



## **Doctoral INPhINIT INCOMING "La Caixa" Fellowships in Theoretical and Experimental Particle Physics, Astroparticle Physics, Cosmology, Gravitational Waves 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 INCOMING "la Caixa" fellowships, in the fields of Particle Physics, Astroparticles, Cosmology, Gravitational Waves and Instrumentation R&D.

These are 3-year PhD positions at the top scientific research centers in Spain, accredited with the Severo Ochoa of María de Maeztu excellence awards. The international character of the program requires candidates to have spent no more than 12 months in Spain in the 3 years just before the starting date. 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:

- **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** (Dr. Abelardo Moralejo, moralejo@ifae.es)
- **CosmoHub next generation: Enabling open science, analysis and data management in the Big Data era for multi-messenger Astronomy** (Dr. Jorge Carretero Palacios, carretero@pic.es)
- **Depleted Monolithic Active Pixel Sensors with Charge Multiplication for Medical Applications** (Prof. Sebastian Grinstein, sgrinstein@ifae.es)
- **Design, prototyping, validation and assessment of scientific capabilities of a trigger for low energy gamma rays for the HERD cosmic ray detector in the future Chinese Space Station** (Dr. Javier Rico, jrico@ifae.es)
- **Development of Machine Learning Based Algorithms for Event Reconstruction of a novel Detector Technology** (Dr. Thorsthen Lux, thorsten.lux@ifae.es)
- **New B-Flavour anomalies** (Prof. Joaquim Matias, matias@ifae.es)
- **Searches for new phenomena with the ATLAS detector at the LHC** (Prof. Aurelio Juste Rozas, juste@ifae.es)
- **Study of Gravitational Waves using the LIGO-Virgo Interferometers** (Prof. Mario Martínez Pérez, mmp@ifae.es)
- **Timing the expansion of the Universe with quasar spectra** (Dr. Andreu Font-Ribera, afont@ifae.es)

Applications should be completed online at:

<https://fundacionlacaixa.org/en/la-caixa-foundation-doctoral-inphinit-fellowships-incoming>



## Requirements:

In order to be accepted, candidates must meet the following eligibility requirements:

### Experience:

At the call deadline, applicants must be in the first four years (full-time equivalent research experience) of their research careers and not yet have been awarded a doctoral degree.

### Studies pursued:

At the time of recruitment, candidates must comply with one of the following options:

- To have completed the studies that lead to an official university degree adapted to the European Higher Education Area awarding 300 ECTS credits, of which at least 60 ECTS credits must correspond to master level.
- To have completed a degree in a university not adapted to the European Higher Education Area that gives access to doctoral studies. The verification of an equivalent level of studies to the ones mentioned above will be made by the university when the admission procedure starts.

### Geographic mobility:

Candidates must not have resided or have carried out their main activity (work, studies, etc.) in Spain for more than 12 months in the 3 years immediately prior to the call deadline.

Short stays, such as holidays, done in a country other than their country of usual residence (where they carried out their main activity), will be considered as time spent in their country of usual residence.

### Level of English:

Candidates must have a demonstrable level of English (B2 or higher).

Complete applications: Only candidates whose applications meet all the requirements of the call may be accepted.

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The application deadline is February 4, 2021.

IFAE and La Caixa Foundation are equal opportunity employers committed to diversity in the workplace, and we welcome applications from all qualified candidates.

General information about IFAE is available at <http://www.ifae.es>.

Sending CVs to implies consent to the legal warning at the bottom of IFAE's Home Page.

For any questions please visit the INPhINIT webpage above or contact the IFAE's Projects Office: Marta Balza ([mbalza@ifae.es](mailto:mbalza@ifae.es)) and Sara Martínez de Salinas Uzquiza ([smartinez@ifae.es](mailto:smartinez@ifae.es))