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MicroLENS Construction and Filling[1] TRISTAN WRIGHT, Virginia Tech, LOW-ENERGY NEUTRINO SPECTROSCOPY (LENS) COLLABORATION — The LENS collaboration's goal is the construction of a low energy neutrino spectrometer (LENS) that will measure the entire solar neutrino spectrum above 114keV. In an effort to reach this goal, we have developed a two phase prototype program. The first of these is microLENS, a small prototype to study the light transmission in the as built LENS scintillation lattice—a novel detector method of high segmentation in a large liquid scintillator detector. The microLENS prototype, the main topic of this discussion, is currently deployed at the Kimballton Underground Research Facility (KURF) near Virginia Tech. We will present the detector construction and the methods and schemes of the program during the first phases of running with minimal channels instrumented (∼41 compared to full coverage 216). After analysis of the scintillation lattice implemented in the microLENS detector, we will finalize designs for the miniLENS prototype and have it operating shortly thereafter.

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