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Coherent elastic neutrino nucleus scattering: experimental efforts at SNS and reactor-site

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Coherent elastic neutrino nucleus scattering (CEνNS) is a standard-model interaction in which the neutrino interacts with the nucleus as a whole. It was first measured by the COHERENT collaboration in 2017 decades after its prediction.
A coherent interaction is only possible at neutrino energies of a few tens of MeV or below, which makes the Spallation Neutron Source (SNS) at Oak Ridge National Laboratory an ideal source for this kind of experiments. The COHERENT experiment located at SNS employs a variety of detectors of different target materials. I will give an overview on the experiment, latest efforts and the physics potential beyond CEνNS.
Another source of neutrinos at the lower end of the coherent energy regime are nuclear reactors and I will discuss the recent results from the reactor-based CONUS experiment as well.

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