UNIVERSITÉ DE MONTRÉAL
Postdoctoral Researcher in Dark Matter Direct Detection

The particle physics group at the Université de Montréal is seeking a postdoctoral researcher to support our dark matter direct detection program with either the SuperCDMS or PICO experiments. Both SuperCDMS SNOLAB and PICO-500 are are expected to begin data taking at SNOLAB in 2021, focusing respectively on low-mass dark matter and spin-dependent couplings to dark matter.

Our group is actively participating in the construction of these experiments. The successful candidate, while based in Montreal, will be expected to travel to SNOLAB in Sudbury, Ontario and work underground in an active mine environment if able. Applicants will be asked in the interview for this position to divulge any conditions that may prohibit their working in an underground environment.

Scientific focus areas for our group include:
- Calibrations of detector response using our tandem accelerator
- Modeling and phenomenology of detector response
- Radioactive backgrounds evaluation
- Radiation propagation simulations in MCNP and Geant4
- Design and fabrication of radiation detectors and their components

Candidates must obtain a PhD in physics or applied physics specializing in particle physics, astrophysics, nuclear physics, or instrumentation by their start date. The successful candidate needs to demonstrate the ability to perform independent research in any of the above areas within an inclusive, diverse and collaborative environment and to communicate their results effectively.

The first review of candidate applications will occur September 16, 2019. Applications will be accepted until the position is filled. Candidates should submit a cover letter (maximum one page), their curriculum vitae, a statement of research interests, and arrange to have three letters of recommendation to:

Prof. Alan Robinson, Department of Physics,
Université de Montréal, C.P. 6128, Succ. Centre Ville
Montréal, Quebec H3C 3J7, Canada
e-mail : alan.robinson@umontreal.ca

We strongly encourage all qualified persons to apply, regardless of citizenship or residential status. In accordance with Canadian immigration regulations, Canadian citizens or permanent residents will be given first consideration.