

## Post-doctoral positions at IFIC-València ATLAS group

The IFIC-València ATLAS group invites candidates to apply for one or more post-doctoral positions to work with the detector and data analysis activities of the experiment.

The IFIC-València is engaged in fundamental research in experimental particle physics. One of the main research lines is the detector construction, data taking and analysis within the ATLAS experiment at CERN's Large Hadron Collider (LHC), where we are one of the leading institutes.

Our group is involved in Higgs and top physics regarding both precision measurements of their properties and direct searches for new phenomena. Regarding top quark physics, we are particularly focused on precision measurements, its coupling to the gauge bosons and the Higgs particle as a probe for new phenomena beyond the LHC energy reach in the context of an Effective Field Theory. We also use topologies with top quarks in the final states to perform direct searches for new physics such as candidates for Dark Matter and vector like top quarks. In the Higgs sector our group studies its coupling to taus, lepton flavour violation decays, di-Higgs production and search for additional Higgs bosons.

We also participate in the experiments data taking activities in particular in the ATLAS track reconstruction and the tracker alignment and in the hadronic calorimeter electronics and data reconstruction.

The successful candidates are expected to join the ATLAS collaboration and get involved in detector and the physics analysis activities of our group, with the aim of the exploitation of the Run 2 and Run 3 data, as well as playing a leading role in the engaged activities.

Job Conditions: Salary and benefits are according to the Spanish public service pay scale. The contract is initially limited to 2 years with a possible extension to a 3rd year (depending on the funding). The job is based in Valencia and offers the possibility of stays at CERN.

Application: Interested candidates should hold a PhD in Particle Physics at the start of the contract, and must submit an application letter with a statement of research interest, the CV and the name of at least 2 possible referees who can provide reference letters.

**Deadline: 08/12/2022.**

### Contact:

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