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Current Analysis on CENNS-10, a Single-Phase Liquid Argon Detector for CEvNS[1] BENJAMIN SUH, Indiana University, Bloomington, COHERENT COLLABORATION — Coherent Elastic Neutrino-Nucleus Scattering(CEvNS) is a neutral-current neutrino interaction first predicted in 1974 and first observed by the COHERENT Collaboration in 2017 using a 14.6kg CsI scintillating crystal. The COHERENT Collaboration has deployed detectors with a range of target nuclei to the Spallation Neutron Source at Oak Ridge National Laboratory(ORNL). As part of this effort, a single-phase liquid argon detector, CENNS-10, was deployed to the SNS in Fall 2016, and has actively been taking data since Spring 2017. Since then, the 24kg fiducial volume target made the first low-N measurement of CEvNS in Spring 2020. The data used to make this measurement encompassed a year and a half of operation, a total of 6.12GWhr total integrated beam power. This talk will detail both the new work being done to analyze this data and set new NSI constraints as well as work being done to analyze the remaining data collected by the CENNS-10 data not included in the CEvNS measurement.

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