









# Institute of Space Sciences (ICE)

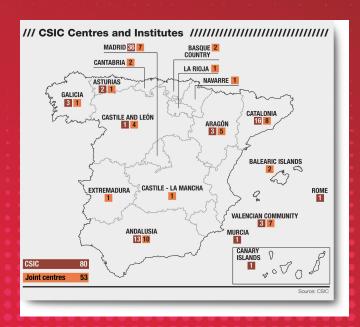
A. Serenelli



# An institute of Spanish Research Council (CSIC)

- > ICE was created by CSIC in 2008 moved to current building in 2015
- > We are a mid-sized CSIC Institute around 150 persons

> CSIC is the largest institution dedicated to research in Spain and the 3rd in Europe with more than 120 institutes and research centres





> At regional level, we are affiliated to Institut d'Estudis Espacials de Catalunya (IEEC)



#### Research structured around three lines

- > From star formation to life: star & planet formation and evolution, characterization of exoplanets & systems, minor bodies, Earth Observation
- The Extreme Universe: the transient sky, Novae and SNe, pulsars, magnetars, PWNe and other high-energy phenomena
- > The Fabric of the Universe: cosmology, large-scale structure, extragalactic astronomy, gravity, gravitational waves

In all areas, we combine theory & simulations, observations, and experimental developments

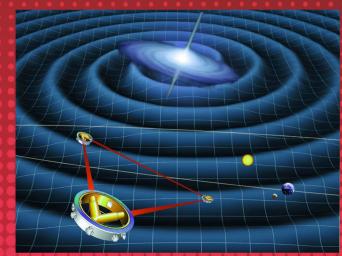
#### Gravitational waves at ICE

A 20 year old endeavor, pioneered by Alberto Lobo when he joined the Institute

ICE led the Spanish contribution to LISA Pathfinder through hardware, software and instrumental developments



Naturally, but with a lot of effort, evolved into participation and leadership in Spanish contributions to LISA



# Strong institutional support

Strategic goal: development of technology for OFCs with nano-Kelvin temperature resolution in sub mHz regime

Maria de Maeztu Seal of Excellence Period: 2022-2025



Fund from the Recovery, Transformation and Resilience Plan (EU, Spain, Catalunya)



> Strong support as well by IEEC through NewSpace Strategy, with ILIADA (25/26)

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- > Strong support as well by IEEC through NewSpace Strategy, with ILIADA (25/26)
- > Carlos Sopuerta, Miquel Nofrarias, Víctor Martin
- > Sascha Husa (IC 2023, from Univ. Baleares) and David Roma (Tecnólogo 2024, inc. 2025)

