



Doctoral INPhINIT "La Caixa" Fellowships in Theoretical and Experimental Particle Physics, Astroparticle Physics, Cosmology, Gravitational Waves, Quantum Computing and Instrumentation R&D at IFAE Barcelona

The Institut de Física d'Altes Energies (IFAE) is offering several PhD positions for talented Early Stage Researchers within the framework of the Doctoral INPhINIT "la Caixa" fellowships, in the fields of Particle Physics, Astroparticles, Cosmology, Gravitational Waves and Instrumentation R&D.

These are 3 year PhD positions, funded by the EU Marie Sklodowska-Curie program, at the top scientific research centers in Spain, accredited with the Severo Ochoa of María de Maeztu excellence awards. On top of a competitive salary, the position offers a dedicated budget for short scientific visits to other research centers. In addition, the IFAE offers additional funds to attend schools or international workshops related to the PhD research topics.

The IFAE is offering 10 projects within this call:

- Searches for new phenomena with the ATLAS detector at the LHC (Prof. Aurelio Juste, juste@ifae.es)
- Unravel New Physics in flavor anomalies using effective field theory's techniques (Dr. Pere Masjuan, masjuan@ifae.es)
- Development of a new generation of solid-state devices with charge multiplication for high energy physics and medical applications (Prof. Sebastian Grinstein, sgrinstein@ifae.es)
- Beyond the Standard Model Physics (Prof.Àlex Pomarol, pomarol@ifae.es)
- Commissioning and First Science with the Northern Cherenkov Telescope Array for very-high-energy gamma-ray astronomy (Prof. Abelardo Moralejo, moralejo@ifae.es)
- Timing the expansion of the Universe with quasar spectra (Dr. Andreu Font, a.font@ucl.ac.u)
- Development of Machine Learning Based Algorithms for Event Reconstruction of a novel Detector Technology (Dr. Thorsten Lux, thorsten.lux@ifae.es)
- Superconducting Adiabatic Quantum Processors (Dr. Pol Forn-Diaz, pforndiaz@ifae.es)
- Gravitational Waves Physics using LIGO/Virgo Interferometers data (Prof. Mario Martínez, mpp@ifae.es)
- i-Vision: Adaptive Retinal Implant Technology for Vision Restoration / Characterization and Performance of the i-Vision pixel ASIC (Prof. Mokhtar Chmeissani, mokhtar@ifae.es)

Applications should be completed online at: <u>https://obrasociallacaixa.org/es/investigacion-y-becas/becas-de-la-caixa/doctorado-inphinit/incoming</u>

The application deadline is February 4, 2020

IFAE and La Caixa Foundation are equal opportunity employers committed to diversity in the workplace, and we welcome applications from all qualified candidates. Sending CVs to implies consent to the legal warning at the bottom of IFAE's Home Page. General information about IFAE is available at http://www.ifae.es.

For any questions please visit the INPhINIT webpage above or contact IFAE's Project Manager Marta Balza (mbalza@ifae.es).