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Status of CEvNS Search with the CENNS-10 Liquid Argon Detecor for COHERENT MATTHEW HEATH, Indiana Univ - Bloomington, COHERENT COLLABORATION — The COHERENT experiment at the Spallation Neutron Source at Oak Ridge National Lab recently observed Coherent Elastic Neutrino Nucleus Scattering (CEvNS) at the 6.7σ level with 14 kg of CsI commissioned in June 2015. COHERENT is intending to measure CEvNS on multiple nuclei to verify the N^2 dependence of the CEvNS cross section. To that end, the roughly 30 kg single phase liquid argon detector CENNS-10 was commissioned in December 2016. CENNS-10 will provide a much lighter nucleus for CEvNS scattering. In this talk I will present initial results of the 'Phase 1' liquid argon run covering Dec. 2016 - May 2017 as well as a first look at 'Phase 2' data after an upgrade to improve the light collection efficiency was performed and additional shielding installed in Summer 2017.

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