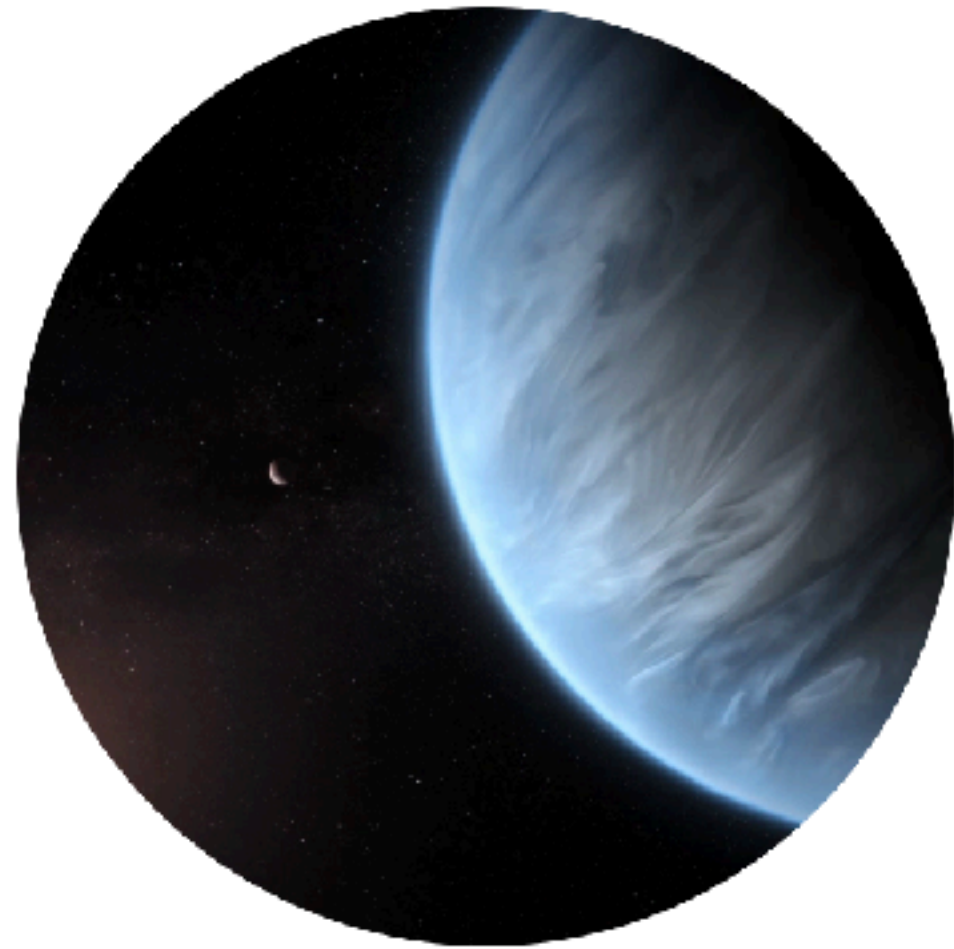


ICE-CSIC departments



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Planetary systems and Earth
Observation

Head: Estel Cardellach

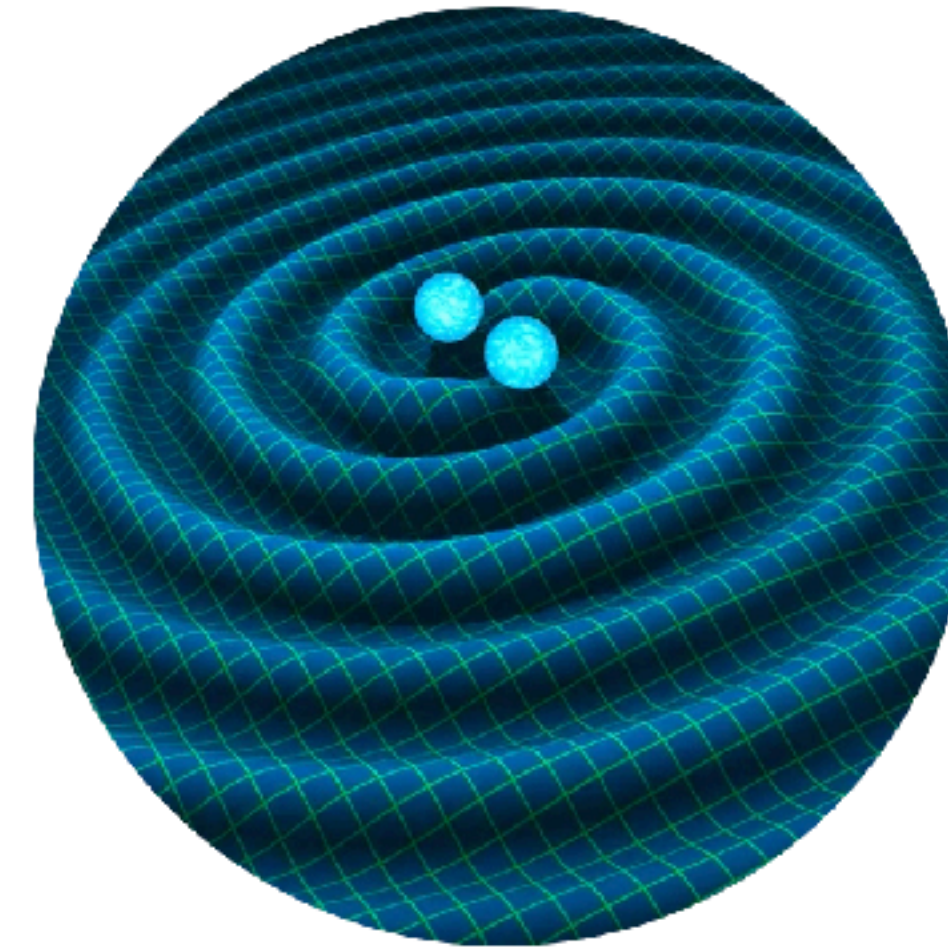
[Read more](#)



Star formation, Stellar and High-
energy Astrophysics

Head: Josep Miquel Girart

[Read more](#)



Nuclear, Gravitational Wave and
Multi-messenger Astrophysics

Head: Carlos Sopuerta

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Extragalactic Astrophysics and
Cosmology

Head: Lluís Galbany

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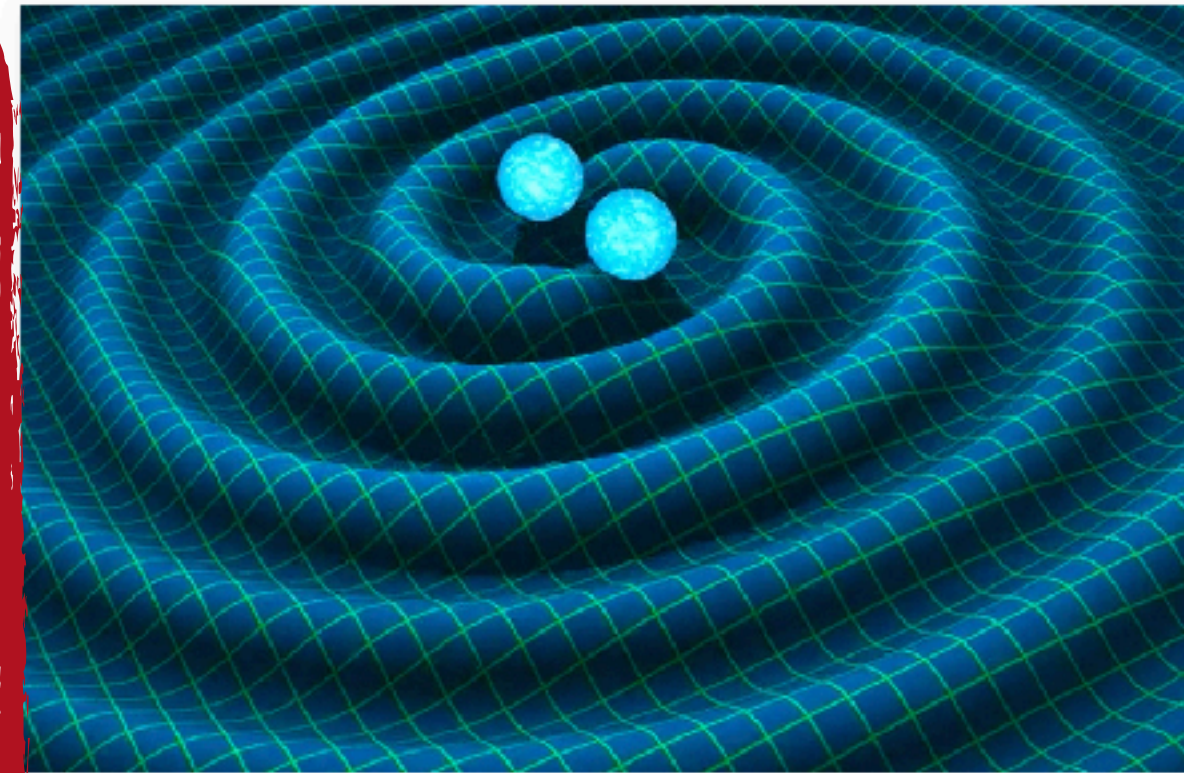
ICE-CSIC research groups



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Analysis tools for large-scale galaxy surveys



Modified gravities



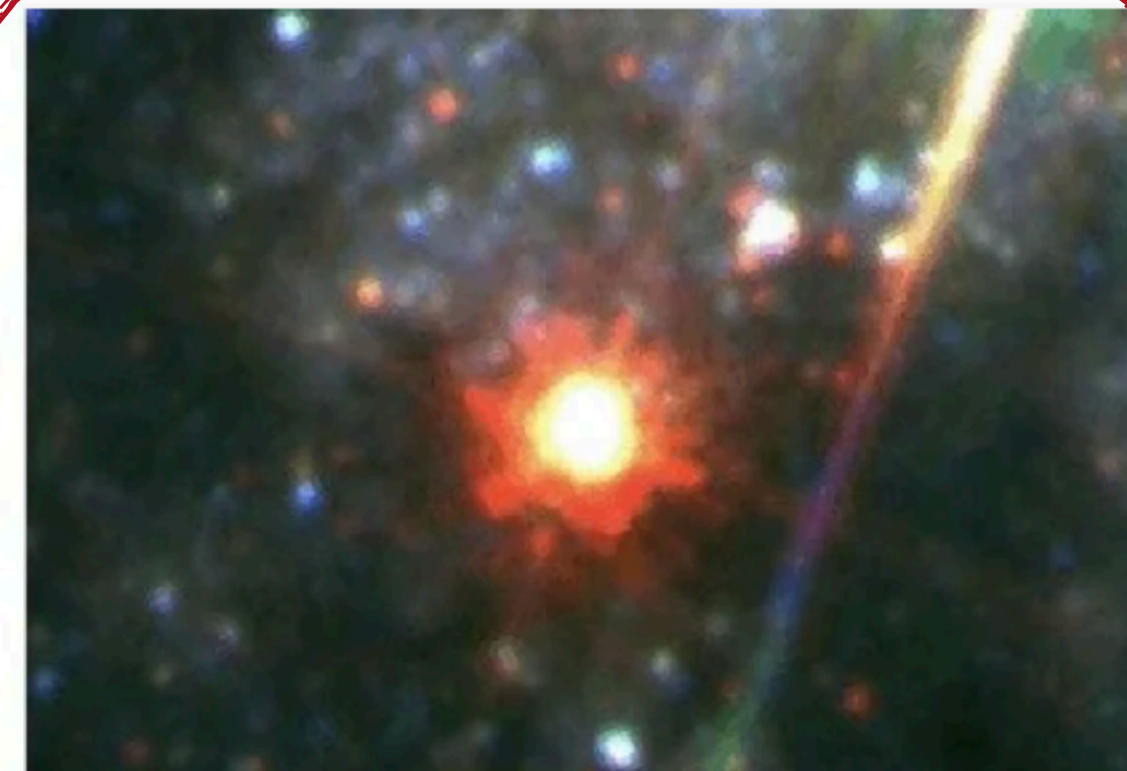
AGN and Galaxy Evolution



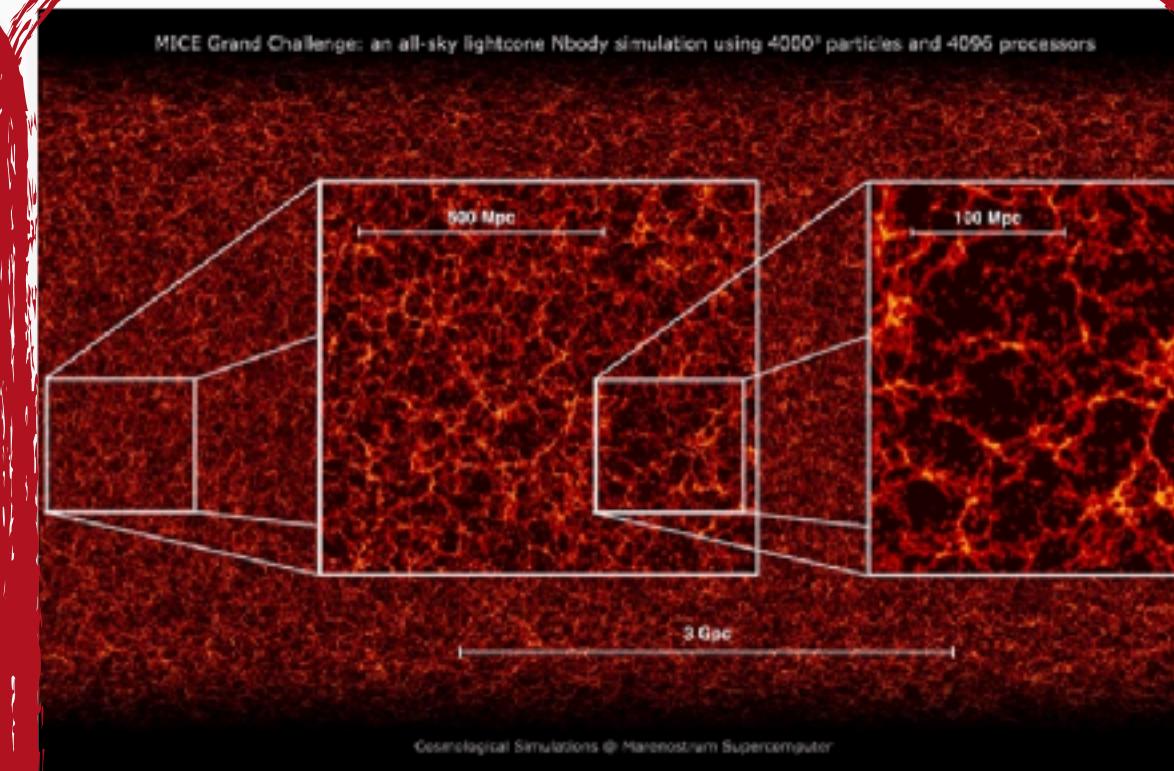
The Black Hole Universe



The Low Surface Brightness Universe



Supernovae and stellar transients



MICE Simulations

ICE-CSIC personnel



Institute of
Space Sciences



Staff (7+2): Francisco Castander, Martin Croce, Pablo Fosalba, Lluís Galbany, Mar Mezcua, Mireia Montes (RyC), Isaac Tutusaus (RyC 09/25) (+ Enrique Gaztañaga at ICG)

Postdocs (9): Alex Alarcon (JLKXA), Sylvain Gouyou Beauchamps, Claudia Gutiérrez (BdP), Maria Kopsacheili (JdC), Li-Wen Liao, Gabriele Parimbelli, Slađana Radinović, Sujatha Ramakrishnan, Santiago Serrano.

PhD Students (15): Alaa Alburai, Marc Alemany, Zahra Baghkani, Gisela Camacho, José Maria Coloma, Dane Cross, Alejandro Eróstegui, Giousè Gambardella, Maider González, Cristina Jiménez, Hao-Yu Miao, Cristian Nery Viglione, Kim Phan, Víctor Rodríguez, Julen Untzaga

Engineers (4): Ricard Casas, Axel Verderi, Álvaro Montoro, Alex Tomás

ICE-CSIC main interests (Survey oriented)



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Space Sciences



DES: Co-lead “DES Y6 cosmology key project” (**Martín**). Interested in galaxy clustering, weak lensing, simulations. Redshift Working Group convener & DEI committee chair (**Alex**). Leading SNI cosmology group, and contributing to SNIa cosmology analysis (**Lluís**).

PAUS: PAU Survey Director (**Enrique**), Project Scientist (**Francisco**). Interested in producing photo-z catalogues (BCNZ ++) and measuring intrinsic alignment in all the wide fields.

DESI: Institutional Board Deputy Chair (**Francisco**), Interested in magnification, MG simulations, galaxy clustering (RSD). Target selection, DESI imaging validation, systematics.

EUCLID: Co-lead of “Cosmological Simulations WG” (**Pablo**), co-lead of DR1 Joint Cosmology 1 key project (**Martín**). Member of Euclid Science Team -EST- and Euclid Consortium Board -ECB-, coordinator of OU-SIM (**Francisco**). Member of the ECDC (**Mireia**). Main developers of Euclid FLAGSHIP galaxy catalogue (comprehensive galaxy assignment pipeline, including galaxy properties, now based on PIC big data infrastructure). Active in the SN WG (**Lluís**)

ICE-CSIC main interests (Survey oriented)



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LSST: Co-chair LSB working group of the Galaxies Science Collaboration (**Mireia**). Transient science in the Transient and Variable Sky (TVS) and Dark Energy Science (DESC) collaborations. DESC Deputy Publication Manager (**Lluís**).

ZTF: External member of the SNIa cosmology working group. Leading the host galaxy characterization of the DR2, 2.5, and 3 (**Lluís**).

ROMAN: Member of the Project Infrastructure Team (PIT) of the HLTDS SN survey involved in the Spectroscopy and Characterization WG (**Lluís**).

LS4: Institutional member, and seat in the collaboration council. Involved in the SN physics and SN cosmology working groups (**Lluís**).

ARRAKIHS: Science lead (**Enrique**). Instrument Coordinator & Deputy Consortium Lead (**Santi**). Active members of the Simulations WP (**Li-Wen**, **Pablo**), lead of the Cirrus WP (**Mireia**).

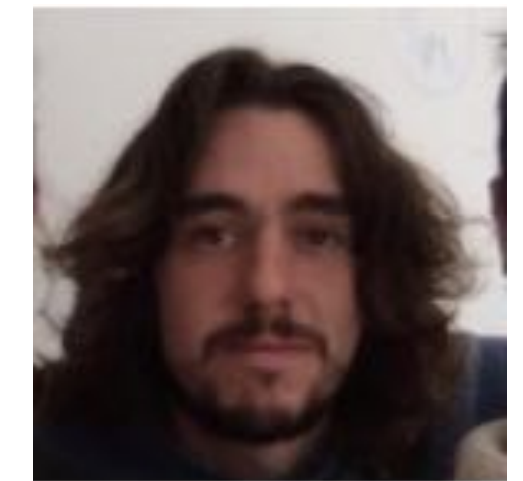
ICE-CSIC postdocs research



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Space Sciences



- **Alex Alarcon** (JLKXA): Galaxy-halo connection; Redshift estimation; Galaxy Clustering; Weak lensing cosmology. **DES.**
- **Sylvain Gouyou Beauchamps**: Massive neutrinos, covariance (Gaussian + SSC) and non-Gaussian likelihood for galaxy clustering. **Euclid.**
- **Claudia Gutiérrez** (BdP): Supernova physics, environments and reddening. **LS4, LSST.**
- **Maria Kopsacheili** (JdC): Supernova Remnants. Diagnostics for SNR identification in optical wavelengths, luminosity functions.
- **Li-Wen Liao**: constraining the nature of dark-matter with the low-surface brightness universe. **ARRAKIHS**



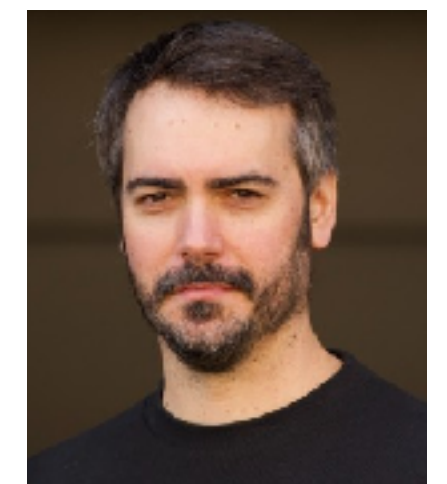
ICE-CSIC postdocs research



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Space Sciences



- **Gabriele Parimbelli:** HOD mocks generation. **EUCLID**
- **Sladana Radinović:** Euclid Post reconstruction BAO and voids. **EUCLID**
- **Sujatha Ramakrishnan:** Generation of galaxy catalogues in cosmological simulations.
- **Santiago Serrano:** Instrument Coordinator & Deputy Consortium Lead. **ARRAKHIS**



ICE-CSIC PhD students research

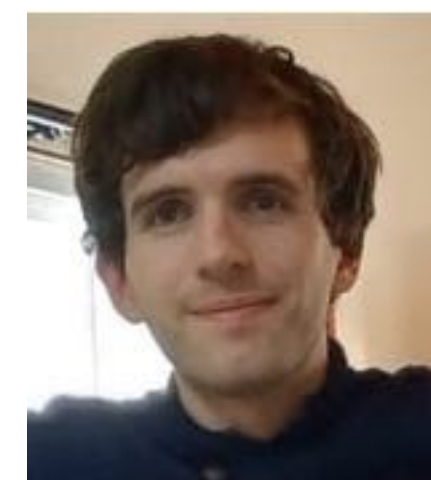
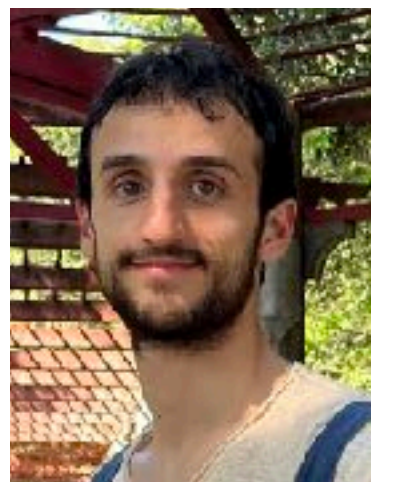
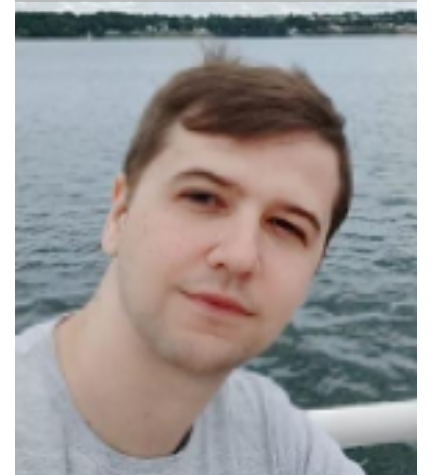
Large-scale galaxy surveys group



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Space Sciences



- **Marc Alemany** (Pablo & Isaac): 3x2pt analysis for future (stage IV) surveys.
- **Zahra Baghkani** (Francisco): Simulating the Universe to exploit Large Cosmological Surveys
- **Gisela Camacho** (Alex): Improving galaxy selection with photometry and clustering information.
- **José Maria Coloma** (Martín): Joint cosmology pipeline. **EUCLID**
- **Giousè Gambardella** (Martín): Galaxy clustering modeling. **EUCLID**
- **Cristian Nery Viglione** (Pablo): Probing gravity with weak lensing and clustering from mock galaxy surveys.



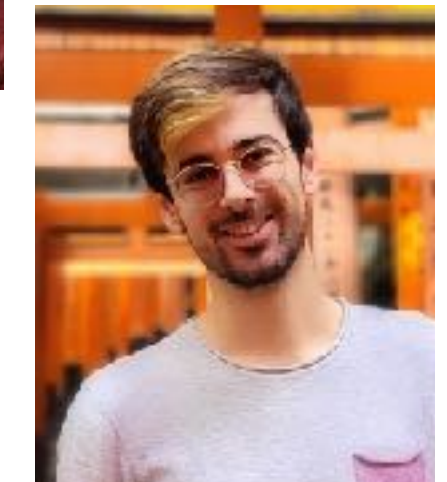
ICE-CSIC PhD students research AGN and Galaxy Evolution group



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- **Alejandro Eróstegui** (Mar): A search for dual AGN in galactic mergers across mass scales. **DESI**
- **Víctor Rodríguez** (Mar): AGN outflows and feedback in dwarf galaxies. **DESI**
- **Julen Untzaga** (Mar & Silvia Bonoli): A search for wandering intermediate-mass black holes in the Milky Way



ICE-CSIC PhD students research SN and transients group



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- **Alaa Alburai** (Lluís): Underluminous 1991bg-like SNIa. **ZTF, LS4, LSST.**
- **Dane Cross** (FI; Carles and Lluís): Deblending, galaxy-galaxy lensing analyses, high- and low-z σ_8 . **ZTF, LSST.**
- **Maidor González** (ICE-MdM; Claudia and Lluís): Core-collapse SN science. Type II and IIb boundaries. **LS4, LSST.**
- **Cristina Jiménez** (FPI; Lluís): SN Ia environments with IFS.
- **Hao-Yu Miao** (JAE-PRE; Claudia and Lluís): Core-collapse SN science. Weird transients. **LS4, LSST.**
- **Kim Phan** (FI; Lluís and Franciso): SNIa cosmology in the Near-infrared, peculiar velocities and low-z σ_8 . **ZTF.**

