

IAC3 QUARTERLY NEWSLETTER

1ST QUARTER, 2025

IAC3 Welcomes New Director and Management Team

On April 4th, IAC3 held its election day. After the votes were cast, Alicia M. Sintes was elected as the new director of the institute. She will lead the new management board together with Antonio E. Teruel as deputy director and Roberto Soler as secretary.



A Message from the New Director

It is a true honour to have been elected as Director of IAC3, and I want to sincerely thank you all for your trust and support. I look forward to building on the strong foundations laid by those who came before me. I take on this role with a deep sense of responsibility, but also with genuine enthusiasm for everything we can achieve together.

Over the years, IAC3 has grown into a dynamic and diverse research community — a place where fundamental research, applied innovation, and knowledge transfer come together. This is thanks to the dedication and hard work of everyone involved, past and present. Our collective efforts have brought us to where we are today, and I truly believe the best is yet to come.

Looking ahead, my commitment is clear: to support your work, to promote excellence across all our research lines, to foster meaningful collaboration, and to strengthen our impact both within the university and beyond. I hope to help create the conditions for new ideas to thrive, and for IAC3 to continue evolving as a leading research institute.

My door is always open — I'm here to listen, to learn, and to work alongside you. Let's move forward, together.

Alicia M. Sintes

What's new in research?

Latest publications

During the first quarter of 2025, we published 7 new papers written by Rodrigo Tenorio, David Keitel, Neha Singh, Anna Heffernan, Tomeu Garau, Joan Duran, Catalina Sbert and Sayantani Bera.

Outstanding members

These past months, our members have been granted with numerous awards and positions. Maria Antònia Ferrer was awarded a PREDOC International fellowship to pursue her PhD under the supervision of our Dr. David Keitel and Dr. Brynmor Haskell, from the Università degli Studi di Milano Statale. Since this past February, Joan Duran has been appointed Deputy Director of the Àrea d'Investigació. This role includes

supporting UIB's research policy, promoting funding acquisition, and fostering collaboration between university research groups and external institutions.

Research projects

The *Tecnologías avanzadas para la exploración del universo y sus componentes* project from the GRAVITY group has been extended until the end of 2025. Moreover, they received two new projects of 65.000,00€ each.

A whole lot of gravitational waves

On December 21, 2024, Rafel Jaume and Joan-René Mérou, PhD students of the IAC3, returned from a three-month research stay at the Laser Interferometer Gravitational-Wave Observatory (LIGO) in Livingston, USA. Their work focused on improving the detector's

sensitivity, identifying and mitigating noise sources, and contributing to real-time follow-ups of gravitational-wave candidate events during the fourth observing run (O4). Their work received a lot of attention from the media, such as [IB3](#) or [Diario de Mallorca](#), curiously enough, on the same day that Joan Llobera (with a team of 6 people) was on duty when a very rare detection of at least one neutron star (an object that remains largely unexplored) happened.



Women in science, and more!

To celebrate the International Day of Women and Girls in Science, Ana Belén Petro and María Jesús Álvarez (who studied together at UIB) took part in IB3 Ràdio's Téntol, a programme about Balearic language and culture. They spoke about their research in digital image restoration and dynamical systems, their experience teaching mathematics at university, and the persistent gender gap in STEM. They highlighted the low number of women in leadership roles and the importance of female role models in science. The episode ended with a fun quiz on science-themed sayings.

Moreover, that same week we published several reels on social media interviewing the IAC3 women, from PhDs to full professors, where they explained their research, their journey as female researchers and the importance of the Day of Women and Girls in Science.

Later, on March 8th, to mark International Women's Day, the Equality and Diversity Committee at IAC3 approved a [new commitment](#) to fostering equality at all levels and to standing against discrimination of any kind, whether based on gender, age, ethnicity, nationality, religion, or sexual orientation, to promote inclusive research practices within the institute



[SEE THE FULL ITEM HERE](#)



Outreach activities

The Institute has taken part in different outreach activities this past months. In February, Alicia Sintès and Sascha Husa introduced high school students to the world of gravitational waves in [MENTORimènt](#). In March, Alicia Sintès gave a talk titled "Les ones gravitacionals: Les noves missatgeres de l'univers" within the *Mirar el cel, mirar la terra* exposition. In April, Manuel Luna from the SOLPHYS group attended the [Solar Eclipse Conference](#) organized by the UIB and our colleagues from AstroMallorca with his talk "The Solar Corona"; while Alicia Sintès was a jury on the [CanSat Challenge](#), where high school students compete on a mini-satellite building contest.

Welcomes, farewells, and progress

These past months, we have had the pleasure of welcoming David Martínez and Alex Vañó as post-doc researchers; Miquel Cantallops Palmer and Roberto Sebastián Trinidad as PhD students and Antoni Bennasar as technical support staff.