

# POSTDOCTORAL RESEARCH POSITION ON THE PACIFIC OCEAN NEUTRINO EXPERIMENT

## JOB DESCRIPTION:

The High Energy Physics group at the Simon Fraser University in Vancouver, Canada, has an opening for a Postdoctoral Research Position in experimental neutrino physics to work on the Pacific Ocean Neutrino Experiment ([P-ONE](#)), <https://www.pacific-neutrino.org/>.

This position offers exciting opportunities for physics in the field of neutrino physics and neutrino astronomy. P-ONE is a proposed cubic kilometer scale neutrino telescope to be deployed off the coast of Vancouver Island, Canada. The main goal of P-ONE is to advance the field of neutrino astronomy extending the cosmic frontier at the highest energies to reveal previously unknown astronomical phenomena, collect data to test fundamental physics at energies a thousand times higher than the Large Hadron Collider at CERN, and provide crucial information for multi-messenger follow up observations. P-ONE leverages the expertise in deep-sea operations from Ocean Networks Canada (ONC) which is a unique oceanographic observatory that offers an excellent opportunity for the construction of a large volume neutrino telescope.

The P-ONE Collaboration is currently developing the first prototype mooring lines to be deployed in 2023 in preparation for a large-scale array. The SFU group has several key interests within our P-ONE group, including: leading roles in the design and construction of key detector components, key developments in detector performance, event simulation and reconstruction, and data analyses.

The successful candidate will be expected to play a leading role in the group's current and future detector development and physics analysis efforts, and to participate in the supervision of graduate students. They are expected to closely collaborate with groups at TRIUMF (Canada's national subatomic physics laboratory), ONC, and the P-ONE groups at the University of Alberta and Queen's University. This position offers unparalleled experimental experience and new opportunities to actively shape the design of a new detector in the rapidly growing fields of neutrino and astroparticle physics.

Qualified candidates must have a Ph.D. in particle or astroparticle physics by the time of appointment. The position is initially a two-year term with the possibility of renewal. Salary will be competitive and depend upon experience. Interested individuals are asked to submit via email to: [sfu-pone-postdoc@sfu.ca](mailto:sfu-pone-postdoc@sfu.ca).

- Cover letter
- Research statement
- Curriculum Vitae
- Arrange to have 3 reference letters sent to: [sfu-pone-postdoc@sfu.ca](mailto:sfu-pone-postdoc@sfu.ca).

Applications received by November 1st, 2021, will receive full consideration. Review of applications will continue until the position is filled.

Please contact Prof. Matthias Danninger ([mdanning@sfu.ca](mailto:mdanning@sfu.ca)) for further information.

SFU is committed to ensuring that no individual is denied access to employment opportunities for reasons unrelated to ability or qualifications. Consistent with this principle, we will advance the interests of underrepresented members of the work force, specifically Indigenous peoples, persons with disabilities, visible minorities, and women; embrace gender and sexual diversity; ensure that equal opportunity is afforded to all who seek employment at the University; and treat all employees equitably. Thus, candidates that belong to underrepresented groups in Physics are particularly welcome to apply.