Abstract Submitted
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Testing the LENS Scintillation Lattice with MicroLENS[1] LIUDMYLA AFANASIEVA, Louisiana State University, LENS COLLABORATION — The LENS Collaboration is developing a next-generation instrument to precisely measure the full spectrum of solar neutrinos, including low energy neutrinos from hydrogen fusion (pp-neutrinos). Detection lies in charged-current capture of neutrinos on 115In in metal-loaded scintillator. The detector architecture employs a lattice structure with a low index of refraction immersed into scintillator to provide precise time and spatial resolution to distinguish the neutrino signal from background. A first generation prototype, microLENS, has been constructed and is currently operating. Measurements with microLENS test the basic optical properties of the lattice detector architecture that is fundamental to the approach. Results from measurements with the microLENS prototype will be discussed.

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