Postdoctoral Researcher - Hyper-K & T2K

TRIUMF is Canada's particle accelerator centre, and one of the world's leading laboratories for particle and nuclear physics and accelerator-based science. We are an international centre for discovery and innovation, advancing fundamental, applied, and interdisciplinary research for science, medicine, and business.

At TRIUMF, we're passionate about accelerating discovery and innovation to improve lives and build a better world. Equity, diversity, and inclusion are integral to excellence and enhance our ability to create knowledge and opportunity for all. Together, we are committed to building an inclusive culture that encourages, supports, and celebrates the voices of our employees, students, partners, and the people and communities we serve.

TRIUMF is currently accepting applications for a Postdoctoral Researcher to join the experimental neutrino group, which collaborates on the Hyper-Kamiokande and T2K experiments, for a three-year term, with the possibility of extension. The international T2K experiment in Japan is making world leading measurements of the neutrino oscillation phenomenon. The Hyper-Kamiokande (Hyper-K) project is an international collaboration to construct a large-scale water Cherenkov detector, located at Kamioka Observatory in Japan, in order to improve on the measurements of the T2K and Super-Kamiokande experiments. The successful candidate will be encouraged to taking a leading role in one of two major projects for the T2K and Hyper-K experiments:

- Design, prototyping and construction of high-resolution multi-PMT photodetectors to be used in the Hyper-K detectors, including the novel intermediate water Cherenkov detector (IWCD) and its prototype at CERN, the Water Cherenkov Test Experiment (WCTE).
- Operation and upgrades of an Optical Transition Radiation (OTR) proton beam monitor for the T2K and Hyper-K experiments.

The successful candidate is also expected to be involved in the analysis of data from the T2K experiment or IWCD prototype experiment at CERN (WCTE), where novel analysis techniques, such as machine learning approaches developed at TRIUMF, will be applied.

Applicants should possess laboratory experience, including experience with electronics, lasers, photodetectors, and calibration and commissioning of new hardware. Experience with detector mechanical systems and mechanical design tools will also be beneficial. A strong work ethic and ability to work independently are also necessary. Qualifications include; a recent PhD in physics, effective communication skills and the ability to work well within a multidisciplinary team. While not required, machine learning experience would be considered an asset.

TRIUMF is located on the south campus of the University of British Columbia, in the heart of Pacific Spirit Park in Vancouver, BC. We offer a competitive total compensation package, including comprehensive benefits, attractive salary, and an excellent opportunity to enhance your career portfolio in a high-profile national research facility.

Learn more about how the amazing research and work we do at TRIUMF impacts humanity https://www.rarestdrug.com/

TRIUMF is an equal opportunity employer, and we welcome applications from all qualified candidates. Your application package must be submitted by email to recruiting@triumf.ca. To be accepted for consideration applications must be complete, and must include the following in one PDF file:

- Subject line: 843
- Employment Application Form
- Cover letter
- Brief statement of research interests
- Detailed CV with a list of publications
- Arrange for at least 3 letters of recommendation or reference to be sent directly to recruiting@triumf.ca including Competition 843 in the subject line

Application closing date: August 26, 2021

It is important to note that due to operation necessity, TRIUMF will as needed, make hiring decisions that could pre-empt the application closing date. Accordingly, we suggest candidates submit expressions of interest in a timely fashion.