



EXCELENCIA
SEVERO
OCHOA



CSIC
CONSEJO SUPERIOR DE INVESTIGACIONES CIENTÍFICAS



VNIVERSITAT
ID VALÈNCIA

Predocctoral Position in Higgs Physics at the LHC with the ATLAS Detector (IFIC-Valencia)

The ATLAS group at IFIC (<http://ific.uv.es/>) offers two PhD positions within the call: “Severo Ochoa PhD fellowships” announced at:

<https://inspirehep.net/jobs/2814828>

corresponding to positions number 4 (Higgs Physics) and 10 (Detector and accelerator R&D and computing for fundamental physics)

The group is strongly involved in the operation and Phase-II upgrade of the detector for the High Luminosity LHC, in particular for the Inner Detector, Tile Calorimeter and Trigger systems. The group has expertise in the modeling of physics processes using Monte-Carlo event generators, tracking, electron, photon and tau reconstruction and identification, and is deeply involved in top quark and Higgs boson physics contributing to precise measurements of their properties as well as to direct searches for new phenomena.

The successful candidate is expected to play an important role in Higgs, Top SM or BSM physics analysis using the full Run 2 and Run 3 datasets, and participate in the maintenance and operation of the ATLAS detector or in the development of the computing infrastructure or the detector for the HL-LHC upgrade of ATLAS. The PhD candidate will use and explore cutting-edge technologies like big data analytics and artificial intelligence.

Applicants must hold a University degree giving access to PhD studies (that is a Master Degree) by the time of enrollment in the PhD program. Candidates are expected to have personal initiative and strong interest in the analysis of particle physics data and be willing to be involved in one of the largest scientific collaborations in the world. The position will be based in Valencia, with some research stays at CERN (one of the world's largest and most respected centers for scientific research) to contribute to Run 3 data taking activities during the duration of the PhD.

Candidates are asked to send their application materials (CV, a cover letter with a motivation statement for the topic(s), and copies of University degrees and grades) with subject “SO PhD fellowships” to the contacts: Prof Veronica Sanz (veronica.sanz@uv.es), Dr Salva Marti (Salvador.Marti@ific.uv.es) for position 4 and Dr Marcel Vos (Marcel.Vos@ific.uv.es) for position 10.

They should also indicate the topic(s) they are interested in: **4. Higgs Physics & 10. Detector and accelerator R&D and computing for fundamental physics.**

Applications received by **October 15th 2024** will receive full consideration.