POSTDOCTORAL FELLOWSHIP IN ASTROPARTICLE PHYSICS

The particle astrophysics group at University of Alberta (U of A; see https://uofa.ualberta.ca/physics/research/centre-for-particle-physics) is seeking for an outstanding postdoctoral fellow to join our experimental activities.

The U of A is home to a large particle physics group, and has a leading role in four major large-scale international experiments in neutrino physics and dark matter, namely SNO+, DEAP-3600 and PICO at SNOLAB and IceCube at the South Pole. The primary goal of a successful candidate will be to actively enable the physics program of SNO+ by taking a leading role in the detector calibration. Involvement in R&D activities for future detectors at the U of A is also foreseen.

The SNO+ experiment aims to establish the Majorana nature of the neutrino by searching for neutrinoless double beta decay using tellurium in liquid scintillator. SNO+ has published results from its water phase and is now in the process of being filled with liquid scintillator. The U of A SNO+ group efforts are directed towards calibration (water phase), event reconstruction and data analysis (all phases), and exploring potential detector upgrades (PMTs and material stability).

The fellowship will be based at the University of Alberta. The position involves travel to SNOLAB (Sudbury, Ontario) where the experiment is located. Experience with instrumentation and R&D in the field of neutrino astroparticle physics and/or dark matter searches or related experiments is an asset. Familiarity with Geant4 and finite element packages is highly desirable. Since SNOLAB cannot be reached by public transport a driver’s license is required.

Candidates should have a recent PhD in experimental astroparticle physics, nuclear or particle physics, or in a closely related field. The original appointment will be for two years, up to three years in special circumstances, subject to funding. The stipend will be commensurate with qualifications and experience.

To Apply:

Applicants should include a detailed CV, a brief statement of research interests, and arrange to have at least two letters of reference forwarded to:

Juan-Pablo Yañez (j.p.yanez@ualberta.ca)
Centre for Particle Physics
Department of Physics CCIS 4-181
University of Alberta
Edmonton, Alberta, CANADA T6G 2E1

Closing Date:
The review of applications will begin on March 29th, 2019 and will continue until the opportunities are filled.

All qualified candidates are encouraged to apply; however, Canadians and permanent residents will be given priority. If suitable Canadian citizens or permanent residents cannot be found, other individuals will be considered.

The University of Alberta is committed to an equitable, diverse, and inclusive workforce. We welcome applications from all qualified persons. We encourage women; First Nations, Métis and Inuit persons; members of visible minority groups; persons with disabilities; persons of any sexual orientation or gender identity and expression; and all those who may contribute to the further diversification of ideas and the University to apply.