

Job description - Postdoctoral researcher R2:

The HEP group at University of Oviedo is looking for a postdoc to join our team and work on our ERC Starting Grant project INTREPID (<https://intrepid.uniovi.es/>). The INTREPID project aims to enhance the trigger capabilities to enable the discovery of long-lived particles at the HL-LHC and beyond. To this end, we will use a multidisciplinary approach involving advanced machine learning techniques and top-of-the-line ultra-fast processing platforms to propose an innovative solution that will improve the capabilities of future trigger systems. The HEP group in Oviedo plays a leading role in the phase-2 upgrade work for the L1 trigger upgrade. It is also involved in several physics analyses including long-lived particle searches, top quark, Higgs and diboson measurements. In addition, the group also plays leading roles in the Phase-2 upgrade work for the DT and L1 muon trigger.

Candidates should have a PhD in High-Energy Physics or in a closely related discipline. Previous experience in trigger, pattern recognition algorithms, firmware development and/or machine learning applications will be considered an asset.

The successful candidate is expected to play a leading role in the group's activities on the muon L1 Trigger upgrade for the CMS experiment at the CERN LHC. The position is initially for almost 4 years (starting end of 2024) with the possibility of renewal based on mutual agreement and funding availability.

Interested candidates should submit via email, to Prof. Santiago Folgueras folguerassantiago@uniovi.es, the following documentation:

1. statement of research interests and list of selected contributions,
2. curriculum vitae,
3. at least three letters of reference.

Review of applications will begin immediately and continue until the position is filled. For general information about this position, please contact Prof. Santiago Folgueras.

Santiago (for the University of Oviedo group).

Contact:

- [Folgueras, Santiago \(folguerassantiago@uniovi.es\)](mailto:folguerassantiago@uniovi.es)

Letters of Reference should be sent to:

- folguerassantiago@uniovi.es