Lluís Galbany

ORCID Number: 0000-0002-1296-6887
Profile SAO/NASA ADS: https://ui.adsabs.harvard.edu
Profile Google Scholar: https://scholar.google.com
Profile INSPIRE-HEP: https://inspirehep.net

Institute of Space Sciences (ICE-CSIC)
Institut d'Estudis Espacials de Catalunya (IEEC)
✉ l.g@csic.es
☞ https://lgalbany.github.io

Education

Sep 2008 - Jun 2023	**BSc Economics (4-year degree)**, Universitat Autònoma de Barcelona (UAB).
Sep 2006 - Oct 2011	**PhD 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	**MSc Physics**, Universitat 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	**BSc Physics (5-year degree)**, U. Autònoma de Barcelona (UAB).

Research experience

Since Dec 2023	**Científico Titular OPI**. Institut de Ciències de l'Espai (ICE-CSIC).
Sep 2021 - Dec 2023	**Ramon y Cajal fellow (2019, ranked 1st).** 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

Oct 2025	MdM Thematic core on supernova science: ICE 6,000 EUR.
Jul 2025	8th ICE Summer School on cosmology: 12,000 EUR.
May 2025	Pro ERC FUNDS grant from CSIC: 5,000 EUR.
Sep 2024	Proyecto Nacional I+D+i AYA PID2023-151307NB-I00. Funding: 140,750 EUR.
Dec 2023	CSIC I-COOP project (COOPB23040). Funding: 23,929.60 EUR.
Dec 2023	CSIC I-LINK B project (ILINK23001). Funding: 23,949.64 EUR.
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: ∼90,000 USD.
Dec 2021	CSIC MOST 2021 project (OSTCSI0003). Funding: 23,946.20 EUR.
Dec 2021	CSIC I-LINK A project (LINKA20409). Funding: 23,914.92 EUR.
Sep 2021	Hubble Space Telescope Cycle 29 #16741 proposal. Funding: ∼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 2019*. 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. 1,500,000 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-UAB. 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	**Guest Lecturer** *Guillermo Haro Advanced School on IFS 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 mentoring

Postdoctoral researchers

Mar 26 - Feb 29	**Panagiotis Charalampopoulos**, ICE-CSIC. A hunt for nuclear transients in the LSST era. Funding: Ajudes Beatriu de Pinós (BP 2024), MCSA COFUND Action.
May 23 - Apr 26	**Claudia Gutiérrez**, IEEC/ICE-CSIC. CC SN physiscs. Funding: Ajudes Beatriu de Pinós (BP 2021), MCSA COFUND Action.
Oct 22 - Dec 25	**Maria Kopsachielli**, ICE-CSIC. SN remnants environments. Funding: ICE María de Maetzu (MdM) postdoctoral fellowship. Funding: Ayudas Juan de la Cierva (JdC), Ref.: JDC2022-049447-I.
Nov 21 - Dec 24	**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 Jul 2025	**Ramon Sanfeliu**, ICE-UAB. The next generation of SN cosmology: H_0 & σ_8. Funding: Ajuts Joan Oró per a personal investigador predoctoral en formació (FI-2025).
From Mar 2025	**Hao Yu Miao**, ICE-UAB. *PhD co-supervisor with Claudia Gutiérrez*. Extreme SNe. Funding: JAE-PRE CSIC fellowship.
From Nov 2023	**Alaa Alburai**, ICE-UAB. *PhD supervisor*. Subluminous 1991bg-like SNe Ia. Funding: Proyecto Intramural Especial (PIE) CSIC 20215AT016.
From Nov 2023	**Maider González**, ICE-UAB. *PhD co-supervisor with Caludia Gutiérrez*. SNe in early phases. Funding: Institute of Space Sciences MdM fellowship.
Sep 22 - Jun 26	**Dane Cross**, ICE/IFAE-UAB. *PhD co-supervisor with Carles Sánchez*. σ_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).
Sep 22 - Aug 26	**Cristina Jiménez**, ICE-UAB. *PhD supervisor*. IFS SN Ia environments characterization. Funding: "Ayudas para contratos predoctorales para la formación de doctores 2020".
May 22 - Mar 26	**Kim Phan**, ICE-UAB. *PhD supervisor*. H_0 determination from SN Ia in the near-infrared. Funding: Ajuts per a personal investigador predoctoral en formació (FI-2022).
Sep 20 - Sep 24	**Raúl González Díaz**, INAOE/ICE-UAB. *PhD co-supervisor with Fabián Rosales*. Diffuse interstellar gas in IFS.
Abr-Jul 2016	**Laura Sánchez-Menguiano**, U. Granada. *Supervised by I. Pérez and S. F. Sánchez*. Radial migration. Funding: Ayudas a la movilidad predoctoral para estancias en centros de I+D 2015.
Aug-Nov 2014	**Manuel Emilio Moreno-Raya**, U. Complutense. *Supervised by M. Mollá and A. López-Sánchez*. Elemental abundances of low-z SN host galaxies. Funding: Ayudas a la movilidad predoctoral para estancias en centros de I+D 2013.

Master students

Mar-Jun 24	**Noor Ali**, ICE-UAB. *Supervisor*. The host galaxies of the Dark Energy Survey 5YR SN sample.
Sep 23 - Jun 24	**Ramon Sanfeliu**, U. Autònoma de Barcelona. *TFM supervisor*. Metallicity dependence on SHOES Cepheids calibration.

Mar 23 - Jun 23 **Christos Thomopoulos**, U. Patras, Greece. *ERASMUS+*.
SNIa NIR diversity and improved standardization.

Mar 23 - Jun 23 **John Kyriakopoulos**, U. Patras, Greece. *ERASMUS+*.
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.

Nov 22 -Aug 23 **Lara Piscarreta**, U. Lisboa. *JAE-ICU supervisor*.
Young supernova programme with GTC.

From Oct 22 **Utsav Siwatoki**, Kathmandu U. (Nepal). *TFM supervisor*.
FP and TF distances of elliptical/spiral galaxies observed with IFS.

Oct 22 - Apr 23 **Carla Barnera**, ICE-CSIC. *JAE-ICU supervisor*.
Spectral evolution of SNe Ia in DES.

Sep 20 - Jul 21 **Sara Muñoz Torres**, U. Granada. *TFM supervisor*.
The oxygen abundance dependence on the Cepheid period in SH0ES.

Oct 19 - Jul 20 **Román Fernández Aranda**, U. Complutense Madrid. *TFM supervised with M. Mollà*.
Stellar populations of SN host galaxies at high-z 0.5<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.

Dec 18 - Jul 20 **Nataliya Ramos Chernenko**, U. Granada. *TFM supervised with I. Domínguez*.
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 Ia supernova environments at high redshift.

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 17 - Jun 18 **Asier Castrillo**, U. Autónoma Madrid. *TFM supervised with Y. Ascasibar*.
Supernova DTDs in nearby galaxies.

Undergrad students

Jul 25-Jun 26 **Maria Riera**, U. Barcelona. *TFG supervised with M. Kopsacheili*
Shock-excited regions detection and characterization in IFS.

Jun-Jul 25 **Martina Solano**, Joves i Ciència, Fundació Catalunya La Pedrea. *Host*.
Global and local host galaxy environments of SHOES type Ia supernovae.

Feb-Jun 2025 **Èlia Déguez**, U. Autònoma de Barcelona. *Student internship*
Type Ia SN environments SED combining HST UV photometry and optical IFS.

Sep 24-Feb 25 **Albert García**, U. Autònoma de Barcelona. *Student internship*
Type Ia SN environments SED combining HST UV with optical, NIR and MIR photometry.

Sep 24-Feb 25 **Èrika Denegra**, U. Autònoma de Barcelona. *Student internship*
H_0 measurements with Type Ia SN in the NIR considering host galaxy dependences .

Jun-Jul 24 **Joan Alcaide**, Joves i Ciència, Fundació Catalunya La Pedrea. *Host*.
Type Ia supernovae Hubble diagram using observations from the ESO archive.

Dec 23 - Jul 24 **Sandra Guerra**, U. Autònoma de Barcelona. *TFG supervisor*.
1991bg-like SNe Ia in the ZTF survey.

Jun 22 - Jul 23 **Ramon Sanfeliu**, U. Autònoma de Barcelona. *Summer internship & TFG supervisor*.
Database of FLOWS NIR SN Ia. Peculiar velocities of SNe Ia.

Feb-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 Iáñez Ferres**, U. Granada. *TFG supervisor*.
Studying the diversity of type Ia supernovae in the NIR.

Sep 20 - Jul 21 **María Delgado Mancheño**, U. Granada. *TFG supervisor*.
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 Ia supernovae from twins.

Nov 19 - Jul 20 **Lamberto Oltra Nieto**, U. Granada. *TFG supervisor*.
The local environment of supernovae as seen by J-PLUS.

Sep 16 - Jun 17 **Asier Castrillo**, U. Autónoma Madrid. *TFG supervised with Y. Ascasibar*.
Supernova rates in nearby galaxies.

Sep 16 - Sep 17	**Nicolette M. Kier**, U. Pittsburgh. *Last year' project supervisor.* HII region statistics in PISCO.
Sep 16 - Mar 17	**Yiwen Huang**, Carnegie Mellon U. *Last year' project supervisor.* Statistical study of SN Ia 91bg-like.
Jan-Sep 2016	**Luis Mora**, U. Chile. *TFG supervisor.* Measuring CO at SN locations with CARMA.
Jan-Jul 2015	**Tania Moraga**, U. Chile. *TFG supervisor.* Type II multiwavelength light-curve characterization.
Mar-Des 2013	**Ismael Pessa**, U. Chile. *TFG supervisor.* SNe Ia properties as a function of the distance to host galaxy.

Membership, service and responsibilities

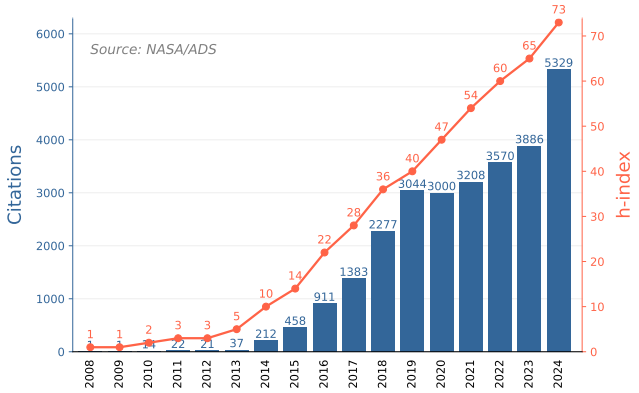
Since Jul 2024	Head of the Department of Extragalactic Astrophysics and Cosmology at ICE-CSIC. Member of the Strategy Board of ICE-CSIC.
Since May 2024	Member of the Teaching Committee of ICE-CSIC. Co-Coordinator of the UAB Master on HEP and Astrophysics at ICE-CSIC.
Since Jan 2024	Member of the IEEC Director Research Advisor Council.
Since 2023	Member of the Nancy Roman PIT for Supernova Cosmology (PI: D. Scolnic).
Since 2023	Member of the La Silla Southern Supernova Survey (LS4). Seat in the Collaboration Council.
Since 2022	External member of the ZTF SNIa cosmology Working group.
Since 2021	Sponsored member of the Dark Energy Spectroscopic Instrument (DESI).
Since 2018	Member of the Electro-magnetic counterparts of GW at the VLT (ENGRAVE). MUSE instrument scientist (with J. Lyman).
2017 - 2023	Member of the WFIRST SIT for SNIa cosmology (PI: S. Perlmutter).
2016 - 2024	Member of the J-PLUS collaboration. Leading the SN environments working group.
Since 2016	Full member of the LSST Dark Energy Science Collaboration (DESC). Serving as a deputy Publication Board Manager (since Nov 2024). Served in the Collaboration Council (2023-2024). Served as a co-chair of the Speakers Bureau (2021-2023). Served in the Publication Board committee (2019-2021).
Since 2016	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.
Since 2015	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.
Since 2013	Member of Public ESO Spectroscopic Survey of Transient Objects (PESSTO $\rightarrow$ ePESSTO+). Serving as the Ombudsperson, and in the Target And Alert (TAT) committee. PI of the *SN environments* and the *SNIa cosmology in the NIR* 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)

Publication list

I have published 433 articles in Q1 peer-reviewed journals that have received over 30k citations and with an h-index of 75 (ADS, Jun 2025) steadily increasing with time.

All these publications can be found in the following links at NASA/ADS, Google Scholar, and ORCID.

Below, I list those in which I have been one of the main contributors.



Selected refereed papers

110. Analyzing type Ia supernovae near-infrared light curves with principal component analysis
T. E. Müller-Bravo, **L. Galbany**, et al. A&A, accepted.
109. New X-ray supernova remnants in NGC7793
M. Kopsacheili, K. Anastasopoulou, N. Rea, C. Gutiérrez, **L. Galbany** A&A, accepted, arXiv:2501.19108.
108. Rapid follow-up observations of infant supernovae with the Gran Telescopio Canarias
L. Galbany, C. Gutiérrez, L. Piscarreta, et al. JCAP, accepted, arXiv:2501.19108.
107. A systematically-selected sample of luminous, long-duration, ambiguous nuclear transients
P. Wiseman, R. D. Williams, I. Arcavi, **L. Galbany**, et al. MNRAS, 537:2024 (2025), arXiv:2406.11552.
106. SN 2023tsz: a helium-interaction-driven supernova in a very low-mass galaxy
B. Warwick, J. Lyman, M. Pursiainen, D. L. Coppejans, **L. Galbany**, et al. MNRAS, accepted, 536:3588 (2025), arXiv:2409.14147.
105. ZTF SN Ia DR2: Properties of the low-mass host galaxies of Type Ia supernovae in a volume-limited sample
U. Burgaz, K. Maguire, G. Dimitriadis, M. Smith, J. Sollerman, **L. Galbany**, et al. A&A, 694:A13 (2025), arXiv:2412.14262.
104. Study of late-time ultraviolet emission in CC SNe and its implications for the peculiar transient AT2018cow
A. Inkenhaag, P. G. Jonker, A. J. Levan, M. Fraser, J. D. Lyman, **L. Galbany**, et al. A&A., 693:A39 (2025), arXiv:2411.09690.
103. Binary progenitor systems for Type Ic supernovae
M. Solar, M. J. Michałowski, J. Nadolny, **L. Galbany**, et al. Nature comm., 15:7667 (2024), arXiv:2409.01906.
102. How Accurate are Transient Spectral Classification Tools?— A Study Using 4646 SEDMachine Spectra
Y-L. Kim, I. Hook, A. Milligan, **L. Galbany**, et al. PASP, 136:11 (2024), arXiv:2410.10963.
101. BETIS: II. Revisiting the ionisation mechanism of the extraplanar diffuse ionised gas
R. González-Díaz, F. F. Rosales-Ortega, **L. Galbany**. A&A, 691:25 (2024), arXiv:2406.17123.
100. The Dark Energy Survey: Cosmology Results With ∼1500 New High-z SNe Ia Using The Full 5-year Dataset
The DES Collaboration, (with) **L. Galbany**, et al. ApJL, 973:14 (2024), arXiv:2401.02929.
99. Circumstellar interaction signatures in the low luminosity type II SN 2021gmj
N. Meza Retamal, Y. Dong, K. A. Bostroem, S. Valenti, **L. Galbany**, et al. A&A, 971:141 (2024), arXiv:2401.04027.
98. 1991T-like Supernovae
M. M. Phillips, C. Ashall, P. J. Brown, **L. Galbany**, et al. ApJS, 273:16 (2024), arXiv:2405.15027.
97. Narrow absorption lines from intervening material in supernovae. I. Measurements and temporal evolution
S. González-Gaitán, C. P. Gutiérrez, J. P. Anderson, A. Morales, **L. Galbany**, et al. A&A, 687:108 (2024), arXiv:2403.11677.
96. BETIS: Bidimensional Exploration of the warm-Temperature Ionised gaS I. Sample presentation and 1st results
R. González-Díaz, F. F. Rosales-Ortega, **L. Galbany**, J. P. Anderson, et al. A&A, 687:20 (2024), arXiv:2311.14254.
95. Supernova Remnant properties and Luminosity Functions in NGC 7793 using MUSE IFS
M. Kopsacheili, C. Jiménez-Palau, **L. Galbany**, P. Boumis, R. González-Díaz. MNRAS, 530:1078 (2024), arXiv:2403.17053.
94. The Calar Alto Legacy Integral Field Area Survey: Spatial resolved properties
S.F. Sánchez, J.K. Barrera-Ballesteros, **L. Galbany**, R. García-Benito, et al. RMxAA, 60:41 (2024), arXiv:2304.13070.
93. Tracing back the birth environments of SNIa progenitor stars: A pilot study based on 44 early-type host galaxies
Y-L. Kim, **L. Galbany**, I. Hook, Y. Kang. MNRAS, 529:3806 (2024), arXiv:2403.13057.
92. Supernova environments in J-PLUS. NCR distributions and SPS, combining narrow- and broad-band filters
R. González, **L. Galbany**, T. Kangas, R. García-Benito, et al. A&A, 684:104 (2024), arXiv:2312.13830.
91. Recovering lost light: discovery of supernova remnants with integral field spectroscopy
H. Martínez-Rodríguez, **L. Galbany**, C. Badenes, et al. ApJ, 963:125 (2024), arXiv:2309.14901.
90. Strong Carbon Features and a Red Early Color in the Underluminous Type Ia SN 2022xkq
J. Pearson, D. J. Sand, P. Lundqvist, **L. Galbany**, et al. ApJ, 960:29 (2024), arXiv:2309.10054.
89. The Calar Alto Legacy Integral Field Area Survey: extended and remastered data release
S. F. Sánchez, **L. Galbany**, C.J.Walcher, R.García-Benito, et al. MNRAS, 526:5555 (2023), arXiv:2304.13022.

88. An updated measurement of the Hubble constant from near-infrared observations of Type Ia supernovae
L. Galbany, T. de Jaeger, Adam G. Riess, T. E. Müller-Bravo, et al. A&A, 679:95 (2023), arXiv:2209.02546.
87. A metallicity dependence on the occurrence of core-collapse supernovae
T. Pessi, J. P. Anderson, J. D. Lyman, J. L. Prieto, **L. Galbany**, et al. APJL, 955:L29 (2023), arXiv:2306.11962.
86. Fast and Not-so-Furious: Case Study of the Fast and Faint Type IIb SN 2021bxu
D. D. Desai, C. Ashall, B. J. Shappee, N. Morrell, **L. Galbany**, et al. MNRAS, 524:767 (2023), arXiv:2303.13581.
85. A characterization of ASAS-SN core-collapse supernova environments with VLT+MUSE: I. Sample selection.
T. Pessi, J. L. Prieto, J. P. Anderson, **L. Galbany**, J. D. Lyman, et al. A&A, 677:28 (2023), arXiv:2306.11961.
84. Environmental dependence of Type IIn supernova properties
T. Moriya, **L. Galbany**, C. Jiménez-Palau, J. P. Anderson, et al. A&A, 677:20 (2023), arXiv:2306.09647.
83. 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, 44:100715 (2023), arXiv:2206.14335.
82. Examining the Properties of Low-luminosity Hosts of Type Ia Supernovae from ASAS-SN
T. Holoien, V. Berger, J. Hinkle, **L. Galbany**, et al. APJ, 950:108 (2023), arXiv:2207.07657.
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, 950:17 (2023), arXiv:2305.09417.
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, 517:3312 (2022), arXiv:2209.10242.
79. The Absolute Magnitudes of 1991T-like Supernovae
M. M. Phillips, C. Ashall, C. R. Burns, C. Contreras, **L. Galbany**, et al. APJ, 938:47 (2022), arXiv:2209.08031.
78. 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, 665:123 (2022), arXiv:2207.04780.
77. A 5 per cent measurement of the Hubble constant from Type II supernovae
T. de Jaeger, **L. Galbany**, A. G. Riess, B. J. Shappee, et al. MNRAS, 514:4620 (2022), arXiv:2203.08974.
76. 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.
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, 933:172 (2022), arXiv:2201.07801.
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, 662:86 (2022), arXiv:2202.04078.
73. 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, 928:103 (2022), arXiv:2109.14644.
72. Aperture-corrected spectroscopic type Ia supernova host galaxy properties
L. Galbany, M. Smith, S. Duarte Puertas, S. González-Gaitán, I. Pessa, et al. A&A, 659:89 (2022), arXiv:2112.02517.
71. 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. NATAS, 6,568 (2022), arXiv:2202.08889.
70. The Dependence of the Type Ia Supernova Host Bias on Observation or Fitting Technique
J. Hand, S. Liu, **L. Galbany**, et al. APJ, 925:115 (2022), arXiv:2102.08980.
69. The effects of varying colour-luminosity relations on type Ia supernova science.
S. González-Gaitán, T. de Jaeger, **L. Galbany**, et al. MNRAS, 508:4656 (2021), arXiv:2009.13230.
68. 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, 923:197 (2021), arXiv:2006.13803.
67. Carnegie Supernova Project: The First Homogeneous Sample of 2003fg-like Type Ia Supernova.
C. Ashall, J. Lu, E. Y. Hsiao, P. Hoeflich, M. Phillips, **L. Galbany**, et al. APJ, 922:205 (2021), arXiv:2106.12140.
66. 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.
65. ASASSN-15hy: an under-luminous, red 03fg-like type Ia supernova.
J. Lu, C. Ashall, E. Y. Hsiao, P. Hoeflich, **L. Galbany**, et al. APJ, 920:107 (2021), arXiv:2107.08150.
64. 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.
63. 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.
62. 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.
61. 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.

60. SN 2017ivv: two years of evolution of a transitional Type II supernova
C. P. Gutiérrez, A. Pastorello, A. Jerkstrand, **L. Galbany**, et al. MNRAS, 499:974 (2020). arXiv:2008.09628.
59. 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.
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. 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.
54. 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.
53. 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.
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 Ia 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. 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. Uncertainties in gas kinematics arising from stellar continuum modeling in IFS data: NGC 2906 with VLT/MUSE
E. Bellocchi, Y. Ascasibar, **L. Galbany**, H. Ibarra-Medel, M. Gavilán, Á. Díaz A&A, 625:A83 (2019), arXiv:1903.06252.
44. CCSNe ages and metallicities from emission-line diagnostics of nearby stellar populations
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. 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.
41. 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.
40. 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.
39. Thermonuclear supernovae and cosmology
I. Dominguez, **L. Galbany**. EPJP, 133:323 (2018).
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. 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.
36. 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.
35. Elemental gas-phase abundances of intermediate redshift type Ia 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.
34. 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.
33. 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.

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 Iax: 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
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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.
25. Molecular gas at supernova local environments unveiled by EDGE
L. Galbany, L. Mora, S. González-Gaitán, A. Bolatto, H. Dannerbauer, et al. MNRAS, 468 628 (2017), arXiv:1702.02945.
24. Hot gas around SN 1998bw. The progenitor inferred through its environment
T. Krühler, H. Kuncarayakti, P. Schady, J. Anderson, **L. Galbany**, J. Gensior. A&A, 602:A85 (2017), arXiv:1702.05430.
23. A type II supernova Hubble diagram from the CSP, SDSS-II nd SNLS surveys.
T. de Jaeger, S. González-Gaitán, M. Hamuy, **L. Galbany**, J. P. Anderson, et al. ApJ, 835:166 (2017), arXiv:1612.05636.
22. Using the local gas-phase oxygen abundances to explore a metallicity-dependence in SNe Ia luminosities
M.E. Moreno-Raya, Á.R. López-Sánchez, M. Mollá, **L. Galbany**, et al. MNRAS, 462:1281 (2016), arXiv:1607.05526.
21. Evidence of ongoing radial migration in NGC 6754: Azimutal variations of the gas properties.
L. Sánchez-Menguiano, S. F. Sánchez, D. Kawata, . (with) **L. Galbany**, et al. ApJL, 830:40 (2016), arXiv:1603.04748.
20. MUSE Reveals a Recent Merger in the Post-starburst Host Galaxy of the TDE ASASSN-14li.
J. L. Prieto, T. Krühler, J. P. Anderson, **L. Galbany**, C. S. Kochanek, et al. ApJL, 830:32 (2016), arXiv:1609.00013.
19. CALIFA, the Calar Alto Legacy Integral Field Area survey IV. Third Public data release.
S. F. Sánchez, R. García-Benito, S. Zibetti, C. J. Walcher, .(with) **L. Galbany**, et al. A&A, 594:A36 (2016) arXiv:1604.02289.
18. Unresolved versus resolved: calibrating young SSP models with VLT/MUSE observation of NGC 3603.
H. Kuncarayakti, **L. Galbany**, J. P. Anderson, T. Krühler, M. Hamuy. A&A, 593:A78 (2016) arXiv:1607.03446.
17. Nearby supernova host galaxies from the CALIFA Survey: II. SN environmental metallicity
L. Galbany, V. Stanishev, A. M. Mourão, M. Rodrigues, H. Flores, et al. A&A, 591:48 (2016), arXiv:1603.07808.
16. Evolving into a remnant: optical spectroscopy of SN 1978K at thirty-six years
H. Kuncarayakti, K. Maeda, J. P. Anderson, M. Hamuy, K. Nomoto, **L. Galbany** MNRAS, 458:2063 (2016), arXiv:1512.02108.
15. Type II supernovae as probes of environment metallicity: observations of host HII regions
J. P. Anderson, C. P. Gutiérrez, L. Dessart, M. Hamuy, **L. Galbany**, et al. A&A, 589:A110 (2016) arXiv:1602.00011
14. SN 2014J at M82: I. A middle-class type Ia supernova by all spectroscopic metrics
L. Galbany, M. E. Moreno-Raya, P. Ruiz-Lapuente, J. I. González-Hernández, et al. MNRAS, 457:525 (2016), arXiv:1510.06596.
13. Characterising the environments of supernovae with MUSE
L. Galbany, J. P. Anderson, F. F. Rosales-Ortega, H. Kuncarayakti, et al. MNRAS, 455:4087 (2016), arXiv:1511.01495
12. On the dependence of the type Ia SNe luminosities on the metallicity of their host galaxies
M. E. Moreno-Raya, M. Mollá, Á . R. López-Sánchez, **L. Galbany**, et al. ApJL, 818:L19 (2016), arXiv:1511.05348
11. UBVRIz light curves of 51 type II supernovae
L. Galbany, M. Hamuy, M. M. Phillips, N. B. Suntzeff, J. Maza, et al. AJ, 151:33 (2016), arXiv:1511.08402
10. A Hubble diagram from type II supernovae based solely on photometry: The photometric-colour method
T. de Jaeger, S. González-Gaitán, J. P. Anderson, **L. Galbany**, M. Hamuy, et al. ApJ, 815:121 (2015), arXiv:1511.05145
9. The rise-time of Type II supernovae
S. González-Gaitán, N. Tominaga, J. Molina, **L. Galbany**, F. Bufano, et al. MNRAS, 451: 2212 (2015), arXiv:1505.02988
8. PESSTO: survey description and products from the first data release.
S. J. Smartt, S. Valenti, M. Fraser, C. Inserra, D. R. Young, .(with) **L. Galbany**, et al. A&A, 579:A40 (2015), arXiv:1410.2210.
7. Statistical Studies of Supernova Environments.
J. P. Anderson, P. A. James, S. M. Habergham, **L. Galbany**, H. Kuncarayakti PASA, 32:e019 (2015), arXiv:1504.04043.
6. CALIFA, the Calar Alto Legacy Integral Field Area survey. III. Second public data release
R. García-Benito, S. Zibetti, S.F. Sánchez, B. Huseman, (with) **L. Galbany**, et al. A&A, 576:135 (2015), arXiv:1409.8302
5. Census of HII regions in NGC6754 derived with MUSE: Constraints on the metal mixing scale.
S.F. Sánchez, **L. Galbany**, J. Falcón-Barroso, P. Sánchez-Blázquez, E. Pérez, et al. A&A, 573:A105 (2015), arXiv:1411.4967

4. Nearby SN host galaxies from the CALIFA Survey: I. Sample, data analysis, and correlation to SF regions
   L. Galbany, V. Stanishev, A. M. Mourão, M. Rodrigues, H. Flores, et al. A&A, 572:A38 (2014), arXiv:1409.1623
3. Aperture corrections for galaxy properties computed from the CALIFA survey.
   J. Iglesias-Páramo, J.M. Vílchez, **L. Galbany**, S.F. Sánchez, F.F. Rosales-Ortega, et al. A&AL, 553:L7 (2013), arXiv:1304.16440
2. Type-Ia Supernova properties as a function of the distance to host galaxy in the SDSS-II/SNe survey.
   L. Galbany, R. Miquel, L. Ostman, P. J. Brown, D. Cinabro, et al. ApJ, 755:125 (2012), arXiv:1206.2210
1. The Subluminous Supernova 2007qd: A Missing Link in a Family of Low-Luminosity Type Ia Supernovae.
   C. M. McClelland, P. M. Garnavich, **L. Galbany**, R. Miquel, R. J. Foley, et al. ApJ, 720:704-716 (2010), arXiv:1007.2850

Thesis

3. Doughnut economics and cities: a comparative approach.
   Lluís Galbany, Bachelor thesis, Universitat Autònoma de Barcelona, Facultat d'Economia i Empresa, 6 06 2023
   Supervisor: Dr. Claudio Cattaneo.
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.
   Lluís Galbany, PhD thesis, Universitat Autònoma de Barcelona, Departament de Física, 28 10 2011
   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
   Lluís Galbany, Master thesis (DEA), Universitat Autònoma de Barcelona, Departament de Física, 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

My work has been presented at international conferences, where I have delivered a total of 78 talks, including 12 invited talks at various conferences and 29 invitations to give seminars at different institutions.
(I: invited, S: seminar, C: contributed)

Jun 2025	I: *Review on SN environments*, Cosmic Lighthouses, Cambridge, UK.
May 2025	C: *The distance ladder with SNIa n the near-infrared*, CosmoVerse workshop, Napoli.
Apr 2025	C: *The Hubble constant from near-infrared observations of SNIa*, Bruno65 conference, Munich.
Apr 2025	I: H_0 *systematics from SNIa in the NIR and Cepheids metallicity*, ISSI workshop, Bern.
Nov 2024	I: *Rapid follow-up of infant supernovae with the GTC*, South American Supernovae 2024, La Plata.
Jul 2024	C: *Cosmology results with 1500 new high-z SNe Ia using the full DES dataset*, RC SEA 2024, Granada.
Nov 2023	S: *Environmental studies of supernovae with Integral Field Spectroscopy*, IfA-Honolulu, HI.
Jun 2023	I: *Observations of supernovae with JWST*, 18th Astronomy Festival, Constantine, Argelia.
Apr 2023	I: *Introduction to Integral Field Spectroscopy*, ENGRAVE Data analysis meeting, Napoli.
Jan 2023	C: *Supernova science at ICE-CSIC*, CRISPisha, Cádiz.
Nov 2022	I: *Review of SN environments*, Supervirtual 2022.
Sep 2022	C: *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 conference, La Palma.
May 2022	C: *The metallicity of SN Ia progenitors*, Estallidos de formación estelar meeting, Madrid.
Apr 2022	I: *Data preparation for the LSST*, Danish Participation in LSST, Copenhagen, Denmark.
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, H0, SNe*, King's College London, UK.
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 Ia 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 Ia local environments with IFS*, University of Pennsylvania, Philadelphia PA.
Nov 2018 S: *SN 2016hnk, a Ca-rich 91bg-like SN Ia 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 Ia 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 SN Int.-field Nearby Galaxies (AMUSING)*. 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 ENAA, CAAUL, 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-Ia SNe standarization accounting for the environment*. Modern Cosmology: Early Universe, CMB and LSS, Benasque Center for Science, Benasque, Spain.
Oct 2010 C: *Type-Ia SDSS-II/SNe properties as a function of the distance to their host galaxies*. SDSS-II/SN Collaboration Meeting, Argonne National Laboratory, IL, USA.

Observing experience

I have been the PI of 97 successful observational proposals, awarded on a competitive basis at the largest observatories worldwide, and have actively participated in more than 100 other observational campaigns.

Only those as a Principal investigator (PI):

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	24B. 0114.D-0158, 12 hours (SM).
	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 UT4 / HAWKI	22A. 0109.22WW.001, 66 hours (SM).
8.1m UT1 / KMOS	24A. 113.26AP, 3 hours (SM).
	22A. 0109.22Y8, 3 hours (SM).
	19B. 0104.D-0498(A), 36 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).
Observatorio Roque de Los Muchachos (ORM)	
10.4m Gran Telescopio Canarias / HIPERCAM	23B-DDT. GTC09, 1 hour.
10.4m Gran Telescopio Canarias / EMIR	25B. GTC84-B, 16 hours.
	24B. GTC1-B, 16 hours.
	24A. GTCMULTIPLE2B, 16 hours.
	23B. GTCMULTIPLE2D, 10 hours.
	23B. GTCMULTIPLE4B, 25 hours.
	23A. 3-GTC5-B, 10 hours.
	22B. 4-MULTIPLE-2, 10 hours.
	22A. 49-MULTIPLE-2, 10 hours.
	21A. 57-GTC36, 18 hours.
	20B. 5-GTC3, 20 hours.
10.4m Gran Telescopio Canarias / OSIRIS	25B. GTC83-A, 8 hours.
	24B. GTC1-A, 8 hours.
	24A. GTCMULTIPLE2B, 8 hours.
	23B. GTCMULTIPLE2D, 14 hours.
	23B. GTCMULTIPLE4B, 20 hours.
	23A. 3-GTC4-A, 14 hours.
	22B. 4-MULTIPLE-2, 8 hours.
	22A. 49-MULTIPLE-2, 14 hours.
	20B. 11-GTC9, 6 hours (ToO).
	20A. 76-GTC52, 10 hours (ToO).
4.5m William Herschel Telescope / WEAVE	23B. —, 6h (SM).
4.5m William Herschel Telescope / PFQHY	21B. SW2021a13, 16h (SM).
	21B. SW2021a26, 28h (SM).
4.5m William Herschel Telescope / ACAM-LIRIS	20A. 150-WHT5, 4 nights.
2.5m Nordic Optical Telescope / NOTCam	25B. 98-NOT10, 6 nights.
	25A. 16-NOT6-A, 6 nights.
	24B. 2-NOT1-A, 6 nights.
	24A. 32-NOT2-A, 6 nights.
	23B. 31-NOT2, 6 nights.
	23A. 5-NOT1, 6 nights.
	22A. 38-NOT2, 6 nights.
	21B. 74-NOT10, 6 nights.
	21A. 58-NOT4, 6 nights.
	20B. 6-NOT2-A, 6 nights.
2.0m Liverpool Telescope / LIRIS	25A. 16-LT2-B, 20 hours.
	24B. 2-LT1-B, 20 hours.
	24A. LT11, 20 hours.
2.0m Liverpool Telescope / SPRAT	25B. 88-LT7, 30 hours.
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	25B. 25B-3.5-003, 4 nights (SM).
	25A. 25A-3.5-003, 3 nights (SM).
	24B. 24B-3.5-002, 3 nights (SM).
	24A. 24A-3.5-002, 4 nights (VM).
	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	25B. 25B-3.5-001, 3 nights (VM).
	25A. 25A-3.5-004, 4 nights (VM).
	24B. 24B-3.5-001, 5 nights (VM).
	24A. 24A-3.5-004, 4 nights (VM).
	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).
2.2m telescope / CAFOS	25B. 25A-2.2-003, 24h (ToO).
	25A. 25A-2.2-003, 2n (VM).
	24B. 24B-2.2-001, 24h (ToO).
2.2m telescope / PANIC	25B. 25B-2.2-002, 24h (ToO).
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).
	19A. 1800146, 46.9 hours (SM).
Observatori Astronòmic del Montec (OAdM)	
0.8m telescope / T80Cam	25A-26B. p683, 200 hours (remote).
	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

Jul 2025	Co-chair of the 8th Summer School of ICE on cosmology.
Dec 2024	Organizer of the *ZTF SN Ia cosmology* workshop, Barcelona, Dec 10th to 12th.
Sep 2024	SOC member of the *LSST in Europe 6* conference, La Palma, Sep 6th to 10th.
Jul 2024	SOC member of the *Transients session* in the SEA 2024, Granada, Jul 15th to 19th.
Jul 2024	SOC co-Chair of the *Dark Energy Science Collaboration* summer meeting, Zurich, Jul 8th to 12th.
Jul 2024	SOC member of the *Transient hosts in the 2020ies* EAS 2024 special session, Padova, Jul 1st to 5th.
May 2024	Organizer of The Dark Energy Survey Collaboration Meeting, S'Agaró, May 27th to 31st.
Jun 2022	Organizer of the ePESSTO+ collaboration meeting, Barcelona, Jun 20th to 22nd.
May 2022	LOC/SOC 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 CAHA*, Granada, Mar 12-13.
Jan 2020	Organizer of the workshop *CRISPINHO: Correcting reddening intelligently for cosmological SN 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.
Apr 2018	Organizer of the workshop *New advances in NIR SNIa science*, Pittsburgh, USA, April 11-13.
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.
Nov 2016	LOC member of the *DEC LSST Hack Week*, Pittsburgh, US, November 7-11.
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.
Aug 2016	Organizer of the workshop *SIDH: Supernova is in da house*, Santiago, Chile, August 1-5.
2014 - 2015	Organizer of 'Supernova Journal Club' seminar series (DAS).
2009 - 2010	Organizer of PhD students 'Thursday's Meeting seminar series (IFAE).

Press and outreach

23/06/2025	Press release on *First images of the most complete movie of the night sky ever made* (ICE, CSIC).
19/05/2025	Pint of Science outreach talk *Mesurant distàncies des del bar* in Mataró.
17/02/2025	BiblioSTEAM outreach talk *Univers, encantat de conèixer-te* at the Llagostera library.
14/02/2025	Press release on *3600 SNe Ia to change how we measure the expansion of the Universe* (ICE, IEEC).
13/02/2025	Talk at the Viaró Global School Kindergarten, Sant Cugat del Vallès.
23/01/2025	BiblioSTEAM outreach talk *Univers, encantat de conèixer-te* at the Sant Julià de Ramis library.
20/01/2025	BiblioSTEAM outreach talk *Univers, encantat de conèixer-te* at the Caldes de Malavella library.
21/11/2024	BiblioSTEAM outreach talk *Univers, encantat de conèixer-te* at the Calonge library.
17/10/2024	BiblioSTEAM outreach talk *Univers, encantat de conèixer-te* at the Lloret de Mar library.
16/05/2024	*Ciència amb tirador*, short public talks in a bar. Seventh session at Bar Anònims, Granollers (link).
27/04/2024	Outreach talk at the Museu de Ciències Naturals de Granollers about DESI results (link, link).
25/04/2024	Outreach talk within the *Cicle d'astronomia* of the Centre Excursionista de Cardedeu (link).
15/03/2024	*Ciència amb tirador*, short public talks in a bar. Sixth session at Bar Anònims, Granollers (link).
01/03/2024	Speaker at the Career prospect for highs school students in La Garriga (link)
18/02/2024	Outreach activity at the Barcelona Museum of Contemporary Art (link)
09/02/2024	Press release on *A new source of dust in the universe discovered: type Ia supernova* (ICE).
10/10/2023	*Ciència amb tirador*, short public talks in a bar. Fifth session at Bar Anònims, Granollers (link).
28/06/2023	Participation in the Enciclopedia.cat Divulcat blog (link).
13/06/2023	Outreach talk about SNe and cosmology at the Agrupación Astronómica de Madrid (link).
13/06/2023	Interview in *La esfera celeste* Astronomy blog (link).
08/06/2023	Premiere of *La veu còsmica*, podcast of poetry, music and science (Funded by FCRI; link).
30/05/2023	Telescope observation of the night sky at the Ermita de Sant Hilari, Cardedeu.
26/05/2023	Outreach talk about DESI at the Granollers planetarium (link).
12/05/2023	Press release on *Multiwavelength observations of the accretion event AT2021lwx*, (ICE, IEEC).

26/04/2023	Outreach talk within the *Cicle d'astronomia* of the Centre Excursionista de Cardedeu (link).
25/04/2023	Outreach talk for the *Aula d'Extensió Universitària del VO (AGEVO)* at the Museu de Granollers.
15/02/2023	*Ciència amb tirador*, short public talks in a bar. Fourth session at Bar Anònims, Granollers (link).
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).
20/09/2022	Telescope observation at Gabriel Castellà school under the Magnet program of Fundació Bofill (link).
14/09/2022	*Ciència amb tirador*, short public talks in a bar. Second session at Bar Anònims, Granollers (link).
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 *SN 2018aoz, the earliest detection of a SNIa 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.
06/09/2021	Activity at Gabriel Castellà school under the Magnet program of Fundació Bofill (link).
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	Outreach talk at the Colegio Su Santidad Juan XXIII, San Joaquín, Chile (CONICYT).
18/03/2016	Outreach talk at the Colegio Malaquias Concha, La Granja, Chile (CONICYT).
01/12/2015	Outreach talk at the Liceo Bicentenario Zapallar high school, Curicó, Chile (link).
30/11/2015	Outreach talk at the Liceo Complejo Educacional Javiera Carrera high school, Talca, Chile (link)
13/04/2015	Outreach talk at the Pintacuentos primary school, Las Condes, Chile (link).
03/02/2014	Press article in the online newspaper Nació digital (Nació Digital).
10/02/2014	Short interview for the La Xarxa television (Vallès Oriental TV).
28/12/2012	Outreach talk at the Ilatargi Astronomical Association, Oñati, Spain (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)

Other merits

—	Regular reviewer for Q1 journals: ApJ, ApJL & AJ (US), MNRAS (UK), A&A (FR), JCAP (UK/IT).
Sep 2025	Member of the committee of Damiano Rosselli PhD thesis defense, IN2P3 Marseille.
2025-2027	Panelist of the Spanish Time Allocation Committee (CAT) for the Canary Islands observatories.
Dec 2023	Chair of the ICE postdoctoral Fellowship committee.
Mar 2023	Reviewer of National Science Programmes for the Spanish National Research Agency (AEI).
Dec 2022	**i3** credential issued by the Spanish Ministry of Universities.
Nov 2022	External referee for the Polish National Science Centre.
Nov 2022	Member of the Tribunal in João Gonçalves (U. Lisboa) Master thesis defense.
Jan 2022	Member of the ICE postdoctoral Fellowship committee.
Oct 21-Dec 23	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 Spanish ANECA agency.

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 Catalan AQU agency.
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 Catalan AQU agency.
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).

Synopsis of the CV

I am an observational astrophysicist with broad, multidisciplinary interests spanning supernova (SN) physics, stellar and galaxy evolution, and cosmology. I obtained my degrees in Physics (2008) and Economics (2023) from the Autonomous University of Barcelona, where I also earned a PhD in Physics (2011) under the supervision of Prof. Ramon Miquel at the Institut de Física d'Altes Energies (IFAE). My Ph.D. on type Ia supernova cosmology was the first performed in a Spanish institution on this topic. Following my PhD, I worked as a postdoctoral researcher at the Centro de Astrof´ísica (CENTRA) in Lisbon, Portugal, under the supervision of Dr. Vallery Stanishev and Prof. Ana M. Mourão. From 2013 to 2016, I held the prestigious Fondecyt postdoctoral fellowship at the Department of Astronomy at the University of Chile, where I had the privilege of collaborating with Prof. Mario Hamuy. I then joined the Department of Physics and Astronomy at the University of Pittsburgh as a postdoctoral researcher in Prof. Michael Wood-Vasey's group from 2016 to 2019. Afterward, I was awarded a Marie Skłodowska-Curie fellowship at the Department of Theoretical Physics and Cosmology at the University of Granada, where I was part of Prof. Inma Domínguez's group. Following a couple of years as a Ramón y Cajal Fellow, I am now a Científico Titular at the Institute of Space Sciences (ICE-CSIC), also affiliated with the Institut d'Estudis Espacials de Catalunya (IEEC). Here, I lead the Supernova Group, which focuses on studying the physics of supernovae and their applications in observational cosmology.

During my career in astrophysics, I have been concerned with key observational aspects of SN science that have a direct impact on other fields of astrophysics such as stellar evolution, galaxy enrichment, and cosmology. The prime goal of my research is to deepen the understanding of the systematic uncertainties in the SN light-curve standardization for measuring cosmological distances by using the information retained in their environment. My research has significantly advanced our knowledge regarding the characteristics of the local environment of SNe and their connection with the observed SN properties, as well as the characterization of their progenitor systems. The topics I have been investigating can be listed as: (1) Improving the use of SNe Ia as distance indicators; (2) Characterizing SN Ia subgroups; (3) Constraining SN progenitors via Integral Field spectroscopy of their environments; and (4) Exploring multiple alternative probes to measure extragalactic distances.

Although these topics cover different scientific goals, they share a common drive to develop innovative data mining techniques and can be handled with the same kind of observations. In addition to these main lines of research I have also been contributing to i) understanding the nature of the extragalactic extinction towards SN observations, which is another important source of uncertainty in SN standardization; ii) a wide range of galaxy enrichment, formation, and evolution studies; and iii) observation and interpretation of gravitational wave counterparts. In the near future I would like to break new ground in these fields in various directions.

So far, I have published 424 articles with over 28,000 citations and an h-index of 74 (ADS, Mar 2025). My work has been presented at international conferences, where I have delivered a total of 77 talks, including 12 invited talks at various conferences and 29 invitations to give seminars at different institutions. I have been the PI of 93 successful observational proposals, awarded on a competitive basis at the largest observatories worldwide, and have actively participated in more than 100 other observational campaigns. I have led analyses within major collaborations (SDSS-II SN, CALIFA, PESSTO, DES, HSC-SSP, MaNGA, J-PLUS, LSST, ROMAN, DESI, ZTF, LS4) and had the opportunity to mentor 3 postdocs, 11 PhD students, 15 graduate students, and 17 undergraduate students, including two funded 3-month PhD research visits and 2 ERASMUS+ undergraduate programs.

March 2025