

Abstract Submitted
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Prototyping for LENS¹ B.C. RASCO, Louisiana State University, THE LENS COLLABORATION — The Low-Energy Neutrino Spectroscopy (LENS) experiment will precisely measure the energy spectrum of low-energy solar neutrinos via charged-current neutrino reactions on indium. The LENS detector concept applies indium-loaded scintillator in an optically-segmented lattice geometry to achieve precise time and spatial resolution with unprecedented sensitivity for low-energy neutrino events. The LENS collaboration is currently developing prototypes that aim to demonstrate the performance and selectivity of the technology and to benchmark Monte Carlo simulations that will guide scaling to the full LENS instrument. Currently a 120 liter prototype, microLENS, is operating with pure scintillator (no indium loading) in the Kimballton Underground Research Facility (KURF). We will present results from initial measurements with microLENS and plans for a 400 liter prototype, miniLENS, using indium loaded scintillator that will be installed this summer.

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