



**Institut de Física
d'Altes Energies**



“*PREBIST*” Predoctoral 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 Predoctoral 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. IFAE is one of the *few* Spanish research institutes awarded with the *Severo Ochoa* distinction for excellence on research (recently renewed for the 2017-2021 period).

IFAE maintains a strong presence in the ATLAS experiment at CERN (Switzerland), with major responsibilities on the calibration and maintenance of the TileCal hadronic calorimeter and the Level-1 Topological Trigger system, and participates in IBL operations and 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. supersymmetry, extra spatial dimensions, dark matter, new heavy quarks and Higgs bosons, etc). The successful PhD candidate will play a leading role in physics analysis using the full Run 2 dataset, and participate in the maintenance and operation of the ATLAS detector. He/she will carry out most of his/her research at CERN in collaboration with other PhD students and postdoctoral researchers.

The position offered is part of *PREBIST*, an international doctoral fellowship program led by the Barcelona Institute of Science and Technology (BIST) of which IFAE is a member. *PREBIST* is co-funded by the European Union's Horizon 2020 research and innovation program under the Marie Skłodowska-Curie grant agreement No. 754558. This program will finance up to 28 four-year fellowships in top research in the Barcelona and Tarragona area (Spain).

Program description: <http://bist.eu/prebist/>

The **application deadline** is **January 7, 2018**.

Eligible candidates must hold, or be in the position of receiving before the deadline, a University degree that would qualify the applicant to enter one of the PhD programmes recognized by the BIST research centers. In addition, the applicant must not have spent more than 12 months of the prior 36 months in Spain, at the time of the call deadline. Incorporation of the successful candidate is tentatively foreseen for May 2018, but it can be negotiated.

Applications must be submitted through the *PREBIST* website <http://bist.eu/prebist/>. Technical questions on the application procedure can be addressed to Ms. Marta Balza (mbalza@ifae.es). Any inquiries specific to the position described above can be addressed to Martine Bosman (bosman@ifae.es) and Aurelio Juste (juste@ifae.es).

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