POSTDOCTORAL FELLOWSHIP IN ASTROPARTICLE PHYSICS

The PICO group at the Centre for Particle Physics at the University of Alberta (see https://www.ualberta.ca/physics/research/centre-for-particle-physics) has an opening for a postdoctoral researcher. The successful candidate will join our activities at SNOLAB associated with the PICO dark matter experiment.

The PICO experiment is the result of the merger of the PICASSO and COUPP collaborations. PICO is currently operating a large bubble chamber at SNOLAB called PICO 40L. This chamber is expected to deliver another set of world leading results in the area of spin-dependent dark matter searches. The PICO collaboration is also in the process of designing and building another large-scale, super-heated dark matter detector at SNOLAB called PICO 500. The duties of this position will include designing, modelling, building, testing and commissioning ultra-low-background detectors, as well as developing software for Monte Carlo simulations and data analysis. The Alberta group on PICO has two faculty members, one research associate, one postdoctoral fellow and several graduate students. Our group is responsible for the optical data acquisition system of PICO 40L, for parts of the optical data reconstruction, for the thermal control system of PICO 500 and several other important subsystems of the new detector.

The position will be based at the University of Alberta and will allow the successful candidate to get hands on experience at the SNOLAB facility in Sudbury (see http://www.snolab.ca). Experience in the field of experimental neutrino physics or dark matter searches is an asset. For fieldwork a driver’s license is highly desirable.

The successful candidate will have a recent PhD in experimental particle astrophysics, experimental 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. Salary will be commensurate with qualifications and experience.

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

Prof. Carsten B. Krauss (carsten.krauss@ualberta.ca)
Centre for Particle Physics
Department of Physics CCIS 4-181
University of Alberta
Edmonton Alberta CANADA
T6G 2E1

The review of applications will begin on November 1st, 2019 and will continue until the position is filled.

All qualified candidates are encouraged to apply. We thank all applicants for their time and effort but only those selected for an interview will be contacted. Applicants may be considered for future vacancies.

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.