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Results of a CEvNS Search with the CENNS-10 Liquid Argon Detector[1] JACOB ZETTLEMOYER, Indiana University Bloomington, COHERENT COLLABORATION — The first observation of coherent elastic neutrino-nucleus scattering (CEvNS) was made by the COHERENT collaboration at the Oak Ridge National Laboratory (ORNL) Spallation Neutron Source (SNS) in August 2017 with a 14.6 kg CsI(Na) detector. One of the physics goals of the COHERENT experiment is to test the N^2 dependence of the CEvNS cross section predicted in the Standard Model by observing CEvNS in multiple low-threshold detectors. To that end, the ∼24 kg CENNS-10 liquid argon detector was deployed at the low-background Neutrino Alley at the SNS. An observation of CEvNS with CENNS-10 would provide a low N measurement to begin to map out the CEvNS cross section. CENNS-10 was deployed in December 2016 for an initial Engineering Run ending in May 2017 and subsequently upgraded for a Production Run beginning in July 2017. In this talk, I will present the latest results from a CEvNS search with the CENNS-10 liquid argon detector.

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