

## **Tenure-Track Position in Experimental Particle Astrophysics at Queen's University, Kingston, Ontario, Canada**

The Department of Physics, Engineering Physics & Astronomy, Faculty of Arts and Science at Queen's University invites applications for a Tenure-track faculty position at the rank of Assistant Professor with expertise in experimental particle astrophysics, with a preferred starting date of July 1, 2019. In exceptional cases, candidates above the level of Assistant Professor may be considered.

Queen's University is one of Canada's leading research-intensive universities. The Department of Physics, Engineering Physics & Astronomy at Queen's University has 29 Faculty working in the areas of astronomy and astrophysics, condensed matter physics and optics, engineering and applied physics, and particle astrophysics. We are located in historic Kingston on the shores of Lake Ontario. Kingston's residents enjoy an outstanding quality of life with a wide range of cultural, recreational, and creative opportunities.

The Queen's particle astrophysics group played a leading role in the Sudbury Neutrino Observatory experiment, which led to the 2015 Nobel Prize shared by Queen's Emeritus Professor Art B. McDonald for the discovery of neutrino oscillations. The group was central in establishing the SNOLAB facility (see [www.snolab.ca](http://www.snolab.ca)), and in the recent creation of the Arthur B. McDonald Canadian Astroparticle Physics Research Institute (MI), which is a Canada-wide program funded by the Canada First Research Excellence Fund (CFREF). The institute is aimed at producing world-class science and inspiring the next generation of physicists. Research in the institute includes the development of particle astrophysics experiments and theory, observational and theoretical astrophysics, detector design, and the development of tools and techniques for calibration, material screening and low-level radio-purification. The establishment of the MI has led to the hiring of four new professors in the Department over the past two years. An additional ten MI professors have been hired at Queen's and collaborating institutions across Canada to significantly enhance this world-renowned particle astrophysics program. For further information please see <https://mcdonaldinstitute.ca/>. The Particle Astrophysics Research Group at Queen's has ten faculty members (including a CERC Chair, an IPP Research Scientist, and the Gray Chair in Particle Astrophysics). Their research interests include dark matter physics, neutrino physics, and detector development. The group is involved in the following experiments: DEAP-3600, NEWS-G, PICO, SuperCDMS, SNO+, MAJORANA, LEGEND, MINER, IceCube, DarkSide-20k, and KDK (see <http://www.queensu.ca/physics/research-groups/particle-astrophysics>).

Candidates must have completed a PhD by the start date of the appointment. The ideal candidate will be skilled at particle astrophysics experimentation and will establish a research program that aligns with and/or complements the research goals of MI and the existing research activities of the Queen's particle astrophysics group. The successful candidate will provide evidence of high-quality scholarly output that demonstrates potential for independent research leading to peer assessed publications and the securing of external research funding. The candidate must demonstrate a strong potential for outstanding teaching contributions at both the undergraduate and graduate levels and an ongoing commitment to academic and pedagogical excellence in support of the department's programs and in support of promoting equity and diversity in

physics. Candidates must provide evidence of an ability to work collaboratively in an interdisciplinary and student-centred environment. The successful candidate will be required to make substantive contributions through service to the department, the Faculty, the University, and/or the broader community. Salary will be commensurate with qualifications and experience. This position is subject to final budgetary approval by the University.

The University acknowledges that certain circumstances may legitimately affect a candidate's record of research achievement and will give careful consideration to the impact of these circumstances (including but not limited to: pregnancy, family responsibilities, illness, disability, research in emerging fields, limited access to resources) when assessing the candidate's research productivity. Candidates are encouraged to provide any relevant information about their experiences and/or career interruptions to allow for a fair assessment of their application.

Providing opportunities for junior faculty to develop a strong teaching and research profile and maintaining an environment where all faculty can thrive is our top priority. Support for course development and delivery is provided by the Department, the Queen's Centre for Teaching and Learning, and the Faculty of Arts and Science. Support of junior faculty to develop strong research programs includes a significant Research Initiation Grant, grant writing workshops and review services, funding support for graduate students through the Queen's Graduate Award program, and one-to-one mentorship from senior faculty members.

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. All qualified candidates are encouraged to apply; however, in accordance with Canadian Immigration requirements, Canadian citizens and Permanent Residents of Canada will be given priority.

To comply with federal laws, the University is obliged to gather statistical information about how many applicants for each job vacancy are Canadian citizens/permanent residents of Canada. Applicants need not identify their country of origin or citizenship, however, all applications must include one of the following statements: "I am a Canadian citizen/permanent resident of Canada"; OR, "I am not a Canadian citizen/permanent resident of Canada". Applications that do not include this information will be deemed incomplete.

A complete application consists of:

- a cover letter (including one of the two statements regarding Canadian citizenship/permanent resident status specified in the previous paragraph);
- a current Curriculum Vitae (including a list of publications);
- a statement of research interests;
- a statement of teaching interests, experience and vision (including mentoring, outreach, and promotion of diversity);
- three letters of reference emailed directly to Prof. Marc Dignam at: [physhead@queensu.ca](mailto:physhead@queensu.ca).

The first review of applications will begin on January 15, 2019 and will continue thereafter until a successful candidate is found. Applicants are encouraged to send all documents in their

application packages electronically as PDFs to Marc Dignam at [physhead@queensu.ca](mailto:physhead@queensu.ca), although hard copy applications may be submitted to:

Prof. Marc Dignam, Head  
Department of Physics, Engineering Physics & Astronomy  
Stirling Hall  
64 Bader Lane  
Queen's University  
Kingston, Ontario  
Canada, K7L 3N6

The University will provide support in its recruitment processes to applicants with disabilities, including accommodation that takes into account an applicant's accessibility needs. If you require accommodation during the interview process, please contact Melissa Balson in the Department of Physics, Engineering Physics & Astronomy, [4mjb5@queensu.ca](mailto:4mjb5@queensu.ca).

Additional information about Queen's University, which may be of interest to prospective faculty members, can be found at <http://www.queensu.ca/facultyrecruitment>.

Academic staff at Queen's University are governed by a [Collective Agreement](#) between the University and the [Queen's University Faculty Association \(QUFA\)](#), which is posted at <http://queensu.ca/facultyrelations/faculty-librarians-and-archivists/collective-agreement> and at <http://www.qufa.ca>.