



Contribution ID: 26

Type: Oral

UCN detection and spin measurement for the TRIUMF neutron EDM experiment

Thursday, 19 October 2017 11:30 (25 minutes)

The Ultracold Neutron (UCN) source at TRIUMF is expected to produce a high density of UCN, and TRIUMF's first experiment using this source will be a search for a neutron Electric Dipole Moment (nEDM). Tests of a lithium glass scintillator detector capable of meeting the expected high rate of UCN was tested at PSI in 2015, and the design of an apparatus to use four of these detectors is underway to measure both spin states of the neutron for both electric field configurations from two simultaneously running experimental cells. This talk will present the result of the detector measurements at PSI, and studies completed in the design of the simultaneous spin measurement apparatus.

Email

seanhansenromu@gmail.com

Primary author: Mr HANSEN-ROMU, Sean (University of Winnipeg)

Co-author: JAMIESON, blair (University of Winnipeg)

Presenter: Mr HANSEN-ROMU, Sean (University of Winnipeg)

Session Classification: ThMo2

Track Classification: Transport and manipulation of ultra cold neutrons (materials, valves, polarization, spin transport, neutron detection)