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Status of the UCNB Experiment at LANSCE SYED HASAN, University of Kentucky, FOR THE UCNB COLLABORATION — The goal of the UCNB experiment is to measure the neutrino asymmetry parameter B, the angular correlation between the neutron spin and the decay neutrino momentum, via the detection of electron-proton coincidences in the decay of polarized ultracold neutrons (UCN). The UCNB experiment builds upon the existing infrastructure for the UCNA experiment, where the UCN from the LANL source are polarized via transport through a 7-T field and then stored in a cylindrical decay trap situated within a 1-T solenoidal spectrometer. Several modifications to the hardware are necessary for the detection of electron-proton coincidences, however, including the requirement of a windowless decay trap, a 30-kV bias system for electrostatic acceleration of the protons, and a novel Si detector system for a precise measurement of the energy dependence of the asymmetry. This talk will present an overview of the status of the UCNB experiment.

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