

## 38th INTERNATIONAL CONFERENCE ON HIGH ENERGY PHYSICS

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## COHERENT at the Spallation Neutron Source (15' + 2')

Saturday, 6 August 2016 11:32 (17 minutes)

The COHERENT collaboration's primary objective is to measure coherent elastic neutrino-nucleus scattering (CEvNS) using the unique, high-quality source of tens-of-MeV neutrinos provided by the Spallation Neutron Source (SNS) at Oak Ridge National Laboratory (ORNL). COHERENT will deploy multiple detector technologies in a phased approach and will test the  $N^2$  dependence of the cross section. Following an extensive background measurement campaign, a location in the SNS basement has proven to be neutron-quiet and suitable for deployment of the COHERENT detector suite. This talk will describe COHERENT physics motivation, status and plans.

Presenter: COOPER, Robert (Fermi National Accelerator Laboratory)

Session Classification: Neutrino Physics

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