

**Job description:**

The SLAC National Accelerator Laboratory (SLAC) is seeking one experimental Research Associates to work on the ATLAS experiment at the Large Hadron Collider (LHC) at CERN.

This position offers exciting opportunities for physics at the energy frontier. The physics interest of the group has a main long-range theme toward searches for new physics and Standard Model measurements that enable such searches. Our physics effort also has a strong emphasis on the buildup of physics signature tools through active engagement in physics performance areas such as tracking and b-tagging, jet and missing Et reconstruction, as well as trigger algorithms and strategies. In addition, our group has a strong and growing emphasis to analyze and reconstruct data in new ways through the application of modern machine learning tools. The main physics research areas of the SLAC ATLAS group include:

- SM and BSM Higgs physics
- New physics searches
- Jets, jet substructure and tagging
- b-tagging and tracking
- Machine learning applications

This position also offers unparalleled experimental experience in the challenging environment of rapidly increasing luminosity of the LHC Phase-II Upgrade. Our longstanding involvements have been with the ATLAS Pixel detector and High Level Trigger and DAQ (TDAQ), and they are continued in our upgrade commitments. In particular, SLAC is the assembly site for the Pixel Inner System, the innermost part of the new silicon tracker ITk which will have a crucial role in many of our analysis topics.

The ATLAS Center at SLAC provides support to our collaborators. In addition to analysis support, we welcome US ATLAS colleagues to participate in detector activities such as the Pixel Inner System project.

The SLAC ATLAS group consists of approximately 20 people, of which 5 are currently based at CERN. This mix is expected to change as LHC enters into a Long Shutdown and as the Pixel Inner System activities ramp up.

The expected start time for this position is summer 2018. The successful candidate is expected to contribute significantly to the following areas:

- Physics analysis
- Physics object reconstruction and performance
- ATLAS upgrade on ITk

**Qualifications:** These are highly competitive positions as part of the general research associate program at SLAC, requiring a background of demonstrated excellence in research and a recent PhD in experimental particle physics. The position is initially a two-year term with the possibility of renewal.

How to Apply: Interested candidates should submit their application through the Academic Jobs Online website (<https://academicjobsonline.org/ajo/jobs/11118>). The deadline to submit the application materials is June 15, 2018.

Submit the following required application material online:

- Cover Letter
- Curriculum Vitae
- Research Statement
- Publication List
- At least three Reference Letters (to be submitted by the reference writers at this site )

SLAC National Accelerator Laboratory is an equal opportunity employer and welcomes nominations of women and minority group members.

Further Info: Please contact Dr. Charles Young ([young@slac.stanford.edu](mailto:young@slac.stanford.edu))