



Contribution ID: 6

Type: **not specified**

The COHERENT Experiment

Tuesday 12 December 2023 09:45 (45 minutes)

The COHERENT collaboration was the first to observe coherent elastic neutrino-nucleus scattering (CEvNS) at the Spallation Neutron Source at Oak Ridge National Laboratory (TN, USA) in 2017. The SNS is a pulsed pion decay-at-rest neutrino source with a well-known spectrum of low-energy neutrinos.

Today, the collaboration operates several detectors measuring CEvNS and neutrino-charged-current interactions across various target nuclei. This point source of low-energy neutrinos, and the proposed second target station at the SNS, provide exciting opportunities for potential new detectors that could employ directional detection techniques.

This talk will focus on the past, present, and future of COHERENT.

Author: PRIOR, Charles (Duke University)

Presenter: PRIOR, Charles (Duke University)