi, C.; Luri, X.; Masana, E.; Olarte, B.; Roca, S.; Romero, M.; Torra, J. Exposició sobre la missió Gaia produïda per l'ICCUB el 2013. Consisteix en 17 plafons informatius editats i impresos en català i en castellà i disponibles també en format digital en anglès i alemany. Aquest any s'ha incorporat un nou plafó a l'exposició "Intel·ligència artificial per explorar la Via Làctia" dissenyat per l'equip de Gaia Galícia i traduït i editat a l'ICCUB en català, castellà i anglès.

Itinerància 2017

- Sense itinerància

"Les distàncies còsmiques" <http://serviastro.am.ub.edu/twiki/bin/view/ServiAstro/DistanciesCosmiques>

Balaguer-Núñez, D.; Carrasco, J.M.; Jordi, C.; Masana, E.; Olarte, B.; Roca, S.; Romero, M. Exposició produïda per l'ICCUB el 2012 que mostra els mètodes per a mesurar distàncies als cossos celestes i com aquests mètodes s'han anat desenvolupant amb els anys segons les distàncies a mesurar.

Itinerància 2017

- Mollerussa, del 9 de gener al 3 de febrer de 2017, INS la Serra
- Beuda, del 31 de març al 2 de maig de 2017, Sant Sepulcre de Palera.
- Hospitalet de Llobregat, del 29 de setembre al 30 d'octubre de 2017, Biblioteca Central Tecla Sala.
- Arenys de Mar, del 15 al 28 de setembre de 2017, INS els Tres Turons
- Barcelona, del 09 de novembre al 14 de desembre de 2017, Aula 141, Centre Cívic Guinardó.

"De la Terra a l'Univers" <http://serviastro.am.ub.edu/twiki/bin/view/ServiAstro/DelaTerra> Versió catalana de l'exposició "From the Earth to the Universe" que mostra l'Univers mitjançant imatges astronòmiques de gran rellevància científica divulgativa, preses des de diferents observatoris del món, també des d'Espanya. Traduïda i editada el 2009.

Itinerància 2017

- Piera, del 3 abril 2017 -19 de maig 2017, INS Guinovarda
- Esplugues de Llobregat, del 31 d'octubre al 30 de novembre 2017, Escola Natzaret .

"Telescopi Assumpció Català" <http://serviastro.am.ub.edu/twiki/bin/view/ServiAstro/TelescopCatala>

Elaborada per els membres del Departament d'Astronomia i Meteorologia de la Universitat de Barcelona. Exposició que ret homenatge a Maria Assumpció Català, que va ser la primera professora numerària astrònoma a la universitat espanyola. El telescopi instal·lat a l'Observatori-Aula del Centre d'Observació de l'Univers (Àger, Montsec) duu el seu nom, essent així el primer telescopi amb el nom d'una dona en tot el territori espanyol

Itinerància 2017

- Barcelona, del 13 febrer al 3 de març de 2017, Facultat de Matemàtiques i Informàtica - Edifici Històric de la Universitat de Barcelona.
- Vilafranca del Penedès, del 6 al 31 de març de 2017, Escola Montagut.
- Barcelona, 12 maig 2017, Festa de la ciència de la UB. Edifici Històric de la Universitat de Barcelona.
- Viladecans, del 1 al 20 novembre 2017, Biblioteca de Viladecans.

"Investigadores en Física nuclear" <http://icc.ub.edu/others/ExpoNuclears/>

Exposició dedicada a diferents investigadores que han contribuït molt significativament al camp de la Física Nuclear, des de l'inici. Exposició elaborada per la Comissió d'Igualtat de la Facultat de Física de la Universitat de Barcelona, l'Institut de Ciències del Cosmos gestiona la seva itinerància.

- Barcelona del 2 al 17 de març de 2017, Facultat de Física (Barcelona), en motiu del Dia Internacional de la Dona.
- Barcelona, del 10 al 20 de novembre de 2017, INS Menéndez y Pelayo (Barcelona).

Pàgines Web i Xarxes Socials

ServiAstro: <http://serviastro.am.ub.edu/>

Autors: S. Olarte

Serviastro és una web de divulgació d'astronomia mantinguda pel Departament de Física Quàntica i Astrofísica / ICCUB que ofereix material didàctic, proporciona informació dels fenòmens astronòmics, passats i futurs i anuncia les activitats i notícies dels membres del Departament i de l'Institut. Durant tot el 2017 s'ha anat actualitzant la informació d'aquest servidor.

Twitter: @ServiAstro

Canal twitter de divulgació de l'astronomia de l'ICCUB. Creat el 2015. Es publiquen les activitats de divulgació fetes pels membres del ICCUB així com els esdeveniments astronòmics importants.

Facebook: @ServiAstro

Plana facebook de divulgació de l'astronomia creada el 2015 i gestionada per l'ICCUB. Des d'aquesta plana es fa seguiment i difusió de les activitats de divulgació de l'Institut

Xerrades a centres educatius

1. Garralda, N., Bosch-Ramon, V., "Xerrades d'astrofísica: "La missió Gaia" i "Astrofísica i forats negres"" Visita escola a la Facultat de Física UB. Barcelona.09/03/2017
2. Jordi, C., "La Lluna és mentidera" Aules Gent Gran Baix Guinardó, Barcelona. 16/03/2017
3. Portell, J., "Gaia, el mapa galàctic de l'Agència Espacial Europea" Aula Gent Gran d'Osona, Vic. 24/05/2017
4. Jordi, C., "La Lluna és mentidera" Aules Gent Gran, Barberà del Vallès, Barberà del Vallès. 30/05/2017
5. Jordi, C., "Formation and evolution of galàxies". Spin's days (Student and Post-Doc IGF Network). Saint Martin de Londres. 14/10/2017
6. Luri, X., "El mètode científic en la vida quotidiana". Realitzada en una biblioteca per a una escola. Biblioteca Can Llauredor (Teià). 16/11/2017

Xerrades públiques

1. Figueras, F., "Taula rodona: la ciència de les dones" Exposició "Per bruixa i Mertzinera". Espai cultural. El Prat de Llobregat. 09/02/2017
2. Jordi, C., "Les distàncies còsmiques". Cicle: "Finestres al Cosmos". Aula Magna Institut d'Estudis Ilerdencs (IEI). 21/02/2017

3. Carrasco, J.M., "Per a què serveix l'astronomia. Museu Sant Cugat. 28/02/2017
4. M. Romero, "Les dones astrònoms, un pilar fonamental en l'estudi de l'univers." Centre Cultural Sant Josep. 08/03/2017
5. Portell, J.; Torra, J., "Gaia: Tres anys estudiant la Galàxia"
6. Diàlegs d'espai - SENER space. Sala Baroja del paranimf de la Universitat del País Basc. 30/03/2017
7. Portell, J., "El primer catàleg Galàctic de Gaia". Agrupació Astronòmica d'Osona, Vic.. 07/04/2017.
8. Sanahuja, B., "Temps espacial i activitat solar: oratges de plasma i tempestes de radiació" Agrupació Astronòmica de Sabadell. 05/04/2017
9. Figueras, F., "Les dones astrònoms, un pilar fonamental en l'estudi de l'univers". Seu de l'Agrupació Astronòmica de Barcelona (ASTER). 02/05/2017
10. Jimenez, R., "¿Comprendemos cómo funciona el Universo?", X Jornades per la divulgació de la Relativitat. Teatre Principal Terrassa. 06/05/2017
11. Miralda, J., "Pícnic Cosmològic". Pícnics científics familiars. Associació Pèndulum. Can Verdaguer Gros (Montseny). 07/05/2017
12. Luri, X., "La galàxia en un petabyte. La missió Gaia de l'ESA". Caixa Forum Zaragoza . 16/05/2017
13. Jordi, C., "Cap on es mou la Via Làctia?". Associació Astronòmica Sant Cugat Valldoreix. 18/05/2017
14. Luri, X., "El mètode científic en la vida quotidiana". Aula 141. Centre Cívic Guinardó (Barcelona). 18/05/2017
15. Luri, X., "Exoplanetes i la possibilitat de vida extraterrestre" Cosmos Vida. Agrupació Astronòmica de Sant Cugat--Valldoreix, Sant Cugat. 01/06/2017
16. Romero, M., "Quant de lluny estan els altres mons? Mesurant distàncies còsmiques". Associació Astronòmica de Manresa. Sala d'actes del Centre Cultural del Casino de Manresa. 02/06/2017
17. Miralda, J., "L'observació d'ones gravitatòries i forats negres a l'univers per LIGO" Associació d'amics de l'astronomia, TRI-A, RUBÍ. Ateneu de Rubí. 21/06/2017
18. Miret, N., "Visita guiada a l'exposició "Amb A d'Astrònoma"" Exposició "Amb A d'Astrònoma" (25/06/2017-03/09/2017). Museu Palau Mercader, Cornellà. 16/07/2017
19. M. Romero, "Redefinint l'escala de distàncies" 1a Jornada Espai ESEIAAT. ESEIAAT UPC, Terrassa. 04/10/2017
20. Jordi, C., "Com viuen, neixen i moren les estrelles" TOC-TOC. Biblioteca Jaume Fuster, Barcelona. 19/10/2017
7. Luri, X., "La matèria fosca" . TOC-TOC. Biblioteca La Sagrera, Barcelona. 15/11/2017
8. Miralda, J., "El futur de l'Univers en expansió". Agrupació Astronòmica de Terrassa i Amics de les Arts de Terrassa.. 28/10/2017
9. Jordi, C., "Els cúmuls estel·lars"
10. Agrupació Astronòmica de Sant Cugat—Valldoreix. Monestir Sant Cugat, AASCV (Sant Cugat). 30/11/2017
11. Badenes, C., "Explosions de supernova: la persistència de la memòria". 25é aniversari SEA. Edifici Històric Universitat de Barcelona (Barcelona). 27/11/2017

Participació a tallers i cursos

1. Pérez-Ràfols, I, Taller "Experiments de Física per estudiants" Facultat de Física UB, MónNatura Pirineus, 03/01/2017
2. Alfonso, A.; Carrasco J.M.; Jordi C.; Masana E.; Mor, R.; Pérez, I.; Moreno de la Cita, V.; Romero M.; Torres, N. Curs Estrelles, Galàxies i Cosmologia. La universitat de l'experiència. La Universitat de Barcelona. 02/2017-05/2017
3. Solanes, J.M., Bellomo, N.; Bernal, J. L. ; Castro, A.; Molina, E.; Pacheco, D.; Torres, N. Participació als Experiments de Física 2016: Taller d'astronomia: 'Observant el Sol i la seva influència en el clima', Facultat de Física UB. 23/02/2017-02/03/2017
4. Miret, N., Taller "La missió Gaia" Saló de l'ensenyament 2017, Fira de Montjuic, 23-25/03/2017
5. Jordi, C.; Luri, X.; Manrique, A.; Salvador, E.; Sanahuja, B.; Solanes, J.M.; Ribó, M., Curs Gaudir UB: Astronomia: els secrets de l'Univers 27/04/2017-29/06/2017

6. E. Molina, Víctor Moreno de la Cita, I. Pérez-Ràfols, N. TorresTaller "Constel·lacions en 3D" Festa de la Ciència de la UB, Ed. Històric Universitat de Barcelona, 12/05/2017
7. Luri, X: , "Contar la ciencia. Técnicas escénicas y de narración oral para la comunicación científica". Els Julols de la UB. 10-14/07/2017
8. Casamiquela, L.; Moreno de la Cita, V.; Pérez-Ràfols, I. participació a "Projecte d'astronomia, Món Natura Pirineus, 26/06/2017-08/07/2017
9. Casamiquela L.; Carrasco J.M.; Jordi C.; Masana E.; Molina, E.; Bosch, V. Curs Astronomia Observacional. Astronomia. La universitat de l'experiència. La Universitat de Barcelona. 09/2017-12/2017
10. Carrasco, J.M.; Luri, L.; Manrique A.; Solanes J.M. Emparan, R.; Ribó, M. Curs Ampliació astronomia i meteorologia. Astronomia. La universitat de l'experiència. La Universitat de Barcelona. 09/2017-12/2017

Cobertura d'esdeveniments astronòmics

1. Eclipsi total de Sol, 21/08/2017
2. Plana especial a serviastrò i publicació de les imatges preses per E. Masana des d'EUA.
3. L'asteroide 2014 J025 s'apropa a la Terra, 19/04/2017
4. Eclipsi anular de Sol a l'hemisferi su, 26/02/2017
5. Eclipsi penombral de Lluna , 10-11/02/2017



Taller de Física de Partícules celebrat el 09 de febrer de 2017



Acte sobre ones gravitacionals, R. Emparan i V. Bosch



C. Jordi, Biblioteca Jaume Fuster



X. Luri Biblioteca Can Llaurador



Festa de la Ciència de la UB



Festival YOMO