



Doctoral FPU Fellowship in Experimental Collider Physics at IFAE-Barcelona

The High Energy Physics Institute in Barcelona (IFAE-Barcelona) invites outstanding physics master students to apply to the FPU2023 Fellowship (Ayudas para la Formación Universitario) to complete a PhD Thesis within IFAE's Experimental Collider Physics program. IFAE is one of the top research centers in Spain conducting experimental and theoretical research at the frontier of fundamental physics, as well as developing cutting-edge detector technology. In 2012 and 2016, IFAE was awarded the distinction of "Severo Ochoa" Centre of Excellence by the Spanish Ministry of Economy and Competitiveness.

IFAE maintains a strong presence in the ATLAS experiment at CERN's Large Hadron Collider (LHC), with major responsibilities on the calibration and maintenance of the TileCal hadronic calorimeter and the Level-1 Topological Trigger system, and participates in the Pixel detector upgrade. The IFAE-ATLAS group has developed an exciting and broad research program that includes precision measurements of the top quark and the Higgs boson, and searches for new phenomena beyond the Standard Model (e.g., dark matter, supersymmetry, vector-like quarks, leptoquarks, additional light or heavy Higgs bosons, etc).

The successful PhD candidate will join the IFAE-ATLAS group and will participate in first-class research with the ATLAS detector. He/she will play a leading role in physics analysis using the full Run 2 and Run 3 datasets, and participate in the maintenance and operation of the ATLAS detector.

Characteristics of the fellowship:

- Duration of 4 years.
- The predoctoral contract will have a minimum annual remuneration of 19,026 euros in the first year, and 23,772 euros in the second, third and fourth years. The salary includes 12 monthly payments and two extraordinary payments per year.
- Those who have obtained a doctorate degree, prior to the start of the last year of FPU aid, will be able to access a postdoctoral orientation period for a maximum of one year.

Requirements of the candidates:

- Be enrolled in a PhD Program 2023-24, or have the master degree, or be enrolled in a master's degree granting access to the PhD course 2024-25.
- Have concluded 180-credit University studies later than 01/01/2019, or 240-credit studies later than 01/01/2020. For studies carried out abroad and not adapted to the European Higher Education Area (EEES), please contact us.
- Have completed a **Degree in Physics** with a **minimum academic average grade of 7,949**. If the qualifications have been completed abroad, the average grade on the academic record must be calculated according to the equivalent average grades set in the current resolutions of the Ministry of Universities, which can be found [here](#).
- People who are beneficiary of a FPU fellowship from previous calls will not be able to submit their application to this call.



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- People who, at the planned time of incorporation into the fellowship, have enjoyed previous predoctoral contracts for a period of more than 24 months will not be eligible to this call.
- A NIE is mandatory for non-Spanish applicants.

Key dates and more information:

For more information on the proposed research projects, eligibility criteria, and the overall application process, please contact Dr. Aurelio Juste (juste@ifae.es) and Dr. Imma Riu (imma.riu@ifae.es) **by January 31, 2024.**

Deadline for submitting applications: **February 15th, 2024, at 2 pm Peninsular Spain.**

Please find all the information in the official web site of the *Ministerio de Ciencia, Innovación e Universidades* by clicking [here](#).