

## Postdoctoral Position in Hadron Collider Physics at the LHC with the ATLAS Detector (IFAE-Barcelona)

The High Energy Physics Institute in Barcelona (IFAE-Barcelona) announces the opening of a Postdoctoral Position to participate in its hadron collider experimental program using the ATLAS detector at the LHC. 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, 2016, and 2024 IFAE was awarded the distinction of "Severo Ochoa" Centre of Excellence by the Spanish Ministry of Economy and Competitiveness.

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

IFAE maintains a strong presence in the ATLAS experiment, with major responsibilities on the maintenance and operation of the TileCal hadronic calorimeter and the Level-1 Topological Trigger system, and participates in the Pixel detector upgrade and, more recently, in the TDAQ Phase-II upgrade. The group has also developed an exciting and broad research program that includes precision measurements of the top quark (e.g., four-top-quark production) and the Higgs boson (e.g., top-Higgs Yukawa coupling, di-Higgs production), and searches for new phenomena beyond the Standard Model (e.g., supersymmetry, vector-like fermions, leptoquarks, additional light or heavy Higgs bosons, etc).

The successful postdoctoral candidate will join the IFAE-ATLAS group and will participate in first-class research with the ATLAS detector. They will participate in the preparation of the ATLAS detector for the High-Luminosity LHC and in the analysis of the data collected during Run 2 and Run 3 of the LHC. The duration of the position is 3 years.

Applicants should hold a Ph.D. in Experimental Particle Physics, which should have been obtained during the period **1 September 2022 to 1 September 2025**. They should provide a curriculum vitae, a brief description of research interests, and arrange for three letters of recommendation to be sent by e-mail to Dr. Tamara Vázquez Schröder (<u>tvazquez@ifae.es</u>) and <u>rrhh@ifae.es</u> stating the job reference (2025/38\_ATRAE\_Postdoc Junior) as the subject of the message **by October 30, 2025**.

IFAE is an equal opportunity employer committed to diversity in the workplace, and we welcome applications from all qualified candidates. Women are particularly encouraged to apply.

Sending CVs to the above addresses implies consent to the <u>IFAE's legal warning on data privacy</u>. The application must contain a personal identification number (DNI, NIE or passport) in order to proceed to the verification of absence of conflict of interest required by Recovery and Resilience Mechanism of the Spanish Government.