

11th International Meeting of the Union for Compact Accelerator-driven Neutron Sources (UCANS11)

Contribution ID: 4

Type: **Invited Talk (Category for invited speakers only)**

TUCAN, the TRIUMF Source for Ultracold Neutrons

Monday, 24 February 2025 13:30 (40 minutes)

The Japanese-Canadian TUCAN (TRIUMF UltraCold Advanced Neutron) collaboration is currently building a next generation ultracold neutron source at TRIUMF, Vancouver, Canada. This superthermal source is based on conversion of fast neutrons from a spallation target to the ultracold regime in liquid, superfluid helium. We expect to deliver around 10^7 UCN per second at the exit of the source. The presentation will provide an overview of the source concept, its moderator and ultracold neutron design and the cryogenic infrastructure required for its operation. Experiments planned will also be briefly introduced.

Email Address

Email Address

Presenter if not the submitter of this abstract

Funding Agency

NSERC

Abstract classification - track type

Facility Updates

Primary author: PICKER, Ruediger (TRIUMF)

Presenter: PICKER, Ruediger (TRIUMF)

Session Classification: Session 1