Daniel Galán Diéguez

Contact Information

Physical Properties and Evolution of Massive Stars group
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Research Interests

Massive stars • O- and B-type stars • Classical Be stars • Stellar rotation • 3D modeling of stellar surfaces • Binary and multiple systems • Spectroscopy, photometry, and interferometry

Research Career Highlights

My research focuses on moving the analysis of rapidly rotating massive stars beyond spherical symmetry. My main contributions are:

- **3D spectral synthesis for massive stars:** As a developer of SPAMMS (Abdul-Masih et al. 2020; Galán-Diéguez et al. 2026b), a code that computes the spectrum of a distorted star by integrating the angle-dependent emission of every element of a 3D surface mesh, I computed new specific-intensity grids (LTE KURUCZ and non-LTE TLUSTY; $T_{\rm eff} = 3\,500 - 55\,000$ K, $\log g = 0 - 5$, 101 emergent angles) and integrated them into the code. SPAMMS, originally limited to O stars, now covers O- to K-type stars.
- **3D surface modeling of rapid rotators:** I designed and developed PANORAMA (Galán-Diéguez et al., in prep.) from scratch. It computes the Roche-model stellar shape and self-consistently derives the surface gravity, temperature, gravity darkening (von Zeipel 1924; Espinosa Lara & Rieutord 2011), and brightness distributions, and is being extended to radiation pressure and differential rotation. Its surface meshes are used directly as input by SPAMMS, providing physically consistent 3D stellar surfaces and synthetic images of rapid rotators.
- **Joint interferometric–spectroscopic analysis:** For rapid rotators, spectroscopy alone cannot disentangle the inclination from $v \sin i$. I combined both codes so that PANORAMA predicts the interferometric observables from the brightness distribution while SPAMMS predicts the line profiles from the same surface, enabling simultaneous fits of both datasets. This method has been applied to γ Cas with the MAGIC + CTAO LST-1 intensity interferometer and is directly transferable to other interferometers.

Research Projects

4) Productos de la interacción de estrellas masivas revelados por grandes sondeos espectroscópicos 2026 – Present
PI: Sergio Simón Díaz *IAC, Spain*

- Project Type: Spanish National Plan (PID)
- Project ID: PID2024-159329NB-C21
- Funding: € 166,500 (Agencia Estatal de Investigación)

3) Extreme time and angular resolution in the optical with Cherenkov telescopes 2026 – Present
PI: Tarek Hassan *CIEMAT, Spain*

- Project Type: European Research Council (ERC Starting Grant)
- Project ID: 101076533
- Funding: € 2,473,531 (European Commission)

2) "la Caixa" Junior Fellowship of Michael Abdul-Masih 2024 – 2026
PI: Michael Yousef Abdul-Masih *IAC, Spain*

- Project Type: Postdoctoral Fellowship
- Project ID: LCF/BQ/PI23/11970035
- Funding: € 310,650 ("la Caixa" Foundation)

1) Los múltiples canales de evolución temprana de las estrellas masivas 2023 – 2026
PI: Artemio Herrero Davó *IAC, Spain*

- Project Type: Spanish National Plan (PID)
- Project ID: PID2021-122397NB-C21
- Funding: € 193,842 (Agencia Estatal de Investigación)

Research Stays

4) Institut de Recherche en Astrophysique et Planétologie (IRAP), Université de Toulouse Jan 18 – Mar 19, 2027
Host: Prof. Michel Rieutord *Toulouse, France*

- Implementation of radiation pressure and differential rotation in the 3D surface modeling of rotating massive stars.

3) Centro de Investigaciones Energéticas, Medioambientales y Tecnológicas (CIEMAT) Oct 12 – Nov 13, 2026
Host: Dr. Tarek Hassan *Madrid, Spain*

- Combined spectroscopic and interferometric analysis of rapidly rotating stars.

2) Centro de Investigación en Tecnologías de la Información y las Comunicaciones (CITIC, UDC) Feb 10 – May 3, 2026
Host: Dr. Minia Manteiga Outeiro *A Coruña, Spain*

- Exploration of the feasibility of machine-learning techniques for efficiently determining the fundamental parameters of rapidly rotating O-type stars from their 3D-deformed geometry.

1) Centro de Astrobiología (CAB, CSIC-INTA) Nov 17 – Dec 19, 2025
Host: Dr. Jesús Maíz Apellániz *Madrid, Spain*

- Research on the impact of stellar rotation on the spectral classification of O-type stars, focusing on how surface deformation and gravity darkening affect key spectroscopic diagnostic lines.

Education

3) PhD in Astrophysics Nov 2023 – Present
Instituto de Astrofísica de Canarias (IAC) *Tenerife, Spain*

- Title: *3D surface modeling of rapidly rotating massive stars*.
- Funded by a FPI fellowship (PRE2022-104239) from the Agencia Estatal de Investigación, Gobierno de España.
- Supervisors: M. Abdul-Masih and S. Rodríguez Berlanas.
- Description: Development of 3D stellar surface modeling frameworks to characterize the geometry and physical structure of rapidly rotating massive stars, including centrifugal distortion, gravity darkening, and radiation-pressure effects.
- Tools: Python, IDL, FASTWIND, TLUSTY, KURUCZ, IACOB-BROAD, SPAMMS, PANORAMA, PYPEIT, and PHOEBE.

2) MSc in Astrophysics Sep 2021 – Jul 2023
Universidad de La Laguna *Tenerife, Spain*

- MSc thesis: *Physical parameters of the low-mass eclipsing binary system ASAS J052919-1617.3*.
- Supervisors: M.J. Arévalo Morales and R. Iglesias Marzoa.
- Description: Determination of the physical parameters of an eclipsing binary system through: (i) development of customized automated software for the photometric analysis, calibration, and modeling of light curves; (ii) binary modeling with PHOEBE.
- Tools: Python, PYRAF, and PHOEBE.
- Received the highest possible grade in the Spanish grading system.

1) BSc in Physics Sep 2016 – Jun 2021
Universidade de Santiago de Compostela (USC) *Santiago de Compostela, Spain*

- BSc thesis: *Photometric observations of eclipsing binary star systems*.
- Supervisors: J.A. Garzón Heydt and R. Iglesias Marzoa.
- Description: Observation, calculation, and analysis of eclipsing binaries. Development of astronomical software for computing light curves of binaries.
- Tools: Python and PYRAF.

Honors and Awards

3. *Formación de Personal Investigador (FPI) fellowship*, **2023**
   from the Agencia Estatal de Investigación, Gobierno de España.
2. *"Residente" PhD fellowship*, **2023**
   from the Instituto de Astrofísica de Canarias, Spain*.
1. *Special distinction in two MSc courses*, **2021–2023**
   in the MSc in Astrophysics, Universidad de La Laguna, Spain.

∗ PhD fellowship declined in order to accept the FPI fellowship.

Event Organization

5) ImBaSE2027: The Impact of Binaries on Stellar Evolution Jul 12–16, 2027
Instituto de Astrofísica de Canarias *Tenerife, Spain*

- LOC member.

4) XXXVII Canary Islands Winter School of Astrophysics Nov 16–27, 2026
Instituto de Astrofísica de Canarias *Tenerife, Spain*

- LOC member.

3) I Congreso Galego de Investigación en Astronomía e Astrofísica Jul 17–18, 2025
Comunidade Galega de Investigación en Astronomía e Astrofísica *Vigo, Spain*

- LOC chair.

2) Munichfest2025: celebrating 40 years of research on hot luminous stars Apr 7–11, 2025
Instituto de Astrofísica de Canarias *La Palma, Spain*

- LOC member.

1) Positional astronomy and basics of astronomical observation Oct 14 – Nov 20, 2023
Universidad de La Laguna *Tenerife, Spain*

- Assistant teacher.

Conferences Attended

9) ImBaSE2027: The Impact of Binaries on Stellar Evolution — Jul 12–16, 2027
Instituto de Astrofísica de Canarias (IAC) — *Tenerife, Spain*

8) Stellar Intensity Interferometry workshop — Oct 5–9, 2026
CIEMAT and IPARCOS (UCM) — *La Palma, Spain*

7) MIAPbP: Bridging Gaps in High-Mass Star Research — Aug 17–28, 2026
Munich Institute for Astro-, Particle and BioPhysics — *Munich, Germany*

6) XVII Reunión Científica de la SEA — Jul 13–17, 2026
Sociedad Española de Astronomía (SEA) — *Tarragona, Spain*

5) Massive Stars Across Redshifts in the Era of JWST and Large-Scale Surveys — Sep 15–19, 2025
International Astronomical Union (IAU) — *Ensenada, Mexico*

4) I Congreso Galego de Investigación en Astronomía e Astrofísica — Jul 17–18, 2025
Comunidade Galega de Investigación en Astronomía e Astrofísica — *Vigo, Spain*

3) Munichfest2025: celebrating 40 years of research on hot luminous stars — Apr 7–11, 2025
Instituto de Astrofísica de Canarias (IAC) — *La Palma, Spain*

2) XVI Reunión Científica de la SEA — Jul 15–19, 2024
Sociedad Española de Astronomía (SEA) — *Granada, Spain*

1) Two in a Million: The interplay of binaries and star clusters — Sep 11–15, 2023
European Southern Observatory (ESO) — *Garching, Germany*

Other Meetings Attended

4) Día de Nuestra Ciencia 2026 — Jun 2, 2026
Instituto de Astrofísica de Canarias — *Tenerife, Spain*

3) Día de Nuestra Ciencia 2025 — Jun 6, 2025
Instituto de Astrofísica de Canarias — *Tenerife, Spain*

2) XV Reunión de Jóvenes Investigadores en el Extranjero 2024 — Dec 27, 2024
IYI Meeting — *A Coruña, Spain*

1) Día de Nuestra Ciencia 2024 — Jun 7, 2024
Instituto de Astrofísica de Canarias — *Tenerife, Spain*

Talks

Invited

1) From Stellar Distortion to Planetary Shadows: Spectral Modeling with SPAMMS — 2026
CAB PyCoffee, Centro de Astrobiología — *Madrid, Spain*

- Led a hands-on workshop designed to teach participants how to use SPAMMS, showcasing its full range of scientific capabilities. Demonstrated its versatile applications across different astrophysical scenarios, including the spectral synthesis of rapid rotators, interacting binaries, and the modeling of exoplanet transits (e.g., the Rossiter–McLaughlin effect).

CONTRIBUTED

4) 3D-surface modeling of rapidly rotating stars: spectral synthesis and interferometric synergy with PANORAMA and SPAMMS 2026
Stellar Intensity Interferometry *La Palma, Spain*

- Combined 3D geometry and brightness-distribution models (PANORAMA) with spectral synthesis (SPAMMS) to jointly analyze interferometric and spectroscopic data of rapidly rotating stars, resolving the inclination–rotation degeneracy ($v \sin i$) and enabling robust determinations of stellar masses and radii beyond the limitations of 1D analyses.

3) Beyond spherical symmetry: 3D surface-based spectral synthesis with SPAMMS 2026
XVII Reunión Científica de la SEA *Tarragona, Spain*

- Presented SPAMMS, a 3D surface-based spectral synthesis code for rapidly rotating massive stars, and its new stellar atmosphere models. Demonstrated how modeling stellar deformation, gravity darkening, and radiation-pressure effects beyond the classical spherical approximation improves stellar parameter determinations and enables the physical characterization of rapidly rotating stars and interacting binary systems.

2) Decoding the lack of fast rotators in Cygnus OB2 2025
I Congreso Galego de Investigación en Astronomía e Astrofísica *Vigo, Spain*

- Addressed the significant deficit of fast rotators in Cygnus OB2 compared to other massive star-forming regions. Evaluated multiple physical scenarios, including environmental effects, the presence of runaway stars, and the statistical impact of spin-axis projection.

1) Very first approach to the lack of fast rotators in Cygnus OB2 2024
XVI Reunión Científica de la SEA *Granada, Spain*

- Presented initial results confirming the lack of fast rotators in Cygnus OB2. Analyzed the sensitivity of late-O and B0 spectral types to rotational effects and discussed their implications for this deficit .

POSTERS

2) Where are the fast rotators in Cygnus OB2? Investigating the missing high-velocity tail 2025
Massive Stars Across Redshifts in the Era of JWST and Large-Scale Surveys *Ensenada, Mexico*

- Characterized the deficit of fast-rotating O-type stars in the Cygnus OB2 association. Evaluated the potential influence of the cluster age, the runaway population, and the specific star-formation environment on the observed rotational-velocity distribution.

1) Unraveling post-binary evolutionary channels in Cygnus OB2 using WEAVE 2024
XVI Reunión Científica de la SEA *Granada, Spain*

- Presented the WEAVE project, aimed at studying evolutionary channels in Cygnus OB2, including mergers, runaway stars, and compact objects.

SCHOOLS ATTENDED

5) XXXVII Canary Islands Winter School of Astrophysics Nov 16–27, 2026
Instituto de Astrofísica de Canarias *Tenerife, Spain*

4) Writing in Astronomy Jan 19–23, 2026
Instituto de Astrofísica de Canarias *Tenerife, Spain*

3) Summer School in Statistics for Astronomers Jun 3–7, 2024
Penn State's Center for Astrostatistics, the Pennsylvania State University *Online*

2) Stellar Spectroscopy Workshop Sep 27–28, 2023
University of Tartu *Online*

1) ERASMUS+ School on Eclipsing Binaries and Asteroseismology Sep 26–30, 2022
Instituto de Astrofísica de Canarias *La Palma, Spain*

Observing Experience

Observing Proposals

5) Multi-Technique Optical Characterisation of Be/X-ray Binary Outbursts 2026B
Co-I *CATESP-2026B-50*

- HiPERCAM (GTC): 9 h • ALFOSC (NOT): 10 h • FIES (NOT): 6 h

4) Analysis of Balmer discontinuity in normal B-type and Be stars in the context of the IACOB project 2026B
Co-I *CATESP-2026B-108*

- ALFOSC (NOT): 18 h

3) Massive runaway stars ejected from Cygnus OB2 2025A
Co-I *124-GTC132/25A*

- OSIRIS (GTC): 19 h

2) New observational approach to the missing population of fast rotators in Cygnus OB2 2024B
PI *76-MULTIPLE-2/24B*

- OSIRIS (GTC): 15 h • ALFOSC (NOT): 13.5 h

1) The nature of the massive runaway population in Cygnus OB2 2024A
Co-I *119-GTC119/24A*

- MEGARA (GTC): 19 h

Observing Nights

Telescope	Instrument	Observatory[†]	Semesters (nights)	Total
IAC80	CAMELOT2	OT	2025A (11), 2024B (10), 2022B (10), 2021A (4), 2020B (5)	40
Carlos Sánchez (TCS)	MuSCAT2	OT	2024B (3.5), 2024A (4), 2023B (4), 2023A (4), 2022B (4), 2022A (4)	23.5
Mercator	HERMES	ORM	2026B (5), 2025B (10)	15
Nordic Optical (NOT)	ALFOSC	ORM	2024B (3), 2022B (8)	11
Isaac Newton (INT)	IDS	ORM	2022B (3)	3
			Total	**92.5**

[†]ORM: Roque de los Muchachos Observatory (La Palma, Spain); OT: Teide Observatory (Tenerife, Spain).

Data Reduction

- PYRAF: custom automated pipelines for reduction, calibration, differential photometry, and light-curve construction of eclipsing binaries (CAMELOT2, IAC80).
- PYRAF: custom automated pipelines for reduction and calibration of spectroscopic data (IDS, INT).
- PYPEIT: implementation of Grism #14 and reduction and calibration of spectroscopic data (ALFOSC, NOT).
- PYPEIT: reduction and calibration of spectroscopic data (OSIRIS, GTC).

Teaching

Universidad de La Laguna

Courses that I did not coordinate:

Course	Academic Year	Course ECTS	Teaching ECTS	Level
External Internships	2026–2027	12	1	Undergraduate
External Internships	2025–2026	12	1	Undergraduate
External Internships	2024–2025	12	1	Undergraduate
Basic Observational Techniques	2023–2024	3	1	Master's
Basics of Astronomical Observation	2023–2024	3	1	Short course

Supervision

BSc Thesis

1) Photometric analysis of the low-mass eclipsing binary system ASASSN-V J050229.84-052203.4
Universidad de La Laguna

- Author: Elena Ruiz Laguna
- Supervisors: M.J. Arévalo Morales and D. Galán Diéguez
- Academic year: 2024 – 2025
- Availablehere.

Publications

Refereed First-Author Publications

[Gal+26a] D. Galán-Diéguez et al. "SPAMMS: 3D spectroscopic modeling of stellar surfaces. II. Implementation of Kurucz and TLUSTY model atmospheres". *arXiv e-prints*, arXiv:2609.15331 (Sept. 2026), arXiv:2609.15331. arXiv: 2609.15331 [astro-ph.SR].

[Gal+26b] D. Galán-Diéguez et al. "The lack of fast rotators in Cyg OB2. I. Insights from spectral reclassification of its B0 population". A&A 706, A59 (Jan. 2026), A59. DOI: 10.1051/0004-6361/202557446. arXiv: 2510.15540 [astro-ph.SR].

Refereed Coauthor Publications

[Hor+24] Yasunori Hori et al. "The Discovery and Follow-up of Four Transiting Short-period Sub-Neptunes Orbiting M Dwarfs". AJ 167.6, 289 (June 2024), p. 289. DOI: 10.3847/1538-3881/ad4115. arXiv: 2405.12637 [astro-ph.EP].

[Kan+24] H. Kang et al. "Simultaneous multicolour transit photometry of hot Jupiters HAT-P-19b, HAT-P-51b, HAT-P-55b, and HAT-P-65b". MNRAS 528.2 (Feb. 2024), pp. 1930–1944. DOI: 10.1093/mnras/stae072. arXiv: 2401.03715 [astro-ph.EP].

[Kuz+24] Masayuki Kuzuhara et al. "Gliese 12 b: A Temperate Earth-sized Planet at 12 pc Ideal for Atmospheric Transmission Spectroscopy". ApJ 967.2, L21 (June 2024), p. L21. DOI: 10.3847/2041-8213/ad3642. arXiv: 2405.14708 [astro-ph.EP].

[Pel+24] A. Peláez-Torres et al. "Validation of up to seven TESS planet candidates through multi-colour transit photometry using MuSCAT2 data". A&A 690, A62 (Oct. 2024), A62. DOI: 10.1051/0004-6361/202347251. arXiv: 2409.07400 [astro-ph.EP].

[Mor+23] G. Morello et al. "TOI-1442 b and TOI-2445 b: Two potentially rocky ultra-short period planets around M dwarfs". A&A 673, A32 (May 2023), A32. DOI: 10.1051/0004-6361/202243592. arXiv: 2201.13274 [astro-ph.EP].

[Rai+23] C. M. Raiteri et al. "The optical behaviour of BL Lacertae at its maximum brightness levels: a blend of geometry and energetics". MNRAS 522.1 (June 2023), pp. 102–116. DOI: 10.1093/mnras/stad942. arXiv: 2302.10555 [astro-ph.HE].

[Esp+22] E. Esparza-Borges et al. "A hot sub-Neptune in the desert and a temperate super-Earth around faint M dwarfs. Color validation of TOI-4479b and TOI-2081b". A&A 666, A10 (Oct. 2022), A10. DOI: 10.1051/0004-6361/202243731. arXiv: 2206.10643 [astro-ph.EP].

[Mur+22] F. Murgas et al. "HD 20329b: An ultra-short-period planet around a solar-type star found by TESS". A&A 668, A158 (Dec. 2022), A158. DOI: 10.1051/0004-6361/202244459. arXiv: 2211.02547 [astro-ph.EP].

Submitted / In Preparation

[Ber+27] S. R. Berlanas et al. "The Galactic rotation curve from OB and Red Clump stars: kinematic tracers across stellar populations". *in preparation* (2027).

[Cif+27] A. Cifuentes-Santos et al. "Photospheric parameters of the fast rotating star γ Cassiopeiae. Direct measurements with the MAGIC + CTAO LST-1 Stellar Intensity Interferometer". *under internal review* (2027).

[Gal+27a] D. Galán-Diéguez et al. "3D-surface modeling of rotating stars. I. The PANORAMA framework". *in preparation* (2027).

[Gal+27b] D. Galán-Diéguez et al. "3D-surface modeling of rotating stars. II. Implementation of differential rotation and radiation pressure in the PANORAMA framework". *in preparation* (2027).

[Gal+27c] D. Galán-Diéguez et al. "3D-surface modeling of rotating stars. III. Combined spectroscopic and interferometric analysis using MCMC". *in preparation* (2027).

[Gal+27d] D. Galán-Diéguez et al. "Photospheric analysis of the fast rotating star ζ Ophiuchi using spectroscopy and interferometry." *in preparation* (2027).

Contributions to coauthored publications

- **[Ber+27]**: Processed and analyzed Gaia kinematic data to derive Milky Way stellar rotation curves, using high-performance computing resources (HTCondor and the IAC supercomputing cluster).
- **[Cif+27]**: Applied PANORAMA to model the 3D stellar surface and determine the fundamental stellar parameters of the rapid rotator γ Cassiopeiae, and analyzed its stellar spectra using SPAMMS.
- **[Hor+24, Kan+24, Kuz+24, Pel+24, Mor+23, Esp+22, Mur+22]**: Planned and executed photometric observations at the Telescopio Carlos Sánchez, Observatorio del Teide, Tenerife, Spain.
- **[Rai+23]**: Analyzed and optimized observations at the IAC80 telescope, Observatorio del Teide, Tenerife, Spain.

Skills

Programming Skills	Python • Linux shell scripting • IDL • HTML/CSS • HTCondor
Massive-Star Codes	PHOEBE • SPAMMS • PANORAMA • PRISMAS • FASTWIND • TLUSTY • IACOB-BROAD • MGB
Data & Observation	PYRAF • PYPEIT • Aladin • Topcat
Other Software	LaTeX

Outreach

Television & Newspapers

4) Bos Días — Aug 19, 2026
Televisión de Galicia — *A Coruña, Spain*

- Interview about the upcoming partial lunar eclipse following the 2026 total solar eclipse, explaining its physics and what would be observable during the event.

3) Bos Días — Aug 13, 2026
Televisión de Galicia — *A Coruña, Spain*

- Interview about the experience of observing the 2026 total solar eclipse, what could be seen during the event, and when the next eclipses will occur – with particular focus on the "Trío de Eclipses" (Trio of Eclipses) event visible from the Iberian Peninsula.

2) Especial Eclipse Aug 12, 2026
Televisión de Galicia *A Coruña, Spain*

- Special live broadcast of the 2026 total solar eclipse from Faro Grande de Mera (Galicia, Spain), alongside renowned Galician physicists and astrophysicists (Minia Manteiga, Ana Ulla, and Jorge Mira). [Link]

1) Eclipse+ Aug 11, 2026
Televisión de Galicia *A Coruña, Spain*

- Interview about my path from Galicia to Tenerife to become an astrophysics researcher, and my work on the rotation of massive stars. [Link]

Radio & Podcast

2) Miradas Soltas Aug 10, 2026
Radio Oleiros *Oleiros, Spain*

- Radio interview about the 2026 total solar eclipse visible from Galicia (Spain), highlighting the region as an excellent location to observe the event. Explained the physics of the eclipse, the different stages from partial to totality, and how to observe it safely. [Link]

1) Antes todo esto era plasma Sep 2025 – Present
AstroLab *Online*

- *La ciencia de Proyecto Salvación*. Examined the scientific accuracy, physical principles, and astrobiological concepts in the sci-fi novel and film *Project Hail Mary*. [Link]
- *Las estrellas más raras del Universo*. Explored the most unusual and exotic types of stars in the universe, highlighting their properties and significance. [Link]
- *La batalla contra la falsa ciencia*. Analyzed the societal impact of pseudoscience, with particular attention to its effects on public understanding of science and on trust in scientific institutions. [Link]
- *Fuga de talentos: el éxodo de la ciencia*. Examined the drivers of scientific talent migration and its implications for research capacity and knowledge transfer. [Link]

Talks

2) Luz, sombra y ciencia: midiendo el Universo con binarias eclipsantes Dec 21, 2024
AstroGalicia24: a festa galega das estrelas *Arzúa, Spain*

- Presented the role of eclipsing binaries as fundamental benchmarks for deriving high-precision stellar and orbital parameters. Discussed the implementation of differential photometry for light-curve construction and the subsequent physical modeling of these systems.

1) Eclipsing binary systems: A fancy way to study stars Apr 14, 2023
Congreso de Estudiantes de Física, Universidad de La Laguna *Tenerife, Spain*

- Provided a comprehensive overview of how eclipsing systems allow for the direct determination of stellar masses and radii. Highlighted the synergy between photometric observations and modern modeling techniques to constrain stellar evolution theories. [Link]

Events

1) Open Days of the Teide Observatory 2024 – Present
Instituto de Astrofísica de Canarias *Tenerife, Spain*

- Member of the outreach team, which is dedicated to actively engaging the public through astronomy communication, including explanations of observational methods and key research.
- Dates: June 22–23, 2024; June 20–21, 2025; June 20–21, 2026.

Societies

3) Comunidade Galega de Investigación en Astronomía e Astrofísica (GIAA, Galician Astronomical Society) 2025 – Present

2) Sociedad Española de Astronomía (SEA, Spanish Astronomical Society) 2024 – Present

1) European Astronomical Society (EAS) 2024 – Present

Board Membership

3) Member of the Comisión de Enseñanza (Teaching Committee). Instituto de Astrofísica de Canarias 2026 – Present

2) Member of the Comisión Permanente (Standing Committee), Departamento de Astrofísica (Universidad de La Laguna) 2026 – Present

1) PhD student representative, Departamento de Astrofísica (Universidad de La Laguna) 2023 – Present

Languages

Native: Spanish, Galician

Fluent: English

Miscellaneous

Spanish and international driver's license