

Abstract Submitted
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OscSNS: A Precision Short-Baseline Neutrino Oscillation Experiment WILLIAM LOUIS, LANL, OSCSNS COLLABORATION — Short baseline neutrino experiments are consistent with neutrino oscillations at a Δm^2 of approximately 1 eV^2 , and world neutrino and antineutrino data fit reasonably well to a 3+N (active+sterile) neutrino oscillation model with CP violation. The OscSNS experiment at ORNL would be able to make precision short-baseline neutrino oscillation measurements and prove that sterile neutrinos exist by observing oscillations of a neutral current reaction in the detector. The OscSNS experiment will be described and the corresponding neutrino oscillation sensitivities and signals will be discussed.

William Louis
LANL

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