CLEAR: Prospects for a Low Threshold Neutrino Experiment at the Spallation Neutron Source

KATE SCHOLBERG, Duke University — A low-threshold neutrino scattering experiment at a high intensity stopped-pion neutrino source has the potential to measure coherent neutral current neutrino-nucleus elastic scattering. A promising prospect for the measurement of this process is a proposed noble-liquid-based experiment, dubbed CLEAR (Coherent Low Energy A(Nuclear) Recoils), at the Spallation Neutron Source. This talk will describe the CLEAR proposal and its physics reach.

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