



Postdoctoral Fellow on the DEAP and NEWS-G Experiments

SNOLAB - Canada's deep underground facility

An exciting postdoctoral position is available at SNOLAB (Sudbury, Ontario), with the Particle Astrophysics Group of Laurentian University and the participation of the Canadian Particle Astrophysics Research Centre (CPARC).

As dark matter continues to elude us, the community is looking for more sensitive detectors, with lower energy thresholds. The NEWS-G detector is a novel application of a Spherical Proportional Counter (SPC) for the search of light ($<1 \text{ GeV}/c^2$) Weakly Interacting Massive Particles (WIMPs) and is expected to be deployed at the end of 2018. Operating the largest dark matter detector to date, the DEAP collaboration has joined a worldwide effort to build a multi-hundred tons liquid argon detector to search for WIMPs with a mass larger than $10 \text{ GeV}/c^2$ with a sensitivity going all the way to the neutrino floor.

The successful candidate will join the NEWS-G and the global argon collaboration working on DEAP-3600, Darkside-20t, and a future 300-tonne liquid argon detector. They will be expected to take a leading role in background estimation, detector operations, data analysis, and writing of papers.

The successful candidate will have a PhD in physics; be experienced in operation and analysis of low-background or otherwise challenging experiments; have a strong publication record; and be able to work well in collaboration. The position will require data-analysis in C++ using ROOT and GEANT4. Teamwork and the ability to work in a large, structured software environment are required. Shift work underground at the SNOLAB facility (6800-foot depth) is expected. This is a term postdoctoral position with a one-year contract, renewable based on performance and funding.

Please email a letter of interest, resume with publication record in pdf format and arrange for three (3) letters of reference to be sent to Dr. Pierre Gorel, Adjunct Professor of Physics at Laurentian University and SNOLAB Research Scientist, pierre.gorel@snolab.ca.

Review of applications will begin May 18, 2018.

We are committed to equity in employment and encourage applications from all qualified applicants, including women, aboriginal peoples, members of visible minorities and persons with disabilities. In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents.

