

Postdoctoral Fellow
Experimental particle astrophysics
Department of Physics, Engineering Physics & Astronomy
Queen's University



The particle astrophysics group at Queen's University is seeking applicants for a postdoctoral fellow research position with the germanium group. The group is focused on developing and characterizing germanium detectors for low-background applications, particularly in the context of the MAJORANA DEMONSTRATOR (running) and LEGEND-200 (in construction) neutrinoless double-beta decay search experiments.

The successful candidate will be involved in the analysis of the data from the MAJORANA DEMONSTRATOR experiment, develop experiments to study charge propagation in a large P-type Point-Contact (PPC) HPGe detector, and lead the design and construction of a liquid argon test stand for qualifying the operation of PPC detectors in liquid argon. The successful candidate will also be given the opportunity to spend approximately 20% of their time pursuing their own research interests and developing their own research program that is aligned with the research conducted by the particle astrophysics group at Queen's. The successful candidate will receive mentoring in graduate student supervision, grant proposal writing, as well as in a variety of hardware and software skills required for this position. The candidate will also be encouraged to participate in outreach activities.

The position will be based at Queen's University in Kingston, ON. The Department of Physics, Engineering Physics & Astronomy at Queen's hosts the Arthur B. McDonald Canadian Astroparticle Physics Research Institute and is home to one of the largest groups in this field, with researchers working on a variety of experiments and theoretical topics (see <https://mcdonaldinstitute.ca>). Some travel to collaborate and participate in activities associated with the MAJORANA DEMONSTRATOR and LEGEND-200 experiments, as well as to participate in conferences, should be expected.

Candidates must have completed a Ph.D. in experimental particle physics, nuclear physics, or particle astrophysics by the start date of the appointment. The original appointment will be for two years, and salary will be commensurate with qualifications and experience.

Applicants should submit:

- Cover letter
- Statement of research interests and experience
- CV with list of publications
- 3 letters of reference

The University acknowledges the potential impact that legitimate career interruption can have on a record of research. If applicable, the University encourages candidates to explain within their application the impact that career interruption has had on their record.

The University invites applications from all qualified individuals. Queen's is committed to employment equity and diversity in the workplace and welcomes applications from women, visible minorities, Aboriginal peoples, persons with disabilities, and LGBTQ persons.

The application should be emailed to Prof. Ryan Martin, ryan.martin@queensu.ca, which can also be contacted to answer any questions about the position. Review of applications will begin December 16th 2018 and will continue until the position is filled.