Contribution ID: **24** Type: **Oral**

Status of the Vertical UCN Source for the TRIUMF neutron EDM Experiment

Tuesday, 17 October 2017 19:00 (25 minutes)

We developed an intense ultracold neutron (UCN) source using superfluid helium (He-II) at the Research Center for Nuclear Physics (RCNP), in Japan. This UCN source uses He-II as a UCN converter to produce a high density of UCN. At the exit of the UCN source, a UCN density of 26 UCN/cm^3 at 90 neV critical energy was achieved with the 400 W proton beam of the ring cyclotron of RCNP in 2011.
In 2016, this UCN source was transported from RCNP to TRIUMF to perform an experiment to finally search for the neutron electric dipole moment (nEDM). The UCN source was installed on the dedicated BL1U proton beamline of TRIUMF in 2017. We performed a cooling test using liquid helium and succeeded in condensing He-II into the UCN production volume and cooling it down to 0.92K.
In this talk, the current status of this UCN source and preparation for the first UCN production at TRIUMF will be discussed.

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Session Classification: TuEv

Track Classification: Sources of ultra cold neutrons