

# IAC3 QUARTERLY NEWSLETTER

2ND QUARTER, 2025

## Knowing is sharing: IAC3's commitment to outreach

Over the past months, IAC3 researchers have been deeply engaged in outreach, sharing their passion for science with the wider community through a range of activities and public events.

In April, IAC3 joined *Mallorca Eclipsada*, an event organized together with AstroMallorca and the UIB to explore the science of eclipses, which drew strong interest from the local public. Around the same time, Dr. Alicia Sintes took part in the *ESA Desafiament CanSat 2025* competition in Binissalem, inspiring high-school students to pursue scientific careers and introducing them to the field of gravitational waves.



Early May brought the *PLANCKS 2025* theoretical physics competition to Barcelona, where IAC3 members played an active role: Alicia Sintes contributed as invited speaker, PhD student Joan Llobera supported the organization, and Dr. Sascha Husa strengthened academic ties with the international community. Shortly after, the group participated in *Ciència per a Tothom* at the UIB, where visitors of all ages experienced hands-on science. The Mathematics, Imaging and Learning group presented an anamorphosis activity using cylindrical mirrors, while the GRAVITY group offered visitors the chance to explore the fabric of space-time in a tangible way.

Finally, at CaixaForum Palma, IAC3 researchers contributed to the second edition of *Finestres a l'Univers*, a public astronomy course designed to bring cutting-edge science closer to society. Prof. Ramon Oliver spoke about the Sun's magnetic activity, while Prof. Carlos Palenzuela captivated the audience with a talk on neutron stars and black holes, and how we can detect them through light and gravitational waves.

Together, these activities highlight IAC3's strong commitment to outreach: making complex scientific ideas accessible, sparking curiosity, and inspiring future generations. At IAC3, we firmly believe that knowing is sharing.

## What's new in research?

### Latest publications

During the first quarter of 2025, we published 8 new papers written by David Keitel, Quentin Henry, Rodrigo Tenorio, Joan-René Merou, Alicia M. Sintes, Marco Sánchez, Toni Buades, Marta Colleoni, Felip A. Ramis, Daniel Torres, Joan Duran, Júlia Navarro and Catalina Sbert. Congratulations!

### Outstanding members

These past months, our members have been granted with numerous awards and positions. Cristian Comellas,

has been awarded a FPU Scholarship, and Rosa Delicado and Tomeu Garau (our technician), a FPU-CAIB Scholarship to pursue their PhD Studies.

Jorge Valencia, PhD student from the GRAVITY group, was awarded the Extraordinary Master's Prize for the FAMA Master's Degree at the UIB.

Joan Duran has been promoted from Deputy Director to Director of the Àrea d'Investigació, and Alicia Sintes has been named one of the 50 most influential women in the Balearic Islands by Forbes Women and joined the scientific advisory board for Palma's bid for European Capital of Culture 2031.

## Latest PhD thesis defended

Two new PhD students from the GRAVITY group have recently graduated: Maria de Lluc Planas, with her thesis titled “*Decoding gravitational wave signals from compact binary coalescence: from LIGO design sensitivity toward the*

*LISA space mission*”, directed by Dr. Antoni Ramos Buades and Dr. Sascha Husa; and Manuel Rodriguez, with “*Kilonovas and neutrinos from binary neutron stars mergers*”, directed by Dr. Carlos Palenzuela i Dr. Joan Massó



## UIB and IAC3 Boost Spain's Leadership in Gravitational Wave Research

The University of the Balearic Islands, through IAC3, is a key partner in REDONGRA, Spain's national network for gravitational wave physics. The initiative coordinates Spanish contributions to projects like LISA and the Einstein Telescope, supports researcher training, and unites 20 leading institutions to strengthen Spain's role in this cutting-edge field.

[SEE THE FULL ITEM HERE](#)



## A Dynamical Birthday for the IAC3's Deputy Director

On June 26–27, 2025, the Dynamical Systems Group at UIB held the workshop “*Analysis of Slow-Fast Dynamics in Evolutionary Trends*” at Hotel Cala Santanyi. The event brought together leading researchers to discuss advances in piecewise dynamical systems. It also celebrated Professor Antonio E. Teruel's 60th birthday, honoring his scientific contributions.

[SEE THE FULL ITEM HERE](#)

## Dr. Jaume Carot Re-elected as Rector of the UIB

The University of the Balearic Islands (UIB) has re-elected Dr. Jaume Carot, member of the Institute of Applied Computing and Community Code (IAC3), as Rector for a new term. His renewal reflects the trust placed in his leadership by the university community and ensures continuity in the institution's strategic direction.



## Welcomes, farewells, and progress

These past months, we have had the pleasure of welcoming Sushree Sangeeta Nayak as a post-doc researcher. Last June Antoni Bennassar left IAC3—our thanks for his contributions and best wishes ahead.