

# Ph.D. position in experimental particle physics in the ATLAS experiment of the LHC

Instituto de Física Corpuscular (IFIC) invites applications for a position to pursue a Ph.D. in physics in the ATLAS experiment of the CERN LHC.

IFIC (<http://ific.uv.es>) is a joint center of the Spanish Research Council (CSIC) and the University of Valencia, devoted to research in particle, astroparticle and nuclear physics.

The ATLAS research group at IFIC has greatly contributed to the construction of the hadronic Tile Calorimeter and the Semiconductor Tracker, and it is very active in their upgrade towards the High-Luminosity LHC. The group is strongly involved in several physics analyses on topics such as searches for exotic physics, or Higgs boson and top quark precision measurements.

## Job description

The position will be funded by the regional government (Generalitat Valenciana) in the framework of the GenT excellence grant, it is expected to start in the beginning of 2024 and have a duration of 3 years.

The successful candidate will become a member of CERN and the ATLAS collaboration, and will work to improve the reconstruction of top quarks and to measure their properties with unprecedented precision. The candidate will have the opportunity to learn state-of-the-art data analysis techniques, including machine learning and advanced statistical analysis, as well as software and computing skills that are essential in order to achieve the goals of the position. The dissemination of the physics results via oral presentations to prestigious international conferences and seminal publications to journals is also expected.

## Requirements

Candidates must have a Masters degree by the date of appointment. They are expected to have a strong commitment to research in particle physics and data analysis, be capable of personal initiative and be willing to be involved in one of the largest scientific experiments in the world. Prior experience in the field of high energy physics, data analysis and software skills (C++, python, etc) is not required but will be valued positively.

## Application

Interested candidates are requested to send their application (including a motivation letter, CV, academic transcripts, and the contact information of two persons who could provide letters of reference) to Dr. Miguel Villaplana ([Miguel.Villaplana@ific.uv.es](mailto:Miguel.Villaplana@ific.uv.es)) and Dr. Marcel Vos ([Marcel.Vos@cern.ch](mailto:Marcel.Vos@cern.ch)).

Review of applications will start as soon as the first applications are received and continue until the position is filled.