



Postdoctoral Researcher – ALPHA

[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.

[ALPHA](#) (Antihydrogen Laser PHysics Apparatus) is a leading international project located at [CERN](#) near Geneva, Switzerland that aims to perform precision tests of fundamental symmetries between matter and antimatter with trapped antihydrogen atoms. We are currently accepting applications for two Postdoctoral Researchers who will advance [ALPHA-Canada's](#) leading efforts in microwave and laser cooling. The successful candidates will play important roles in upcoming gravitational and spectroscopy measurements.

Position 1:

This position will be stationed at CERN with occasional travel to Calgary and Vancouver. Applicants must have a good understanding of the physics of microwave systems. The successful candidate will be expected to:

- Play a key role in the development and operation of the microwave program for the ALPHA experiment, which includes hyperfine spectroscopy and magnetometry
- Contribute significantly to laser cooling and spectroscopy activities
- As an ALPHA-Canada representative, provide support to ALPHA-Canada members and their activities at CERN

Position 2:

This position will initially be stationed at the University of British Columbia with a later transition to CERN. Applicants must have relevant experience in leadership of an experimental project and a good understanding of the physics of VUV lasers. The successful candidate will be expected to:

- Play a key role in the development and the operation of the Lyman-alpha laser for the ALPHA experiment
- Drive the laser cooling physics initiative for ALPHA
- Once located at CERN, provide support to ALPHA-Canada members and their activities at CERN

ALPHA is a dynamic experiment, where physicists from diverse disciplines interact and work very closely, therefore willingness and interest in learning new subjects is essential. The applicant must be able to work in an international environment in a team of highly motivated scientists. Minimum qualifications for both positions include:

- A PhD in Physics or Engineering that was granted in the last 5 years, or will be granted in the near future
- Familiarity with standard physics related software such as Matlab, LabVIEW, or similar
- Experience with electronics instruments, measurement techniques and physics experiment setup requirements
- Proficiency in working with automated DAQ and control software and hardware
- English communication skills, both verbal and written, are required, and French communications skills would be considered an asset

These are grant funded positions and the term of employment will be based on an initial commitment of two years. Salary will be competitive depending on experience.

When submitting your application as detailed below, please include a detailed CV with a list of publications, and arrange for 3 letters of recommendation to be sent directly to the email below.

TRIUMF is an equal opportunity employer, and we welcome applications from all qualified candidates. Your complete application package should be submitted by email to recruiting@triumf.ca and will include the following in one

complete PDF file:

- Subject line: Competition 737
- [Employment Application Form](#)
- Cover letter indicating salary expectations and preference for position 1 or 2
- CV

The review of the applications begins on November 25th, 2019. The positions are open until filled.

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.