

Neutrinos are abundantly produced in the core of nuclear reactors during the decay of radioactive isotopes. These neutrinos, if detected, can provide unique insight into the core of the reactor. To date, all neutrinos detected at a nuclear reactor have been detected through an inelastic process called Inverse Beta Decay (IBD). Coherent Elastic Neutrino Scattering (CEvNS) is an alternative method for detecting nuclear reactor neutrinos, which is technologically challenging but would allow for more compact detectors that reveal even more information as to the core of the reactor. COHERENT is an international experimental collaboration and has performed the world's first successful measurements of CEvNS at the Spallation Neutron Source (SNS) at Oak Ridge National Lab. This presentation will introduce the "gemini" detector which will be high statistics follow up on the initial measurement of CEvNS at the SNS. From here, this presentation will also illustrate the road map to using this technology to measure CEvNS at a nuclear reactor.