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Toward a CEvNS Observation With Germanium JACOB DAUGH-HETEE, University of Tennessee, Knoxville — The COHERENT Collaboration made the first ever observation of Coherent Elastic Neutrino-Nucleus Scattering (CEvNS) as reported in *Science* in August 2017. CEvNS is a Standard Model process in which the cross section depends on the square of the number of neutrons in the target nucleus. Therefore, COHERENT continues to work toward measuring CEvNS on other targets to test this N<sup>2</sup> dependence. This talk will describe studies of backgrounds for COHERENT's High-Purity germanium (HPGe) detector deployment in Neutrino Alley at the Spallation Neutron Source. D. Akimov et al, Observation of coherent elastic neutrino-nucleus scattering. *Science* **357**, 1123-1126 (2017). doi:10.1126/science.124.3212.103pmid:17796274

> Justin Raybern Duke Univ

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