

Department of Physics and Astronomy David Rittenhouse Laboratory 209 S. 33rd. Street Philadelphia, PA 19104-6396

Applications are invited for a **postdoctoral fellowship** in the Department of Physics & Astronomy at the **University of Pennsylvania** to conduct research in **experimental particle physics** with the **ATLAS** detector. The successful candidate should have a PhD in experimental particle physics, have a strong interest in searching for physics beyond the standard model, and be highly motivated to work in tracking for the HL-LHC trigger. There are also additional opportunities to get involved with the exceptional Penn electronics and instrumentation group.

Information on recent and ongoing physics analyses can be found on our web site (https://web.sas.upenn.edu/pennatlas/physics-analysis/), and include searches for electroweak supersymmetric particles, Higgs to Invisible, and beyond the standard model diboson couplings. It is expected that the successful candidate will play a leading role in physics analysis for one of these searches or a new search driven by their physics interests in Run 3.

Many options for tracking for the HL-LHC trigger are currently being considered and developed. This is an extreme computing challenge. The Penn group is currently investigating FPGA-based solutions and is considering getting involved in other approaches. The successful candidate is expected to contribute significantly to this program where there is a lot of space for innovation.

Applications should be submitted using https://academicjobsonline.org/ajo/jobs/23242. Required application materials include a cover letter, curriculum vitae, and a statement describing your research interests and experience relevant to this postdoctoral fellowship. Applicants should include the names and contact information of three or more individuals who will provide letters of recommendation. Review of applications will begin on the 1st of November 2022 and will continue until the position is filled.

The Department of Physics & Astronomy is strongly committed to Penn's Action Plan for Faculty Diversity and Excellence,

see https://almanac.upenn.edu/archive/volumes/v58/n02/diversityplan.html for more information. The University of Pennsylvania is an Equal Opportunity Employer. Minorities, women, individuals with disabilities and protected veterans are encouraged to apply.

For further information, please contact Professor Elliot Lipeles (lipeles@sas.upenn.edu)