# Lluís Galbany



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## Synopsis of the CV

I am an observational astrophysicist with broad and multidisciplinary interests spanning supernova physics, massive stars, galaxy evolution, and cosmology. I obtained a PhD in Physics from Universitat Autònoma de Barcelona in Oct 2011 under the supervision of Prof. Ramon Miquel at the Institut de Física d'Altes Energies (IFAE). I have been a postdoctoral researcher at the CENTRA/IST in Lisboa under the supervision of Dr. Vallery Stanishev and Prof. A. M. Mourao, a FONDECYT postdoctoral fellow at the Astronomy Department of Universidad de Chile working with Prof. Mario Hamuy, a research associate at the Department of Physics and Astronomy of University of Pittsburgh working with Prof. Michael Wood-Vasey, and a Marie Skłodowska-Curie fellow at Universidad de Granada integrated in Prof. Inmaculada Domínguez group. Currently, I am a Ramón y Cajal Fellow at the Institute of Space Sciences (IEEC-CSIC). I have always enjoyed scientific independence, conducting competitive research in enjoyable scientific environments.

So far, I have published 322 articles with more than 21,000 citations and an h-index of 63 (ADS, Jun 2023). My work has been presented in international conferences giving in total 67 talks, including 5 invited talks at different conferences and 28 invitations to deliver seminars at different institutions. I have been PI of 59 successful observational proposals in a competitive basis in the largest observatories around the world, and actively participated in more than 40 other observational campaigns. I have led analyses within major collaborations (SDSS-II SN, CALIFA, PESSTO, DES, HSC-SSP, MaNGA, J-PLUS, LSST, WFIRST, DESI, ZTF), and I had the chance to mentor 3 postdocs, 8 PhD students, 7 graduate and 14 undergraduate students, including two funded 3-months PhD research visits, and 2 ERASMUS+ undergrad programmes.

## Education

Sep 2008 - Jun 2023 B.S in Economics (4-year degree), Universitat Autònoma de Barcelona (UAB).

Sep 2006 - Oct 2011 Ph.D. in Physics, Institut de Física d'Altes Energies - IFAE, U. Autònoma de Barcelona - UAB.

Supernova studies in the SDSS-II/SNe Survey: spectroscopy of the peculiar SN 2007qd, and photometric properties of Type-Ia supernovae as a function of the distance to the host galaxy.

Supervisor: Prof. Ramon Miquel.

Sep 2006 - Apr 2008 Master degree in Physics, U. Autònoma de Barcelona (UAB).

Tests of DES Charge Coupled Devices. Supervisors: Ramon Miquel and Manel Martínez.

Jun 2007 Certificate of Teaching Proficiency, Institute of Education Sciences (ICE-UAB).

Sep 2001 - Jun 2006 B.S. in Physics (5-year degree), U. Autònoma de Barcelona (UAB).

## Research activity

(expect.) Nov 2023 Científico Titular OPI. Institut de Ciències de l'Espai (ICE-CSIC).

Sep 2021 - present Ramon y Cajal fellow (RyC 2019). Institut de Ciències de l'Espai (ICE-CSIC).

Sep 2019 - Aug 2021 Marie Skłodowska-Curie fellow (MSCA-IF 2018). Universidad de Granada.

Sep 2016 - Aug 2019 **Postdoctoral research associate.** University of Pittsburgh.

Oct 2013 - Aug 2016 FONDECYT 2014 postdoctoral fellow. Universidad de Chile.

Nov 2011 - Sep 2013 Postdoctoral researcher. Instituto Superior Técnico (IST), Universidade de Lisboa.

## Fellowships and grants awarded

Apr 2023	Ajuts Programa INVESTIGO (2023). Funding: 66.217,84 EUR
Jan 2023	Ajuts de suport a grups de recerca de Catalunya (SGR-Cat 2021). Funding: 24,000 EUR
Jul 2022	Ajuts per al Foment de la Cultura Científica a Catalunya Joan Oró (FCRI). Funding: 15,000 EUR
Jul 2022	Hubble Space Telescope Cycle 30 $\#17179$ proposal. Funding: $\sim$ 90,000 USD.
Dec 2021	MOST CSIC 2021 project. Funding: 23,946.20 EUR.
Dec 2021	CSIC I-LINK A project. Funding: 23,914.92 EUR.
Sep 2021	Hubble Space Telescope Cycle 29 $\#16741$ proposal. Funding: $\sim$ 90,000 USD.
Sep 2021	Proyecto Nacional I+D+i AYA PID2020-115253GA-I00. Funding: 155,577 EUR.
Sep 2021	Proyecto Intramural Especial (PIE) CSIC 20215AT016. Funding: 150.000 EUR.
Jul 2020	Ramon y Cajal Fellowship (RyC 2019, ranked 1st). Funding: 308.600 EUR.
May 2020	UGR conference organization funding. Amount: 1.000 EUR.
Mar 2020	NOAJ grant for visitor researcher program. Funding: 285.000 JPY.
Feb 2019	Marie Skłodowska-Curie Actions - Individual Fellowship (MSCA-IF): 172,932.48 EUR.
Jan 2019	The future of SN host galaxies studies workshop. Funding PITT-PACC: 8,000 USD.
Apr 2018	New advances in NIR SNIa science workshop. Funding PITT-PACC: 10,000 USD.
Mar 2018	SNe II cosmology with the LSST workshop. Funding PITT-PACC: 4,000 USD.
Mar 2017	FINCA grant for visitor researcher program. Funding: 2,650 EUR.
Nov 2016	Preparing for SN Science in the LSST Era workshop. Funding LSST Enabling science: 19,750 USD.
Apr 2013	FONDECYT Postdoctoral fellowship 2014. CONICYT - Chile: 74.352.000 CLP
Jun 2004	SENECA-SICUE student fellowship, Universidad de La Laguna. Funding: 4,520 EUR.

Total funding awarded: approx. 1,200,000 EUR

## \_\_\_\_\_ Teaching activity

Nov 2021	Guest Lecturer Techniques in Observational Astronomy, Purdue University, IL.
From Sep 2021	Lecturer MasterCosmos BCN. Postgraduate in HEP, Astrophysics & Cosmology, ICE-IFAE.
	Neutron Stars, Black Holes and Gravitational Waves; Galaxies and Extragalactic Astrophysics; Introduction to Physics of the Cosmos; Cosmology (Coordinator).
Sep 2019 - Aug 2021	Lecturer Department of Theoretical and Cosmological Physics, U. Granada.
	Stellar Physics, Physics Laboratory, General Physics.
Nov 2016	Guest Lecturer '2nd SELGIFS Advanced School on IFS Data Analysis', UAM, Madrid, Spain.
Aug 2014	<b>Guest Lecturer</b> 'Guillermo Haro Advanced School on IFS Techniques and Analysis', INAOE, Puebla, Mexico.
Sep 2008 - Sep 2010	Teaching Assistant Physics Department of U. Autònoma de Barcelona.
	General Physics, Mathematical Methods, Physics Laboratory.

## Supervision and mentorship

### Postdocs

From Apr 2023	Claudia Gutiérrez, IEEC/ICE-CSIC. CC SN physiscs. Funding: Ajudes Beatriu de Pinoś (BP 2021), MCSA COFUND Action.
From Sep 2022	Maria Kopsachielli, ICE-CSIC. SN remnants environments.
	Funding: ICE Mará de Maetzu (MdM) postdoctoral fellowship.
From Nov 2021	Tomás Müller, ICE-CSIC. Supernova cosmology in the NIR.
	Funding: Proyecto Intramural Especial (PIE) CSIC 20215AT016.
	Funding: Ayudas Juan de la Cierva (JdC), Ref.: FJC2021-047124-I.

### PhD students

From Sep 2022 **Dane Cross**, ICE/IFAE-UAB. *PhD co-advisor with Carles Sánchez*.  $\sigma_8$  at low and high redshift. Funding: Proyecto Intramural Especial (PIE) CSIC 20215AT016.

	Funding: Ajuts Joan Oró per a personal investigador predoctoral en formació (FI-2023)".
From Sep 2022	<b>Cristina Jiménez</b> , ICE-UAB. <i>PhD advisor</i> . IFS SN la environments characterization. Funding: "Ayudas para contratos predoctorales para la formación de doctores 2020".
From May 2022	<b>Kim Phan</b> , ICE-UAB. <i>PhD advisor</i> . H <sub>0</sub> determination from SN Ia in the near-infrared. Funding: Ajuts per a la contractació de personal investigador predoctoral en formació (FI-2022)".
From Sep 2020	<b>Raúl González Díaz</b> , INAOE/ICE-UAB. <i>PhD co-advisor with Fabián Rosales</i> . Diffuse interstellar gas in IFS.
Sep 18 - Sep 21	Jared Hand, U. Pittsburgh. Supervised by W. M. Wood-Vasey. Stellar population synthesis. (See selected refereed papers #70)
Sep 18 - Feb 21	<b>Daniel Perrefort</b> , U. Pittsburgh. <i>Supervised by W. M. Wood-Vasey</i> . Subluminous SNe. (See <i>selected refereed papers</i> #62)
From Apr 2018	<b>Héctor Martínez Rodríguez</b> , U. Pittsburgh. <i>Supervised by C. Badenes</i> . SN remnants in IFS. (paper in prep.)
Abr-Jul 2016	<b>Laura Sánchez-Menguiano</b> , U. Granada. Supervised by I. Pérez and S. F. Sánchez. Radial migration. (See selected refereed papers #21) Funding: "Ayudas a la movilidad predoctoral para estancias en centros de I+D 2015".
Mar 2016	Manuel Emilio Moreno-Raya, U. Complutense. Supervised by M. Mollá and A. López-Sánchez. Elemental abundances of int-z SN host galaxies. (See selected refereed papers #35)
From Jun 2015	Alessandro Razza, U. Chile. Supervised by G. Blanc. SN Ia extinction studies from their LC and IFS of their host galaxies. (paper in prep.)
Aug-Nov 2014	<b>Manuel Emilio Moreno-Raya</b> , U. Complutense. <i>Supervised by M. Mollá and A. López-Sánchez</i> . Elemental abundances of low-z SN host galaxies. (See <i>selected refereed papers</i> #12, #22). Funding: "Ayudas a la movilidad predoctoral para estancias en centros de I+D 2013".
Master students	
Mar 23 - Jun 23	<b>Christos Thomopoulos</b> , U. Patras, Greece. <i>ERASMUS+</i> . SNIa NIR diversity and improved standardization.
Mar 23 - Jun 23	John Kyriakopoulos, U. Patras, Greece. <i>ERASMUS+</i> .  ZTF SNIa Hubble diagrams as a function of SN properties.
Nov 22 - Sep 23	Carlos Valero, ICE-CSIC. TFM supervisor. Host galaxy dependences on SHOES $H_0$ measurement. (paper in prep.)
Nov 22 -Aug 23	Lara Piscarreta, U. Lisboa. <i>JAE-ICU supervisor</i> . Young supernova programme with GTC. (paper in prep.)
Oct 22 - Jun 23	<b>Utsav Siwatoki</b> , Kathmandu U. (Nepal). <i>TFM supervisor</i> . FP and TF distances of elliptical/spiral galaxies observed with IFS. (paper in prep.)
Oct 22 - Apr 23	Carla Barnera, ICE-CSIC. JAE-ICU supervisor. Spectral evolution of SNe Ia in DES. (paper in prep.)
Sep 20 - Jul 21	Sara Muñoz Torres, U. Granada. <i>TFM supervisor</i> .  The oxygen abundance dependence on the Cepheid period in SH0ES. (paper in prep.)
Oct 19 - Jul 20	Román Fernández Aranda, U. Complutense Madrid. <i>TFM supervised with M. Mollà</i> . Stellar populations of SN host galaxies at high-z 0.5 <z<1.0. (see="" <i="">selected refereed papers #80)</z<1.0.>
Sep 19 - Jul 20	Raúl González Díaz, U. Granada. TFM supervised with R García-Benito.  NCR method in broad and narrow band data from J-PLUS. (paper in prep.)
Dec 18 - Jul 20	Nataliya Ramos Chernenko, U. Granada. <i>TFM supervised with I. Domínguez</i> . The local environment of Type Ia supernovae with IFS.
Nov 18 - Jun 19	Macarena García del Valle, U. Complutense Madrid. TFM supervised with M. Mollà. Type la supernova environments at high redshift. (See selected refereed papers #80)
Oct 18 - Sep 19	Isaac Lozano Rey, U. Internacional de València (VIU). TFM supervisor.  The imprint of hydrogen-rich core collapse supernovae from their parent populations.
Sep 16 - Jun 17	Asier Castrillo, U. Autónoma Madrid. TFM supervised with Y. Ascasibar. Supernova DTDs in nearby galaxies. (See selected refereed papers #63)

From Jun 22 Ramon Sanfeliu, U. Autònoma de Barcelona. Summer internship & TFG supervisor. Database of FLOWS NIR SN Ia. Peculiar velocities of SNe Ia. Feb 22 - Jul 22 Cristina Jordà, U. Politècnica de Catalunya. TFG supervised with R. Morros. Spectral diversity of CC SNe with machine learning. Sep 20 - Jul 21 Antonio láñez Ferres, U. Granada. TFG supervisor. Studying the diversity of type Ia supernovae in the NIR. (See selected refereed papers #76) María Delgado Mancheño, U. Granada. TFG supervisor. Sep 20 - Jul 21 The type Ia NIR Hubble diagram constructed with ANDICAM JHK data. Nov 19 - Jul 20 Darío García Redecillas, U. Granada. TFG supervisor. Studying the diversity of subluminous type la supernovae from twins. Nov 19 - Jul 20 Lamberto Oltra Nieto, U. Granada. TFG supervisor. The local environment of supernovae as seen by J-PLUS. (paper in prep.) Sep 16 - Jun 17 Asier Castrillo, U. Autónoma Madrid. TFG supervised with Y. Ascasibar. Supernova rates in nearby galaxies. (See selected refereed papers #63) Sep 16 - Sep 17 Nicolette M. Kier, U. Pittsburgh. HII region statistics in PISCO. (See selected refereed papers #34) Sep 16 - Mar 17 Yiwen Huang, Carnegie Mellon U. Statistical study of SN la 91bg-like. (See selected refereed papers #50) Luis Mora, U. Chile. TFG supervisor. Jan-Sep 2016 Measuring CO at SN locations with CARMA. (See selected refereed papers #25) Jan-Jul 2015 Tania Moraga, U. Chile. TFG supervisor. Type II multiwavelength light-curve characterization. (See selected refereed papers #11) Feb-Jul 2014 **Ismael Pessa**, U. Chile. *TFG supervisor*. SNe la properties as a function of the distance to host galaxy. (See selected refereed papers #71)

### Publication list

Here you can find links of my publications in the ADS, Google Scholar, and ORCID.

#### Selected refereed papers

- 82. A graph-based spectral classification of Type II supernovae R. de Souza, S. Thorp, L. Galbany, E. E. O. Ishida, S. González-Gaitán, et al.. ASCOM, accepted.
- 81. SN 2016ije: An SN 2002es-likeSNIa Exploded in a Metal-poor and Low-surface Brightness Galaxy Z. Li, T. Zhang, X. Wang, J. Zhang, L. Galbany, et al. APJ, accepted.
- 80. Stellar Populations in SNIa host galaxies at intermediate-high z: SF and OH enrichment histories I. Millan-Irigoyen, M. G. del Valle-Espinosa, R. Fernández-Aranda, L. Galbany, et al. MNRAS, accepted.
- 79. The Absolute Magnitudes of 1991T-like Supernovae M. M. Phillips, C. Ashall, C. R. Burns, C. Contreras, L. Galbany, et al. APJ, accepted.
- 78. HostPhot: global and local photometry of galaxies hosting supernovae or other transients T. Müller-Bravo, L. Galbany. JOSS, 7(76):4508 (2022), arXiv:2208.08117.
- 77. Testing the Homogeneity of Type Ia Supernovae in the Near-Infrared for Accurate Distance Estimations T. Müller-Bravo, L. Galbany, E. Karamehmetoglu, M. Stritzinger, C. Burns, et al. A&A, accepted.
- 76. A 5 per cent measurement of the Hubble constant from Type II supernovae  $_{\rm T.~de~Jaeger,~L.~Galbany,~A.~G.~Riess,~B.~J.~Shappee,~et~al.~MNRAS,~accepted.}$
- 75. Cosmological Results from the RAISIN Survey: Using SNe Ia in NIR as a Novel Path to Measure the DE EoS D. Jones, K. Mandel, R. P. Kirshner, ... L. Galbany, et al. APJ, accepted.
- 74. Systematic errors on optical-SED  $M_s$  estimates for galaxies across cosmic time and their impact on cosmology A. Paulino-Afonso, S. González-Gaitán, L. Galbany, et al. A&A, accepted
- 73. Infant excess emission reveals the origin of a normal Type Ia Supernova Y. Qi Ni, D-S Moon, M. R. Drout, A. Polin, ... L. Galbany, et al. NATURE ASTRONOMY, accepted.
- 72. A Tale of Two Type Ia Supernovae: The fast-declining siblings SNe 2015bo and 1997cn W. Hoogendam, C. Ashall, L. Galbany, B. Shappee, et al. APJ, accepted, arXiv:2109.14644.
- 71. Aperture-corrected spectroscopic type la supernova host galaxy properties

  L. Galbany, M. Smith, S. Duarte Puertas, S. González-Gaitán, I. Pessa, et al. A&A, accepted, arXiv:2112.02517.

- 70. The Dependence of the Type Ia Supernova Host Bias on Observation or Fitting Technique J. Hand, S. Liu, L. Galbany, et al. APJ, accepted, arXiv:2102.08980.
- 69. Are Type Ia Supernovae in Restframe H Brighter in More Massive Galaxies?

  K. A. Ponder, W. MN. Wood-Vasey, A. Weyant, N. T. Barton, L. Galbany, et al. APJ, accepted, arXiv:2006.13803.
- 68. Carnegie Supernova Project: The First Homogeneous Sample of 2003fg-like Type la Supernova. C. Ashall, J. Lu, E. Y. Hsiao, P. Hoeflich, M. Phillips, L. Galbany, et al. APJ, accepted, arXiv::2106.12140.
- 67. The effects of varying colour-luminosity relations on type la supernova science. S. González-Gaitán, T. de Jaeger, L. Galbany, et al. MNRAS, 508:4656 (2021), arXiv:2009.13230.
- 66. ASASSN-15hy: an under-luminous, red 03fg-like type la supernova. J. Lu, C. Ashall, E. Y. Hsiao, P. Hoeflich, L. Galbany, et al. APJ, 920:107 (2021), arXiv:2107.08150.
- 65. Probing the Progenitors of SNe Ia using Circumstellar Material Interaction Signatures. P. Clark, K. Maguire, M. Bulla, L. Galbany, et al. MNRAS, 507:4367 (2021), arXiv:2107.09034.
- 64. Supernova 2018cuf: A Type IIP supernova with a slow fall from plateau. Y. Dong, S. Valenti, K. A. Bostroem, D. J. Sand, J. E. Andrews, L. Galbany, et al. APJ, 906:56 (2021). arXiv:2010.09764.
- 63. The delay time distribution of supernovae from IFS of nearby galaxies.

  A. Castrillo, Y. Ascasibar, L. Galbany, S. F. Sánchez, et al. MNRAS, 501:3122 (2021). arXiv:2012.11958.
- 62. A Template-based Approach to the Photometric Classification of SN 1991bg-like SNe in the SDSS-II SN Survey. D. Perrefort; Y. Zhang; L. Galbany, W. M. Wood-Vasey, S. González-Gaitán APJ, 904:156 (2020). arXiv:2010.09756.
- 61. Observational constraints on the optical and NIR emission from a NS-BH binary merger candidate S190814bv ENGRAVE coll. A&A, 643:113 (2020). arXiv:2002.01950.
- 60. The stellar metallicity distribution function of galaxies in the CALIFA survey.

  A. Mejía-Narváez, S. F. Sánchez, E. A. Lacerda, L. Carigi, L. Galbany, et al. MNRAS, 499:4838 (2020). arXiv:2009.13712.
- 59. SN 2017ivv: A type II supernova with an abnormal nebular evolution.

  C. P. Gutiérrez, A. Pastorello, A. Jerkstrand, L. Galbany, et al. MNRAS, 499:974 (2020). arXiv:2008.09628.
- 58. A measurement of the Hubble constant from Type II supernovae.

  T. de Jaeger, W. Zheng, B. E. Stahl, A. V. Filippenko, A. G. Riess, L. Galbany. MNRAS, 496:3402 (2020). arXiv:2006.03412.
- 57. Studying Type II supernovae as cosmological standard candles using the Dark Energy Survey. T. de Jaeger, L. Galbany, S. González-Gaitán, et al. MNRAS, 495:1860 (2020). arXiv:2005.09757.
- 56. Studying the environment of AT 2018cow with MUSE.

  J. D. Lyman, L. Galbany, S. F. Sánchez, J. P. Anderson, H. Kuncarayakti. MNRAS, 495:992 (2020). arXiv:2005.02412.
- 55. Discovery and Rapid Follow-up Observations of the Unusual Type II SN 2018ivc in NGC 1068.

  K. A. Bostroem, S. Valenti, D. J. Sand, J. E. Andrews, S. D. Van Dyk, L. Galbany, et al. APJ, 895:31 (2020), arXiv:1909.07304.
- 54. The AMUSING++ Compilation: I. Full Sample Characterization and Galactic-Scale Outflows Selection. C. López-Cobá, S. F. Sánchez, J. P. Anderson, I. Cruz-González, L. Galbany, et al. AJ, 159:167 (2020), arXiv:2002.09328.
- 53. HII regions in the CALIFA survey: I. catalog presentation.

  C. Espinosa-Ponce, S. F. Sánchez, C. Morisset, J. K. Barrera, L. Galbany, et al. MNRAS, 494:1622 (2020), arXiv:2003.07865.
- 52. Galaxies hosting an AGN: a view from the CALIFA survey.

  E. Lacerda, S. Sánchez, R. Cid Fernandes, C. López-Cobá, C. Espinosa, L. Galbany. MNRAS, 492:3073 (2020), arXiv:2001.00099.
- 51. The 50-100 pc scale parent stellar populations of SNII and limitations of single star evolution models. P. Schady, J.J. Eldridge, J. Anderson, T.-W. Chen, L. Galbany, et al. MNRAS, 490:4515 (2019), arXiv:1907.12260.
- 50. Evidence for a Chandrasekhar-mass explosion in the Ca-strong 1991bg-like type la supernova 2016hnk. L. Galbany, C. Ashall, P. Hoeflich, S. González-Gaitán, et al. A&A, 630:A76 (2019), arXiv:1904.10034.
- 49. Models and Sim. for the Photometric LSST Astronomical Time Series Classification Challenge (PLAsTiCC) R. Kessler, G. Narayan, A. Avelino, E. Bachelet, R. Biswas, ...(with) L. Galbany, et al. PASP, 131:094501 (2019), arXiv:1903.11756.
- 48. The extraplanar type II supernova ASASSN-14jb in the ESO 467-G051 galaxy. N. Meza, J. L. Prieto, A. Clocchiatti, L. Galbany, et al. A&A, 629:A57 (2019), arXiv:1811.11771.
- 47. Superluminous Supernovae from the Dark Energy Survey.

  C. Angus, M. Smith, M. Sullivan, C. Inserra, P. Wiseman, ...(with) L. Galbany, et al. MNRAS, 487:2215 (2019), arXiv:1812.04071.
- 46. On the nature of the unusual transient AT 2018cow from Hi observations of its host galaxy M. J. Michałowski, P. Kamphuis, J. Hjorth, D. A. Kann, A. de Ugarte, L. Galbany, et al. A&A, 627:106 (2019), arXiv:1902.10144.

- 45. Accounting for the uncertainties in gas kinematics arising from stellar continuum subtraction in MUSE IFS. E. Bellocchi, Y. Ascasibar, L. Galbany, H. Ibarra-Medel, M. Gavilán, Á. Díaz A&A, 625:A83 (2019), arXiv:1903.06252.
- 44. Emission-line diagnostics of CCSN host HII regions including massive binary population Lin Xiao, L. Galbany, J.J. Eldridge, and Elizabeth R. Stanway. MNRAS, 482:384 (2019), arXiv:1805.01213.
- 43. Unravelling the infrared transient VVV-WIT-06: the case for an origin in a classical nova D.P.K. Banerjee, E. Y. Hsiao, T. Diamond, L. Galbany, et al. APJ, 867:99 (2018), arXiv:1809.06801.
- 42. Thermonuclear supernovae and cosmology I. Dominguez, L. Galbany. EPJP, 133:323 (2018).
- 41. The SELGIFS data challenge: generating synth. obs. of CALIFA galaxies from hydrodynamical simulations G. Guidi, J. Casado, Y. Ascasibar, R. García-Benito, L. Galbany, et al. MNRAS, 479:917 (2018), arXiv:1610.07620.
- 40. Serendipitous discovery of a strong-lensed galaxy in integral field spectroscopy from MUSE.

  L. Galbany, T. E. Collett, J. Méndez-Abreu, S. F. Sánchez, J. P. Anderson. MNRAS, 479:262 (2018), arXiv:1803.09277G.
- 39. SN 2016esw: a bright Type II supernova observed a few hours after the explosion T. de Jaeger, L. Galbany, C. P. Gutiérrez, A. V. Filippenko, W. Zheng, et al., MNRAS, 478:3776 (2018), arXiv:1805.03205.
- 38. No surviving companion in Kepler's supernova.

  P. Ruiz-Lapuente, F. Damiani, L. R. Bedin, J. I. Gonzalez Hernandez, L. Galbany, et al., APJ, 862:124 (2018), arXiv:1711.00876.
- 37. The lowest metallicity type II supernova from the highest mass red-supergiant progenitor J. P. Anderson, L. Dessart, C. P. Gutiérrez, T. Krühler, L. Galbany, et al., NATURE ASTRONOMY, 2:574 (2018), arXiv:1805.04434.
- 36. Observed Type II supernova colours from the Carnegie Supernova Project-I T. de Jaeger, J. P. Anderson, L. Galbany, et al., MNRAS, 476:4592 (2018), arXiv:1802.07254.
- 35. Elemental gas-phase abundances of intermediate redshift type la supernova star-forming host galaxies M. E Moreno-Raya, L. Galbany, A. R. López-Sánchez, M. Mollá, et al., MNRAS, 476:307 (2018), arXiv:1801.06547.
- PISCO: The PMAS/Ppak Integral field supernova hosts compilation
   L. Galbany, J. P. Anderson, S. F. Sánchez, H. Kuncarayakti, S. Pedraz, et al., APJ, 855:107 (2018), arXiv:1802.01589.
- 33. Constraints on core-collapse supernova progenitors from explosion site integral field spectroscopy H. Kuncarayakti, J. P. Anderson, L. Galbany, K. Maeda, M. Hamuy, et al. A&A, 613:35 (2018), arXiv:1711.05765.
- 32. Studying the ultraviolet spectrum of the first spectroscopically confirmed SN at z=2. M. Smith, M. Sullivan, R. C. Nichol, L. Galbany, et al., APJ, 854:37 (2018), arXiv:1712.04535.
- 31. The shape of O abundance profiles explored with MUSE: evidence for widespread deviations from single gradients L. Sánchez-Menguiano, S. F. Sánchez, I. Pérez, T. Ruiz-Lara, L. Galbany, et al. A&A. 609:A119 (2018), arXiv:1710.01188.
- 30. Investigating the diversity of SNe lax: A MUSE and NOT spectroscopic study of their environments J. D. Lyman, F. Taddia, M. D. Stritzinger, L. Galbany, G. Leloudas, et al. MNRAS, 473:1359 (2018), arXiv:1707.042708.
- 29. SN 2016jhj at redshift 0.34: extending the SN II Hubble diagram using the standard candle method T. de Jaeger, L. Galbany, A. Filippenko, S. González-Gaitán, et al. MNRAS, 472:4233 (2017), arXiv:1709.01513.
- 28. Serendipitous discovery of an optical emission line jet in NGC 232 C. Lopez-Cobá, S. F. Sánchez, I. Cruz-González, L. Binette, L. Galbany, et al. APJL, 850:L17 (2017), arXiv:1711.02785.
- 27. Type II SN spectral diversity II: spectroscopic and photometric correlations C. P. Gutiérrez, J. P. Anderson, M. Hamuy, S. González-Gaitán, L. Galbany, et al. APJ, 850:90 (2017), arXiv:1709.02799.
- 26. DES15E2mlf: A Spectroscopically Confirmed Superluminous SN that Exploded 3.5 Gyr After the Big Bang Y.-C. Pan, R. J. Foley, M. Smith, L. Galbany, C. B. D'Andrea, et al. MNRAS, 470:4241 (2017), arXiv:1702.05430.
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- 115. J-PLUS: tools to identify planetary nebulae and symbiotic stars in the J-PLUS and S-PLUS surveys. L. A. Gutiérrez-Soto, et al. A&A, 633:123 (2020), arXiv:1912.10145.
- 114. The spectral evolution of AT2018dyb and the presence of metal lines in TDEs  $_{
  m G.\ Leloudas,\ et\ al.}$  APJ, 887:218 (2019), arXiv:1903.03120.
- 113. The CALIFA view on stellar angular momentum across the Hubble sequence. J. Falcón-Barroso, et al. A&A, 632:59 (2019), arXiv:1910.06236.
- 112. SN2018kzr: A Rapidly Declining Transient from the Destruction of a White Dwarf O. R. McBrien, et al. APJ, 885:23 (2019), arXiv:1909.04545.
- 111. SN 2017gmr: An energetic Type II-P supernova with asymmetries. J. E. Andrews, et al. APJ, 885:43 (2019), arXiv:1907.01013.

- 110. PLAsTiCC: Selection of a performance metric for classification probabilities balancing diverse science goals A.Malz et al. AJ, 158:171 (2019), arXiv:1809.11145.
- 109. SDSS-IV MaStar A Large and Comprehensive Empirical Stellar Spectral Library. R. Yan, et al. APJ, 883:175 (2019), arXiv:1812.02745.
- 108. J-PLUS: Impact of bars on quenching timescales in nearby green valley disc galaxies J. P. Nogueira-Cavalcante, et al. A&A, 630:88 (2019), arXiv:1907.11244.
- 107. HSC16aayt: Slowly evolving interacting transient rising for more than 100 days T. Moriya, et al. APJ, 882:70 (2019), arXiv:1907.01633.
- 106. ASASSN-15pz: Revealing Significant Photometric Diversity Among 2009dc-like, Peculiar Type Ia Supernovae P. Chen, et al. APJ, 880:35 (2019), arXiv:1904.03198.
- 105. First cosmology results using SNIa from the DES: Measurement of the Hubble constant. E. Macaulay, et al. MNRAS, 486:2184 (2019), arXiv:1811.02376.
- 104. ASASSN-15oz: Evidence of Circumstellar Interaction in a Type IIL Supernova. K. Azalee Bostroem, et al. MNRAS, 485:5120 (2019), arXiv:1901.09962.
- 103. A Physical Basis for the H-band Blue-edge vel. and LC Shape Correlation in Context of SNIa Explosion Physics C. Ashall, et al. APJ, 878:86 (2019), arXiv:1904.01633.
- 102. Cosmological constraints from multiple probes in the Dark Energy Survey. T. Abbott, et al. PHRvL, 122:171301 (2019), arXiv:1811.02375.
- 101. Investigating the properties of stripped-envelope supernovae; what are the implications for their progenitors? S. Prentice et al. MNRAS, 485:1559 (2019), arXiv:1812.03716.
- 100. Nebular H $\alpha$  Limits for Fast Declining Type Ia Supernovae D. Sand, et al. APJL, 877:L4 (2019), arXiv:1903.03626.
- 99. The type IIP supernova 2017eaw: from explosion to the nebular phase T. Szalai, et al. APJ, 876:19 (2019), arXiv:1903.09048.
- 98. First release of the high-z SLSNe from the Subaru high-z SN campaign (SHIZUCA). II. Spectroscopic properties. C. Curtin, et al., APJS, 241:17 (2019), arXiv:1801.08241.
- 97. First release of the high-z SLSNe from the Subaru high-z SN campaign (SHIZUCA). I. Photometric properties T. J. Moriya, et al., APJS, 241:16 (2019), arXiv:1801.08240.
- 96. CSPII: Using NIR Spectroscopy to determine the outer  $^{56}$ Ni distribution in SNIa as a test for explosion scenarios. C. Ashall, et al. APJL, 875:L14 (2019), arXiv:1902.10088.
- 95. First cosmology results using SNIa from the DES: Photometric pipeline and light curve release. D. Brout, et al. APJ, 874:106 (2019), arXiv:1811.02378.
- 94. First cosmology results using SNIa from the DES: Analysis, systematic uncertainties, and validation. D. Brout, et al. APJ, 874:50 (2019), arXiv:1811.02377.
- 93. The Fifteenth Data Release of the SDSS: 1st Release of MaNGA-derived Quantities, Vis. Tools, and Stel. Lib. D. S. Aguado, et al. APJS, 240:23 (2019), arXiv:1812.02759.
- 92. First cosmology results using SNIa from the DES: Constraints on cosmological parameters. T. Abbott, et al. APJL, 872:L30 (2019), arXiv:1811.02374.
- 91. J-PLUS: measuring H $\alpha$  emission line fluxes in the nearby universe R. García-Logroño, et al., A&A, 622:A180 (2019), arXiv:1804.04039.
- 90. J-PLUS: Morphological star/galaxy classification by PDF analysis C. López-Sanjuan, et al., A&A, 622:A177 (2019), arXiv:1804.02673.
- 89. J-PLUS: The Javalambre Photometric Local Universe Survey. J. Cenarro, et al., A&A, 622:A176 (2019), arXiv:1804.02667.
- 88. Carnegie Supernova Project-II: The Near-infrared Spectroscopy Program Eric Y. Hsiao, et al. PASP, 131:014002 (2019), arXiv:1810.08213.
- 87. Carnegie Supernova Project-II: Extending the NIR Hubble Diagram for Type Ia Supernovae to z  $\sim$  0.1 Mark M. Phillips, et al. PASP, 131:014001 (2019), arXiv:1810.09252.
- 86. Systematic study of outflows in the Local Universe using CALIFA: I. Sample selection and main properties. C. López-Cobá et al. MNRAS, 482:4032 (2018), arXiv:1811.01253.

- 85. Spatial field reconstruction with INLA: Application to IFU galaxy data. S. González-Gaitán, et al. MNRAS, 482:3880 (2019), arXiv:1802.06280.
- 84. K2 Observations of SN 2018oh Reveal a Two-Component Rising Light Curve for a Type la Supernova. G. Dimitriadis, et al., APJL, 870:L1 (2018), arXiv:1811.10061.
- 83. Phot. and spec. properties of SN Ia 2018oh with early excess emission from the Kepler 2 observations W. Li et al. APJ, 870:12 (2019), arXiv:1811.10056.
- 82. A Virgo Env. Survey Tracing Ionised Gas Emission (VESTIGE).IV. Tails of Ionised Gas in the MR NGC 4424. A. Boselli et al. A&A, 620:A164 (2018), arXiv:1810.09234.
- 81. SN 2017ens: The metamorphosis.of a bright broad-lined type Ic supernova to a type IIn T.-W. Chen et al. APJL, 867:L31 (2018), arXiv:1808.04382.
- 80. A nearby superluminous supernova with a long pre-maximum 'plateau' and strong CII features J.P. Anderson et al. A&A, 629:A67 (2018), arXiv:1806.10609.
- 79. The High Cadence Transient Survey (HiTS) IV. Compilation and characterization of light-curve catalogs J. Martínez, et al., AJ, 156:186 (2018), arXiv:1809.00763.
- 78. Relativistic supernova 2009bb exploded close to an atomic gas cloud. Michal J. Michalowski, et al., A&A, 618:A104 (2018), arXiv:1808.00977.
- 77. Type II supernovae in low luminosity host galaxies.

  C. Gutiérrez, et al., and MNRAS, 479:3232 (2018), arXiv:1806.03855.
- 76. The delay of shock breakout due to circumstellar material seen in most Type II Supernovae F. Förster, et al., NATURE ASTRONOMY, 2:808 (2018), arXiv:1809.06379.
- 75. Using late-time spectra to constrain Type la supernova progenitor and explosion properties K. Maguire, et al., MNRAS, 477:3567 (2018), arXiv:1803.10252.
- 74. The Data Release of the Sloan Digital Sky Survey-II Supernova Survey. M. Sako, et al. PASP, 130:064002 (2018), arXiv:1401.3317.
- 73. The type IIn supernova 2010bt: The explosion of a star in outburst. N. Elias-Rosa, et al., APJ, 860:68 (2018), arXiv:1805.02188.
- 72. The twin SNe 2013K and 2013am: observed and physical properties of two slow, normal Type IIP events. L.  $_{\rm Tomasella,\ et\ al.}$ ,  $_{\rm MNRAS}$ , 475:1937 (2017),  $_{\rm arXiv:1712.03933}$
- 71. The fourteenth data release of the Sloan Digital Sky Survey B. Abolfathi, et al. APJS. 235:42 (2018), arXiv:1707.09322.
- 70. Discovery of distant RR Lyrae stars in the Milky Way using DECam G. Medina, et al., APJ, 855:43 (2018), arXiv:1802.01581.
- 69. Asteroids in the High Cadence Transient Survey J. Peña, et al., AJ, 155:135 (2018), arXiv:1806.03352.
- 68. SN 2017dio: a type lc SN exploding in a hydrogen-rich circumstellar medium H. Kuncarayakti, et al., APJL, 854:L14 (2018), arXiv:1712.00027
- 67. Morpho-kinematic properties of S0 bulges in the CALIFA survey: Clues to the origin of S0 galaxies. J. Méndez-Abreu, et al., A&A, 474:1307 (2017), arXiv:1710.09349.
- 66. The early detection and follow-up of the highly obscured type II SN 2016ija/DLT16am L. Tartaglia, et al., APJ. 853:62 (2018), arXiv:1711.03940
- 65. A kilonova as the electromagnetic counterpart to a gravitational-wave source S. Smartt, et al., NATURE, 551:75 (2017), arXiv:1710.05841.
- 64. Type II SN spectral diversity I: Observations, sample characterization and spectral line evolution C. P. Gutiérrez, et al.,, APJ, 850:89 (2017), arXiv:1709.02487.
- 63. Multi-messenger Observations of a Binary Neutron Star Merger B. P. Abbott, et al., APJL, 848:2 (2017), arXiv:1710.05833.
- 62. Toward the Dynamical Classification of Galaxies: PCA of SAURON and CALIFA circular velocity curves V. Kalinova, et al., MNRAS, 469:2539 (2017), arXiv:1509.03352.
- 61. The Mass-Metallicity Relation revisited with CALIFA S.F. Sánchez, et al., MNRAS, 469:2121 (2017), arXiv:1703.09769.

- 60. Serendipitous discovery of RR Lyrae stars in the Leo V ultra-faint galaxy G. Medina, et al., APJL, 845:10 (2017), arXiv:1708.00009.
- 59. Complexity in the light curves and spectra of slow-evolving superluminous supernovae C. Inserra, et al., MNRAS, 468:4642 (2017), arXiv:1701.00941.
- 58. Sloan Digital Sky Survey IV: Mapping the Milky Way, nearby galaxies and the distant Universe M. R. Blanton, et al., AJ, 154:28 (2017), arXiv:1603.04748.
- 57. Observational evidences for radial migration in disc galaxies from CALIFA  $_{\rm T.\ Ruiz\text{-}Lara,\ et\ al.,\ }A\&A,\ 604:A4\ (2017),\ arXiv:1705.02120.$
- 56. Arm and interarm abundance gradients in CALIFA spiral galaxies L. Sánchez-Menguiano, et al.,, A&A, 603:A113 (2017), arXiv:1705.05733.
- 55. Resolving the age bimodality of galaxy stellar populations on kpc scales s. Zibetti, et al. MNRAS, 468:1902 (2017), arXiv:1701.06570.
- 54. Star formation driven galactic winds in UGC 10043.

  C. López-Cobá, et al., MNRAS, 467:4951 (2017), arXiv:1701.01695.
- 53. The spectral evolution of SLSN LSQ14mo and its interacting host galaxy system  $_{\rm T.-W.~Chen,~et~al.}$  A&A, 602:A9 (2017), arXiv:1611.09910.
- 52. Early observations of type la supernova SN2015F. R. Cartier, et al., MNRAS, 464:4476 (2016), arXiv:1609.04465.
- 51. The progenitor and early evolution of the type IIb SN 2016GKG L. Tartaglia, et al., APJ LETTERS, 836:L12 (2017), arXiv:1611.00419.
- 50. 2D Multi-component photometric decomposition of CALIFA galaxies. J. Méndez-Abreu, et al., A&A, 598:32 (2017), arXiv:1610.05324.
- 49. Stellar kinematics across the Hubble sequence in the CALIFA survey: general properties and aperture corrections. J. Falcón-Barroso, et al. A&A, 597:A48 (2017), arXiv:1609.06446.
- 48. IMF shape constraints from stellar populations and dynamics from CALIFA M. Lyubenova, et al., MNRAS LETTERS, 463:3220 (2016), arXiv:1606.07448.
- 47. The High cadence Transient Survey (HiTS): I. Survey design and supernova shock breakout constraints. F. Förster, et al., APJ, 832:155 (2016), arXiv:1609.03567.
- 46. Pan-STARRS and PESSTO search for the optical counterpart to the LIGO gravitational wave source GW150914 S. J. Smartt, e al., MNRAS LETTERS, 462:4094 (2016), arXiv:1602.04156.
- 45. The dependence of oxygen and nitrogen abundances on stellar mass from the CALIFA survey. E. Pérez-Montero, et al., A&A, 595:A62 (2016), arXiv:1608.04677.
- 44. Photoionization models of the CALIFA HII regions compatible with the direct method C. Morisset, et al., A&A, 594:A37 (2016) arXiv:1606.01146.
- 43. Supernova 2014J at M82: II. Direct analysis of spectra obtained with IN and WH telescopes P. Vallely, et al. MNRAS, 460:1614 (2016), arXiv:151202608.
- 42. First survey of Wolf-Rayet star populations over the full extension of nearby galaxies observed with CALIFA D. Miralles-Caballero, et al. A&A, 592:A105 (2016), arXiv:1605.03991.
- 41. Supplement: "Localization and broadband follow-up of the gravitational-wave transient GW150914" B. P. Abbott, et al. APJ SUPPLEMENT SERIES, 225:8 (2016), arXiv:1602.07864.
- 40. Localization and broadband follow-up of the gravitational-wave transient GW150914 B. P. Abbott, et al. APJ LETTERS, 826:L13 (2016), arXiv:1602.08492.
- 39. Aperture effects on the oxygen abundance determinations from CALIFA data J. Iglesias-Páramo, et al. APJ, 826:71 (2016), arXiv:1605.03490.
- 38. SN 2015bn: a detailed multi-wavelength view of a nearby superluminous supernova M. Nicholl, et al. APJ, 826:39 (2016), arXiv:1603.04748.
- 37. Star formation along the Hubble sequence: Radial structure of the star formation of CALIFA galaxies R. González Delgado, et al. A&A, 590:A44 (2016), arXiv:1603.00874.
- 36. The type lax supernova, SN 2015H: a white dwarf deflagration candidate M. R. Magee, et al. A&A, 589:A89 (2016), arXiv:1603.04728.

- 35. PIPE3D, A pipeline to analyse integral field spectroscopy: II. Analysis sequence and CALIFA dataproducts S. F. Sánchez, et al. RMxAA, 52:171 (2016), arXiv:1601.01830.
- 34. Spatially-Resolved Star Formation Main Sequence Of Galaxies in the CALIFA Survey M. Cano-Díaz, et al. A&A LETTERS, 821:L2 (2016), arXiv:1602.02770.
- 33. Warm ionized gas in CALIFA early-type galaxies 2D emission-line patterns and kinematics for 32 galaxies  $_{\rm J.~M.~Gomes,~et~al.}$  A&A, 588:68 (2016), arXiv:1509.02191.
- 32. LSQ13fn: A type II-Plateau SN with a possibly low Z progenitor that breaks the standardised candle relation J. Polshaw, et al. A&A, 588:1 (2016), arXiv:1511.01718.
- 31. The shape of the oxygen abundance profiles in CALIFA face-on spiral galaxies L. Sánchez-Menguiano, et al. A&A, 587:70 (2016), arXiv:1601.01542.
- 30. No direct coupling between bending of galaxy disc stellar age and light profiles T. Ruiz-Lara, et al. MNRAS LETTERS, 456:35 (2016), arXiv:1511.03499.
- 29. Supernova 2013fc in a circumnuclear ring of a luminous infrared galaxy: the big brother of SN 1998S T. Kangas, et al. MNRAS, 456:323 (2016), arXiv:1510.06596.
- 28. Spectroscopic aperture biases in inside-out evolving early-type galaxies from CALIFA J. M. Gomes, et al. A&A, 586:A22 (2016), arXiv:1511.01300.
- 27. Spiral-like star-forming patterns in CALIFA early-type galaxies J. M. Gomes, et al., A&A, 585:A92 (2016), arXiv:1511.00744.
- 26. Outer-disk reddening and gas-phase metallicities: The CALIFA connection R. A. Marino, et al., A&A, 585:47 (2016), arXiv:1509.07878.
- 25. Star Formation in the Local Universe from the CALIFA sample: I. Calibrating the SFR using IFS data C. Catalán-Torrecilla, et al., A&A, 584:A87 (2015), arXiv:1507.03801.
- 24. On the diversity of Super-luminous Supernovae: Ejected mass as the dominant factor M. Nicholl, et al., MNRAS, 452:3869 (2015), arXiv:1503.03310.
- 23. The CALIFA survey across the Hubble sequence: Spatially resolved stellar pop. properties in bulges and disks R. M. González Delgado, et al., A&A, 581:A103 (2015), arXiv:1506.04157.
- 22. LSQ14bdq: A Type Ic super-luminous supernova with a double-peaked light curve M. Nicholl, et al., APJ LETTERS, 807:L18 (2015), arXiv:1505.01078.
- 21. Central star formation and metallicity in CALIFA interacting galaxies J.K. Barrera-Ballesteros, et al., A&A, 579:A45 (2015), arXiv:1505.03153.
- 20. Early-time light curves of Type lb/c supernovae from the SDSS-II Supernova Survey F. Taddia, et al., A&A, 574:A60 (2015), arXiv:1408.4084.
- 19. Imprints of galaxy evolution on HII regions. Memory of the past uncovered by the CALIFA survey. S.F. Sánchez, et al., A&A, 574:A47 (2015), arXiv:1409.8293.
- 18. Defining photometric peculiar type la supernovae S. González-Gaitán, et al., APJ, 795:142 (2014), arXiv:1409.4811.
- 17. CALIFA: a diameter selected sample for an Integral Field Spectroscopy galaxy survey C.J. Walcher, et al., A&A, 569:A1 (2014), arXiv:1407.2939.
- 16. The Core Collapse Supernova Rate from the SDSS-II Supernova Survey M. Taylor, et al., APJ, 792:135 (2014), arXiv:1407.0999.
- 15. Insights on the stellar mass-metallicity relation from the CALIFA survey R. M. González Delgado, et al., APJ LETTERS, 791:L16 (2014), arXiv:1407.1315.
- 14. Improved cosmological constraints from a joint analysis of the SDSS-II and SNLS supernova samples. M. Betoule, et al., A&A, 568:A22 (2014), arXiv:1401.4064.
- 13. Hubble Space Telescope and ground-based observations of the type lax supernovae SN 2005hk and SN 2008A C. Mc Cully, et al., APJ, 786:134 (2014), arXiv:1309.4457.
- 12. Host galaxy spectra and consequences for SN typing from the SDSS SN Survey. M. D. Olmstead, et al., AJ, 147:75 (2014), arXiv:1308.6818.
- 11. A characteristic oxygen abundance gradient in galaxies disks unveiled with CALIFA S.F. Sánchez, et al. , A&A, 563:A49 (2014), arXiv:1311.7052.

- The effect of weak lensing on distance estimates from supernovae.
   M. Smith, et al., APJ, 780:24 (2014), arXiv:1307.2566.
- 9. The effects of spatial resolution on Integral Field Unit Surveys at different redshift. The CALIFA perspective. D. Mast, et al., A&A, 561:129 (2014), arXiv:1311.3941.
- 8. The N2 and O3N2 indicators revisited: improved calibrations based on CALIFA and  $T_e$ -based literature data. R. A. Marino, et al., A&A, 559:114 (2013), arXiv:1307.5316.
- 7. The nature of LINER galaxies: Ubiquitous hot old stars plus rare accreting black holes. R. Singh, et al., A&A, 558:A43 (2013), arXiv:1308.4271.
- 6. Properties of type la supernovae inside rich galaxy clusters. H. S. Xavier, et al., MNRAS, 434:1443 (2013), arXiv:1304.6431.
- 5. Nebular emission and the Lyman continuum photon escape fraction in CALIFA early-type galaxies. P. Papaderos, et al., A&A LETTERS, 555:L1 (2013), arXiv:1306.2338.
- 4. Mass-Metallicity relation explored with CALIFA. I. Is there a dependence on the star-formation rate?. S. F. Sánchez, et al., A&A, 554:A58 (2013), arXiv:1304.2158.
- 3. CALIFA, the Calar Alto Legacy Integral Field Area survey: II. First public data release. B. Husemann, et al., A&A, 549:A87 (2013), arXiv:1210.8150.
- 2. A Measurement of the Rate of Type Ia Supernovae in Galaxy Clusters from the SDSS-II Supernova Survey. B. Dilday, et al., APJ, 715:1021-1035 (2010), arXiv:1003.1521.
- 1. Measurements of the Rate of Type Ia Supernovae at Redshift  $z \lesssim 0.3$  from the SDSS-II Supernova Survey. B. Dilday, et al., APJ, 713:1026-1036 (2010), arXiv:1001.4995.

#### **Thesis**

2. Supernova studies in the SDSS-II/SNe Survey: spectroscopy of the peculiar SN 2007qd, and photometric properties of Type-Ia supernovae as a function of the distance to the host galaxy.

 $\textbf{\textit{Llu\'e Galbany}}, \ PhD \ thesis, \ Universitat \ Aut\`onoma \ de \ Barcelona, \ Departament \ de \ F\'isica, \ 28 \ 10 \ 2011 \ and \$ 

Supervisor: Dr. Ramon Miquel. Tribunal: Dr. Robert C. Nichol, Dr. Enrique Fernàndez, Dr. Francisco J. Castander BASES DE DATOS DE TESIS DOCTORALES (TESEO), REF. 936108

1. Tests of DES Charge Coupled Devices

 $\textbf{\textit{Llu\'{is} Galbany}}, \, \text{Master thesis (DEA)}, \, \text{Universitat Aut\'onoma de Barcelona}, \, \text{Departament de F\'{s}ica}, \, 18 \,\, 04 \,\, 2008$ 

Supervisor: Dr. Ramon Miquel, Dr. Manel Martínez. Trib.: Dr. Eduard Massó, Dr. Enrique Fernàndez, Dr. Francisco J. Castander BIBLIOTECA DE CIÈNCIA I TECNOLOGIA (UAB), T-53 2008 GAL

## Invited presentations and selected talks

### (I: invited, S: seminar, C: contributed):

- Apr 2023 I: Introduction to Integral Field Spectroscopy, ENGRAVE Data analysis meeting.
- Jan 2023 C: Supernova science at ICE-CSIC, CRISPisha, Cádiz.
- Sep 2022 S: A new measurement of H0 with SNe Ia in the NIR, RC SEA 2022, La Laguna.
- Jul 2022 S: A SN in the borough: IFS so SN host galaxies, NAOJ, Tokyo.
- Jul 2022 S: Integral field spectroscopy so SN host galaxies, U Kyoto, Kyoto.
- Jun 2022 C: Cosmography of Laniakea: SNe Ia, pec. vel. and DM, NOT workshop, La Palma.
- May 2022 C: The metallicity of SN la progenitors, Estallidos de formación estelar meeting, Madrid.
- Feb 2022 S: IFS of SN hosts, U. Purdue, IN.
- Feb 2022 S: Cornering H0 form SNe Ia in the NIR, ICE-CSIC.
- Feb 2022 S: Cornering H0 form SNe Ia in the NIR, IAC, Tenerife.
- Dec 2021 S: Dust, HO, SNe, King's College London.
- May 2020 C: Type Ia SNe evolution studied with IFS: the low and high-z examples, CSIC, Madrid.
- Apr 2020 S: A SN in the borough: IFS of SN hosts, NYU Abu Dhabi (POSTPONED COVID-19).
- Mar 2020 C: The Legacy Andalusian Transient IFU Network Observatory (LATINO), IAA, Granada.
- Jan 2020 C: The AMUSING survey, CRISPINHO workshop, Granada.
- Oct 2019 S: A SN in the borough: integral field spectroscopy of SN hosts, UNAM México.
- Oct 2019 C: IFS follow up of CSP SNIa host galaxies, Carnegie Obs, Passadena.

- Sep 2019 C: Dones and ToDos in IFS surveys of SN hosts, U. de Southampton, UK.
- Sep 2019 S: Constraining progenitors with integral field spectroscopy, U. de Granada.
- Sep 2019 S: Surveys of integral field spectroscopy of SN hosts, Florida State University, Tallahassee, FL.
- Aug 2019 I: Progenitors of Type la supernovae conference, Lijiang, Yunnan, China.
- Jul 2019 C: Analyzing Integral field spectroscopy data CRISP workshop, Lisbon, Portugal.
- Feb 2019 C: A 1991bg-like SNIa 2016hnk, Carnegie SN Project meeting, Saint George Island, FL.
- Dec 2018 C: Testing WFIRST simulations with SNEMO, Lawrence Berkeley National Lab, CA.
- Nov 2018 S: SN la local environments with IFS, University of Pennsylvania, Philadelphia PA.
- Nov 2018 S: SN 2016hnk, a Ca-rich 91bg-like SN la with a light echo, ESO, Santiago, Chile.
- Nov 2018 C: The local environment of type Ia SNe as seen with IFS, Bariloche, Argentina.
- Jul 2018 C: A Ca-rich faint 91bg-like type Ia SN, Institute for Astrophysics, Honolulu HI.
- Jul 2018 C: CSP SN Ia environments with IFS. Carnegie SN Project meeting, IfA, Honolulu HI.
- Jul 2018 C: A Ca-rich faint 91bg-like type la SN, Lorentz center, Leiden.
- Jun 2018 S: Inferring SN progenitor properties with J-PLUS, CEFCA, Teruel.
- Jun 2018 S: Using the environment to infer SN progenitor properties, U. Zaragoza.
- Jun 2018 S: Using the environment to infer SN progenitor properties, U. Barcelona.
- Jun 2018 S: The Pmas/ppak Integral-field SN hosts COmpilation (PISCO), IAA Granada.
- Jun 2018 S: Using the environment to infer SN progenitor properties, U. Autònoma de Barcelona.
- Dec 2017 S: The Pmas/ppak Integral-field SN hosts COmpilation (PISCO), CfA Harvard MA.
- Oct 2017 C: The local environment of type Ia SNe as seen with IFS, Carnegie Observatories, Pasadena.
- Mar 2017 S: The All-weather MUse SN Integral field Nearby Galaxies survey, U. Oulu, Finland.
- Mar 2017 S: PISCO and AMUSING: IFS of SN environments, University of Turku, Finland.
- Feb 2017 S: Integral field spectroscopy of SN environments, University of Toronto, Canada.
- Feb 2017 S: What's there? Integral field spectroscopy to study SN environments, U. Pittsburgh PA.
- Nov 2016 I: The All-weather MUse AN Integral field Nearby Galaxies survey, IFS school UAM, Madrid.
- Nov 2016 I: SN remnant dominated regions and SN rates with IFS, IFS school UAM, Madrid.
- Nov 2016 C: Spectrophot. SNII template: A SiFTO fitter for SNeII. LSST SN workshop, Pittsburgh.
- Aug 2016 C: SN environmental studies through IFS. SNe through the ages:, Easter Island, Chile.
- Jul 2016 C: SN environmental studies through IIFS. XII RC SEA 2016, Bilbo, Spain.
- Jul 2016 C: The All-weather MUse Supernova Integral field Nearby Galaxies (AMUSING) survey. EWASS 2016, Athens, Greece.
- Jun 2016 C: Standardization of SN II with statistical methods. Meeting on Fundamental Cosmology, Barcelona.
- Jun 2016 S: Environmental studies of SNe. CIEMAT, Madrid, Spain.
- May 2016 C: Statistical methods in SN II light-curves. South American Supernovae 2016, La Plata, Argentina.
- Mar 2016 C: The local environment of SNe as seen with IFS. SOCHIAS 2016, Antofagasta, Chile.
- Jun 2015 C: Nearby supernova host galaxies from the CALIFA survey. EWASS 2015, La Laguna, Spain.
- Jun 2015 C: The local environment of SNe., IX PESSTO meeting, Paris, France.
- May 2015 S: Characterizing SN host galaxies with IFS. European Southern Observatory, Santiago, Chile.
- Apr 2015 C: PCA of type II SN light-curves. South American Supernovae 2015, Santiago, Chile.
- Apr 2015 C: SN studies with IFS: the CALIFA contribution. CALIFA Busy Week, Firenze, Italy.
- Sep 2014 S: Characterizing SN host galaxies with IFS. Universidad de Guanajuato, Mexico.
- Aug 2014 I: What can IFS shine on SN progenitors. I: Studying SN environments with IFS. Guillermo Haro Advanced School on IFS Techniques and Analysis, INAOE, Puebla, Mexico.
- May 2014 S: Integral Field Spectroscopy of nearby supernova host galaxies, IEEC-UAB.
- Nov 2013 C: Studying SNe environment with CALIFA Survey. XIV LARIM, Florianópolis, Brasil.
- Jul 2013 C: Integral Field Unit spectroscopy of supernova host galaxies. XXIII Encontro Nacional de Astronomía e Astrofísica (ENAA), CAAUL Universidade de Lisboa, Portugal.
- Apr 2013 S: IFU spectroscopy of SN host galaxies. Universidad de Chile, Santiago, Chile.
- Apr 2013 C: IFU spectroscopy of SN host galaxies. CALIFA 5th Busy Week, AIP, Potsdam, Germany.
- Jan 2013 S: Using the environment to understand SNe properties. CIEMAT, Madrid, Spain.
- Nov 2012 C: Studying CCSNe environment with CALIFA Survey. CALIFA 4th Busy Week, IAA, Granada.
- Aug 2012 C: Type-la SNe standarization accounting for the environment. Modern Cosmology: Early Universe, CMB and LSS, Benasque Center for Science, Benasque, Spain.
- Oct 2010 C: Type-la SDSS-II/SNe properties as a function of the distance to their host galaxies. SDSS-II/SN Collaboration Meeting, Argonne National Laboratory, IL, USA.

	Seat in the Collaboration Council.
2021 - present	Sponsored member of the Dark Energy Spectroscopic Instrument (DESI).
2018 - present	Member of the Electro-magnetic counterparts of GW at the VLT (ENGRAVE). MUSE instrument scientist (with J. Lyman).
2017 - present	Member of the WFIRST SIT for SNIa cosmology (PI: S. Perlmutter).
2016 - present	Member of the J-PLUS collaboration.  Leading the SN environments working group.
2016 - present	Full member of the LSST Dark Energy Science Collaboration (DESC). Served in the Publication Board committee (2019-2021). Serving as a co-chair of the Speakers Bureau (2021-present). Serving in the Collaboration Council (2023-present).
2016 - present	External collaborator of the Hyper Suprime Cam Survey (HSCS) for SNe II and SLSNe.
2016 - 2021	Member (until 2019; EC since then) of the Sloan Digital Sky Survey IV (SDSS-IV). PI of an ancillary program in MaNGA to observe SN host galaxies.
2015 - present	Member (EC until 2021) of the Dark Energy Survey (DES). Leading the SNII working group.
2015 - 2016	Member of the Chilean Scientific Coordination Committee for the LSST.
2013 - present	Member of Public ESO Spectroscopic Survey of Transient Objects (PESSTO $\rightarrow$ ePESSTO+). Serving as the ePESSTO+ Ombudsperson, and in the Target And Alert (TAT) committee. PI of the <i>SN environments</i> and the <i>SNIa cosmology in the NIR</i> science groups.
2011 - 2017	Associate member of the Calar Alto Legacy Integral Field Area Survey (CALIFA). Responsible of the external ancillary data catalogues.
2008 - 2014	External member of the Sloan Digital Sky Survey II - Supernova Survey (SDSS-II/SNe).
2006 - 2011	Participant member of the Dark Energy Survey (DES)

## Major collaborators

J. P. Anderson (ESO, Chile), S. Gónzalez-Gaitán (CENTRA, Portugal), M. Stritzinger (U. Aarhus), M. Phillips (Carnegie Obs.), E. Hsiao (FSU), S. F. Sánchez (UNAM, México), H. Kuncarayakti (U. Turku, Finland), F. Förster (CMM, U. Chile), I. Domínguez (UGR, Spain), M. Hamuy (DAS, U. Chile), C. Badenes (U. Pittsburgh), M. A. Pérez-Torres (IAA-CEFCA), M. Mollá (CIEMAT, Spain), A. R. López-Sánchez (Macquire U.), F. F. Rosales-Ortega (INAOE, México), Y. Ascasibar (UAM, Spain), J. M. Vílchez (IAA, Spain), A. M. Mourão (IST, Lisbon), R. Miquel (IFAE-UAB, Spain).

## Observing experience

— Only those as a Principal investigator (PI):

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Hubble Space Telescope (HST)
                     2.4m / WFC3
                                    Cycle 30. 17179, 232 orbits (Service mode; SM).
                                    Cycle 29. 16741, 218 orbits (Service mode; SM).
Cerro Paranal Observatory (CPO)
                8.1m UT4 / MUSE
                                    20B. 106.2104.001, 53 hours (SM).
                                    17A. 099.D-0022(A), 45 hours (SM).
                                    16B. 098.D-0115(A), 99 hours (SM).
                                    14B. 60.A-9329(A), 4 hours (SM).
               8.1m UT1 / KMOS
                                    22A. 0109.22Y8.001, 3 hours (SM).
                                    19B. 0104.D-0498(A), 36 hours (SM).
               8.1m UT4 / HAWKI
                                    22A. 0109.22WW.001, 66 hours (SM).
Las Campanas Observatory (LCO)
      6.5m Baade Telescope / FIRE
                                    16B. CN2016B-17, 2 nights (Visitor mode; VM).
      6.5m Clay Telescope / LDSS3
                                    16B. CN2016B-16, 4 nights (VM).
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Observatorio Roque de Los Muchachos (ORM)

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10.4m Gran Telescopio Canarias / EMIR
                                                      23A. 3-GTC5-B/23A, 10 hours.
                                                      22B. 4-MULTIPLE-2/22B, 10 hours.
                                                      22A. 49-MULTIPLE-2/22A, 10 hours.
                                                      21A. 57-GTC36/21A, 18 hours.
                                                      20B. 5-GTC3/20B, 20 hours.
             10.4m Gran Telescopio Canarias / OSIRIS
                                                      23A. 3-GTC4-A/23A, 14 hours.
                                                      22B. 4-MULTIPLE-2/22B, 8 hours.
                                                      22A. 49-MULTIPLE-2/22A, 14 hours.
                                                      20B. 11-GTC9/20B, 6 hours (ToO).
                                                      20A. 76-GTC52/20A, 10 hours (ToO).
           4.5m William Herschel Telescope / PFQHY
                                                      21B. SW2021a13, 16h (SM).
                                                      21B. SW2021a26, 28h (SM).
       4.5m William Herschel Telescope / ACAM-LIRIS
                                                      20A. 150-WHT5/20A, 4 nights.
            2.5m Nordic Optical Telescope / NOTCam
                                                      23A. 5-NOT1/23A, 6 nights.
                                                      22A. 38-NOT2/22A, 6 nights.
                                                      21B. 74-NOT10/21B, 6 nights.
                                                      21A. 58-NOT4/21A, 6 nights.
                                                      20B. 6-NOT2-A/20B, 6 nights.
                          Gemini Observatory (GO)
                              8.2m G-North / GMOS
                                                      18B. NOAO-2018B-0060, 10 hours (SM).
                                                      18A. NOAO-2018A-0125, 1.1 hours (SM).
                                                      18A. NOAO-2018A-0040, 10 hours (SM).
                              8.2m G-South / GMOS
                                                      15B. GS-2015B-Q-8, 10 hours (SM).
  Cerro Tololo Inter-American Observatory (CTIO)
                1.3m SMARTS telescope / ANDICAM
                                                      19A. 2019A-0081, 42 hours (SM).
                                                      18B. 2018B-0016, 42 hours (SM).
                                                      18A. 2018A-0047, 30 hours (SM).
Centro Astronómico Hispano de Andalucía (CAHA)
                       3.5m telescope / OMEGA2000
                                                      23B. 23B-3.5-005, 4 nights (VM).
                                                      23A. 23A-3.5-004, 4 nights (VM).
                                                      22B. 22B-3.5-008, 3 nights (VM).
                                                      22A. 22A-3.5-002, 4 nights (VM).
                                                      21B. 21B-3.5-003, 4 nights (VM).
                                                      21A. F21-3.5-003, 4 nights (SM).
                                                      20B. H20-3.5-002, 4 nights (SM).
                        3.5m telescope / PMAS-Ppak
                                                      23B. 23B-3.5-004, 4 nights (VM).
                                                      23A. 23A-3.5-003, 4 nights (VM).
                                                      22B. 22B-3.5-007, 4 nights (VM).
                                                      22A. 22A-3.5-011, 5 nights (VM).
                                                      20B. H20-3.5-001, 4 nights (VM).
                                                      20A. F20-3.5-008, 5 nights (VM).
                                                      18B. H18-3.5-008, 6 nights (VM).
                                                      18A. F18-3.5-001, 3 nights (SM).
                                                      17B. H17-3.5-001, 2 nights (SM).
                                                      17A. F17-3.5-001, 3 nights (SM).
                                                      16B. H16-3.5-012, 2 nights (SM).
                                                      16A. F16-3.5-006, 5 nights (SM).
                                                      15B. H15-3.5-004, 4 nights (VM).
       Astronomical Australian Observatory (AAO)
                       4.2m AAT telescope / KOALA
                                                      18A. A/2018A/19, 11 nights (VM).
    Observatorio Astroómico de Javalambre (OAJ)
                           0.8m telescope / T80Cam
                                                      21A. 2000182, 44.24 hours (SM).
                                                      20B. 2000177, 47.52 hours (SM).
                                                      20A. 1900165, 47.52 hours (SM).
                                                      19B. 1900154, 47.52 hours (SM).
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19A. 1800146, 46.9 hours (SM).

#### Observatori Astronòmic del Montec (OAdM)

0.8m telescope / T80Cam

23A-24B. p477, 280 hours (remote).

22B. p425, 45 hours (remote).

22A. p389, 45 hours (remote).

21B. p351, 45 hours (remote).

#### Apache Point Observatory (APO)

2.5m SDSS telescope / BOSS

17B. MaNGA Ancillary program, 30 objects (SM).

## Organization of scientific meetings and seminar series

- Jun 2022 Organizer of the extended Public ESO Spectroscopic Survey of Transient Objects + (ePESSTO+) meeting, Barcelona, Jun 20th to 22nd.
- May 2022 LOC member of the 16th Iberian Cosmology (IberiCOS) 2022 meeting, May 4-6.
- Sep 2021 SOC member of the Encontro Nacional de Astronomia e Astrofisica (ENAA) 2021, Sep 8-10.
- Jul 2020 SOC member of the Dark Energy Science Collaboration (DESC) virtual meeting, Jul 20-24.
- Jun 2020 Chair of the special session Supernova host environments at the EAS 2020, Leiden, NL.
- Mar 2020 SOC member of the *Public Surveys and new instrumentation for Calar Alto Observatory* workshop, Granada, Mar 12-13.
- Jan 2020 Organizer of the workshop CRISPINHO: Correcting reddening intelligently for cosmological supernova probes, Granada, Jan 27-31.
- Sep 2019 Organizer of the workshop The future of SN host galaxies studies II, Southampton, UK, Sep 23-25.
- Jan 2019 Organizer of the workshop The future of SN host galaxies studies, Pittsburgh, USA, Jan 22-24.
- Organizer of the workshop New advances in NIR SNIa science, Pittsburgh, USA, April 11-13. Apr 2018
- Mar 2018 Organizer of the workshop SN II cosmology in the LSST, Pittsburgh, USA, March 5-9.
- 2017 2019 Organizer of the Astro Seminars at the Department of Physics and Astronomy U. Pittsburgh.
  - Nov 2016 Organizer of the workshop Preparing for supernova science in the LSST era: a kick-off workshop, Pittsburgh, USA, November 16-18.
  - LOC member of the DEC LSST Hack Week, Pittsburgh, US, November 7-11. Nov 2016
  - Aug 2016 LOC member of the conference Supernovae through the ages: understanding the past to prepare for the future, Easter Island, Chile, August 9-13. Funding: several sources including ESO-Chile, AURA, Carnegie observatories, MAS, and CASSACA.
  - Organizer of the workshop SIDH: Supernova is in da house, Santiago, Chile, August 1-5. Funding: Aug 2016 \$200,000 CLP from the Millennium Institute for Astrophysics (MAS).
- 2014 2015 Organizer of 'Supernova Journal Club' seminar series (DAS).
- 2009 2010 Organizer of PhD students 'Thursday's Meeting seminar series (IFAE).

#### Research visits

#### National Central University (NCU). Taiwan. Apr 2023

Type la supernova photospheric velocities and their environment

Collaborators: Prof. Yen-Chen Pan.

#### Oct 2022 Institute for Astronomy (IfA). U. Hawai'i.

Type la supernova peculiar velocities and  $\sigma_8$ .

Collaborators: Prof. Ben Shappee, and Dr. Thomas de Jaeger.

National Astronomical Observatory of Japan (NAOJ). Under the NAOJ visitor program. Jul 2022

Type IIn supernova environments and relation to SN properties.

Collaborator: Dr. Takashi Moriya.

#### Mar 2022 University of Aarhus, Denmark

Status and development of the FLOWS project.

Collaborator: Prof. Maximillian Stritzinger.

#### Oct 2019 Instituto de Astronomía, UNAM, Mexico City Quality control pipeline for the AMUSING survey. Collaborator: Prof. Sebastián Sánchez. Carnegie Observatories, Pasadena Oct 2019 Preparation of the next stage of the Carnegie Supernova Project (CSP). Collaborator: Dr. Christopher Burns. Jul 2019 Universidade de Lisboa, Portugal. Correcting reddening intelligently for cosmological supernova probes (CRISP). Collaborator: Dr. Santiago González-Gaitán. Nov 2018 European Southern Observatory (ESO), Chile. Executive meeting for the AMUSING survey. Collaborator: Dr. Joseph Anderson. University of Southampton, UK. Oct 2018 SN Ia environments with IFS. Collaborators: Dr. Matthew Smith and Prof. Mark Sullivan. May 2018 Macquaire University, AUS. IFS observations with KOALA. Collaborator: Dr. Ángel R. López-Sánchez. Feb 2018 University of Berkeley, US. Type II SN cosmology in the Dark Energy Survey. Collaborator: Dr. Thomas de Jaeger. Centro Inv. Energéticas, Medioambientales y Tecnológicas (CIEMAT), SPAIN. Jun 2017 Intermediate redshift type la supernova host galaxies. Collaborator: Dra. Mercedes Mollá University of Turku, FINLAND. Under the FINCA visitor program. Mar 2017 Integral Field Spectroscopy of SN host galaxies. Collaborator: Dr. Hanindyo Kuncarayakti, Dr. Seppo Matila. University of Berkeley, US. Feb 2017 Type II supernova cosmology. Collaborator: Dr. Thomas de Jaeger. Centro Inv. Energéticas, Medioambientales y Tecnológicas (CIEMAT), SPAIN. Jun 2016 Metallicity dependence on SN Ia luminosity. Collaborator: Dra. Mercedes Mollá Feb 2016 University of Pittsburgh, US. Type Ia supernova cosmology in the NIR. Collaborators: Dr. Michael Wood-Vasey and Dr. Carles Badenes. Instituto de Astrofísica de Canarias, SPAIN. Jun 2015 Spectroscopic characterization of SN 2014J. Collaborators: Dr. Jonay I. González Jun 2014 University of Southampton & Institute of Cosmology and Gravitation, Portsmouth, UK. Supernova science with DECam. Collaborators: Dr. Francisco Förster, Dr. Mark Sullivan, Dr. Robert Nichol Departamento de Astronomía, Universidad de Chile, CHILE. Apr 2013 Core-collapse and type Ia SNe environmental studies.

Collaborators: Dr. Joseph Anderson

Jan 2013 Centro Inv. Energéticas, Medioambientales y Tecnológicas (CIEMAT), SPAIN.

Type Ia SN standardization accounting for host galaxy metallicity.

Collaborator: Dra. Mercedes Mollá

Feb 2007 Fermi National Laboratory (FNAL), US

Studies related to DES CCD characterization.

Supervisors: Dra. Brenna Flaugher and Dr. Juan Estrada

- 26/05/2023 Outreach talk about DESI at the Granollers planetarium (Link).
- 26/04/2023 Outreach talk within the Cicle d'astronomia of the Centre Excursionista de Cardedeu.
- 25/04/2023 Outreach talk for the Aula d'Extensió Universitària del VO (AGEVO) at the Museu de Granollers.
- 29/11/2022 Ciència amb tirador, short public talks in a bar. Third session at Bar Anònims, Granollers (Link).
- 17/11/2022 Nit de la Recerca, telescope observations at UAB.
- 27/10/2022 Outreach talk at the Agrupació Astronòmica de Barcelona (ASTER).
- 14/09/2022 Ciència amb tirador, short public talks in a bar. Second session at Bar Anònims, Granollers (Link).
- 25/07/2022 Director of La veu còsmica, podcast of poetry, music and science (Funded by FCRI).
- 19/05/2022 Interview at Vallès Oriental TV, about astronomy and the city of Granollers (Link).
- 18/05/2022 Ciència amb tirador, short public talks in a bar. First session at Bar Anònims, Granollers (Link).
- 28/04/2022 Amb G de Granollers interview for the strategic plan of the city (Link).
- 17/02/2022 Press release on a Nature Astronomy article *SN 2018aoz, the earliest detection of a type la supernova to date,* (ICE, IEEC, CSIC).
- 12/12/2021 Interview in *La esfera celeste* Astronomy blog (Link).
- 24/11/2021 Outreach talk at l'Alzina primary school, Molins de Rei.
- 18/03/2021 Two outreach talks at the mental health unit of the juvenile detention center Els Til·lers.
- 12/11/2020 Interview in *La esfera celeste* Astronomy blog (Link).
- 14/11/2019 Outreach talk at José Hurtado Primary school, Granada. "What is a star?" (IAU100).
- 08/11/2019 Participation in "Semana de la Ciencia" at UGR. Speaker in Stand 5 "Stellar evolution" (Link).
- 23/06/2018 "Perfils", interview in the online newspaper Nació digital (in Catalan, Nació Digital).
- 20/06/2018 Interview in the La Xarxa television (in Catalan, Vallès Oriental TV).
- 30/05/2018 'Career day' at the Environmental Charter School, outreach talk. Pittsburgh PA.
- 18/03/2016 "Supernovas, explosiones en el universo", outreach talk at the Colegio Su Santidad Juan XXIII, San Joaquín, Chile (in Spanish, Día de astronomia, CONICYT).
- 18/03/2016 "Supernovas, explosiones en el universo", outreach talk at the Colegio Malaquias Concha, La Granja, Chile (in Spanish, Día de astronomia, CONICYT).
- 01/12/2015 "Supernovas, explosiones estelares", outreach talk at the Liceo Bicentenario Zapallar high school, Curicó, Chile (in Spanish, http://www.astrofisica.cl/?p=4904).
- 30/11/2015 "Supernovas, explosiones estelares", outreach talk at the Liceo Complejo Educacional Javiera Carrera high school, Talca, Chile (in Spanish, http://www.astrofisica.cl/?p=4904)
- "Qué son los meteoritos?", outreach talk at the Pintacuentos primary school, Las Condes, Chile (in Spanish, http://www.astrofisica.cl/?p=4287).
- 03/02/2014 "Esclata la Supernova més propera a la Terra des de 1604", press article in the online newspaper Nació digital (in Catalan, Nació Digital).
- 10/02/2014 "Un granollerí que estudia l'Univers a Santiago de Xile", short interview for the La Xarxa television (in Catalan, Vallès Oriental TV).
- 28/12/2012 "Supernovas, la llave del lado oscuro del Universo", outreach talk at the llatargi Astronomical Association, Oñati, Spain (in Spanish, El Correo).

## Languages

Catalan Native speaker
Spanish Native speaker
English CEFR C1
Portuguese CEFR A2.

## Astronomical society membership

2020 - present International Astronomical Union (IAU)
 2019 - present European Astronomical Society (EAS)
 2016 - present Sociedad Española de Astronomía (SEA)
 2015 - 2016 Sociedad Chilena de Astronomía (SOCHIAS)

#### Other merits

- Regular revieer for journals: ApJL, ApJ & AJ (US), MNRAS (UK), JCAP (UK/IT), Galaxies (Switzerland).
- Mar 2023 Reviewer for the Spanish National Research Agency (AEI).

- Nov 2022 External referee for the Polish National Science Centre.
- Nov 2022 Member of the Tribunal in João Gonçalves (U. Lisboa) Master thesis defense.
- Feb 2023 Expected Bachelor in Economics, UAB (229/240 credits passed. Only missing TFG).
- Jan 2022 Member of the ICE postdoctoral Fellowship committee.
- Since Oct 2021 Treasurer of the Social and Solidarity Economy consumers association La Magrana Vallesana.
  - May 2021 Reviewer for the Hubble Space Telescope Cycle 29 proposals.
  - 2020-2021 ESO Observing Programmes Committee (OPC) Panel member for periods P106, P108 (P107 cancelled), and P109.
  - Apr 2020 Profesor Contratado Doctor credential awarded from the Agencia Nacional de Evaluación de la Calidad y Acreditación (ANECA).
  - Oct 2019 Reviewer for the Hubble Space Telescope Cycles 26 and 27 Mid-cycle proposals.
  - May 2019 CIRTL course on Diversity in the College Classroom.
  - Apr 2019 Lecturer (*Lector*) credential issued by the Agència per a la Qualitat Universitària (AQU) de Catalunya.
  - Dec 2018 Associate certification from the Center for the Integration of Research, Teaching, and Learning (CIRTL), University of Pittsburgh.
  - 2017 DDT External reviewer for the Spanish Time Allocation Committee (CAT) of the Instituto de Astrofísica de Canarias (IAC).
    - Jul 2016 Member of the Tribunal in Manuel Moreno-Raya PhD thesis defense.
- 2016A semester External reviewer for the Spanish Time Allocation Committee (CAT) of the Instituto de Astrofísica de Canarias (IAC).
  - Dec 2015 Tenured assistant professor (*Recerca*) credential issued by the Agència per a la Qualitat Universitària (AQU) de Catalunya.
  - Jun 2011 Training Program for Higher Education Teachers (FDES-UAB).
  - Jun 2010 Corrector of University Access Exams (PAU).
    - 2008 Radiological protection program at UTPR (UAB).