

Abstract Submitted
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Prospects for Measuring Neutrino-Nucleus Coherent Scattering at a Stopped-Pion Neutrino Source KATE SCHOLBERG, Duke University
— Coherent neutral current neutrino-nucleus elastic scattering has never been observed. Although the cross-section is very high, nuclear recoil energies are very small. However, detection of the process may be within the reach of the new generation of low-threshold detectors. A promising prospect for the first detection of this process is an experiment at a high flux stopped-pion neutrino source such as the SNS. Results of some preliminary rate calculations will be presented, and sensitivity of such a measurement to new physics will be explored.

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