



Postdoctoral Position on DarkSide-20k and ARGO

April 21, 2021

The Department of Physics at Carleton University has an immediate opening for a postdoctoral researcher in experimental particle astrophysics focusing on development of the DarkSide-20k dark matter search with argon at LNGS in Italy and on R&D for the future ARGO dark matter search. The position is based at Carleton University in Ottawa and may involve travel to the LNGS underground laboratory in Italy (www.lngs.infn.it) or the site of an underground argon extraction facility in Colorado, USA. Successful candidates will join the Carleton research and technical team, described at physics.carleton.ca/apex. The Carleton group has responsibility for developing and deploying ultralow-background coatings of conductive polymer and of wavelength shifter on the inner surfaces of the Darkside-20k TPC and for ultrahigh-purity gas analysis during extraction of low-radioactivity argon from an underground source in Colorado, USA. The Carleton group also performs R&D toward future experiments, including the future ARGO dark matter search, and has substantial experimental facilities for prototyping noble liquid detectors, including support for cryogenic detector development, photon readout, ultralow background techniques, optical characterization, and surface profiling. Potential projects on ARGO include prototyping SiPM-based liquid argon detectors for background rejection and detector simulations.

Candidates should have a PhD or equivalent degree in experimental particle astrophysics, nuclear or particle physics, or in closely related fields. The original appointments will be for two years, with possibility of renewal. Salary range is \$55,000-\$58,000 commensurate with qualifications and experience.

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

Prof. Mark Boulay
Professor and Tier 1 Canada Research Chair
DEAP Project Director
c/o Joseph Snider
josephsnider@cunet.carleton.ca

Applications will be accepted until the positions are filled. Carleton University is an equal opportunity employer and strongly encourages all qualified persons to apply. As a postdoc at Carleton, you would be represented by the Public Service Alliance of Canada and entitled to membership in PSAC Local 77000. Carleton University thanks all who express an interest and advises that only those selected for an interview will be contacted.