Postdoctoral position at York University, Toronto, in Experimental Particle Physics

The York University High Energy Physics group in the Department of Physics and Astronomy invites applications for a postdoctoral position to work on both the DUNE experiment hosted by Fermilab and the ATLAS experiment at CERN. The main role of this position is to provide key support in the computing aspect of the two projects.

A PhD in experimental particle physics (or related field) awarded within the past five years is required (plus if any career breaks). The candidate should have a strong background in programming (C++, Python and Linux) and machine learning techniques. Experience with HEP software is highly preferred.

We are looking for a candidate who will devote 50% of their time to contributing to the DUNE computing group. No prerequisite in neutrino physics is necessary, however this postdoctoral position offers an ideal opportunity to get trained in neutrino physics. Responsibility and visible roles within the protoDUNE and DUNE production team can be achieved within the first months. The candidate can join ongoing efforts in the deployment of machine learning tools for the reconstruction group, with potential publications using protoDUNE data.

With the remaining 50% of the time, the candidate is expected to join the York-ATLAS group, whose main physics interests are within the Exotics group, with searches for long-lived particles and magnetic monopoles. The team is exploring new methods for improving the sensitivity of the analyses using machine learning techniques. The candidate is expected to provide technical expertise on the latest methods of deep learning, and bring deep learning tools from the ATLAS community to the DUNE community. The physics topic is left to the choice of the applicant. The candidate will be given the opportunity to help with the supervision of our students.

The successful candidate will be based at York University in Toronto, but occasional travel within Canada, the US, and to Europe is expected. The position is for two years with a possible extension of a year, starting September 1, 2020 or earlier. Applications will be evaluated until May 25th.

We encourage all qualified persons to apply.

Interested applicants should send by email a CV, a statement of research interests, and arrange to have sent three letters of recommendation to:

Dr. Claire David
claired@yorku.ca

Only those applicants selected for consideration will be contacted.

Feel free to send inquiries if you have questions regarding this position.