

Abstract Submitted  
for the APR17 Meeting of  
The American Physical Society

**Theory Overview of Coherent Neutrino-Nucleus Scattering and Implications for Physics Beyond the Standard Model** JAMES DENT, University of Louisiana at Lafayette — The study of coherent neutrino-nucleus scattering provides an opportunity for novel tests of the Standard Model, and therefore for explorations of physics beyond the Standard Model including the search for non-standard neutrino interactions and portals to hidden particle sectors. Additionally, coherent neutrino-nucleus scattering presents an interesting challenge as an irreducible background for upcoming low-threshold experiments searching for direct detection of dark matter from dark matter-nuclei scattering processes. In this talk I will overview theoretical aspects of coherent neutrino-nucleus scattering including its Standard Model prediction, its utility in probing physics beyond the Standard Model in upcoming experiments, and its implications for the ultimate reach of direct detection of dark matter.

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Date submitted: 27 Sep 2016

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