



## Ph.D. position in experimental particle physics

IFIC (Instituto de Física Corpuscular) is a joint centre of the Spanish Research Council (CSIC) and the University of Valencia (UV), devoted to research in Particle, Astroparticle and Nuclear Physics and its applications, covering both the theoretical and experimental aspects of these fields. IFIC received the "Severo Ochoa" distinction for centres of outstanding scientific importance at national and international level, impact at industrial and social level, and ability to form and attract scientific talent. More information about IFIC the can be found at: <http://ific.uv.es>.

The ATLAS research group at IFIC has greatly contributed to the construction of the Semiconductor Tracker (SCT) and to the hadronic Tile Calorimeter (TileCal) and it is very active in the construction of the new inner tracker (ITk) and the upgrade of the TileCal electronics for the Phase-II upgrade towards the High-Luminosity LHC (HL-LHC). The group is strongly involved also in trigger and several analyses on Top-quark and Higgs boson measurements and Higgs, Di-boson, Exotic and SUSY searches.

### Job description:

The successful candidate will become a member of the ATLAS collaboration, perform studies on fundamental particle interactions, search for physics beyond the Standard Model at the LHC and get involved in the activities related to the construction of the ITk strips detector for the HL-LHC. The candidate will also participate in data taking activities during Run 3 and contribute to the hardware and software developments of the ATLAS detector. During the research, the candidate will learn and perform sophisticated data analysis (machine learning, statistical tools, state-of-the-art theoretical predictions and global fits for new physics interpretations). Temporary stays at CERN or at other research centres or universities would be possible.

### Requirements:

Applicants must hold a Master degree (or equivalent) in Physics or expect to hold such a degree by January 1st 2020. Applicants are expected to have a strong commitment to forefront research lines in particle physics, data analysis, be capable of personal initiative and be willing to be involved in one of the largest scientific experiments in the world.

### Application:

The Ph.D. position is for a maximum of 4 years within the ATLAS group at IFIC. Candidates should submit a motivation letter, CV, academic transcripts and coordinates of two contacts willing to provide a letter of recommendation. The successful candidate is expected to start by early 2020, therefore the review process will start immediately and continue until the position is filled. Applications and possible further inquiries should be addressed to Dr. Carlos Escobar ([cescobar@ific.uv.es](mailto:cescobar@ific.uv.es)).