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The UCNB experiment: progress toward the measurement of electron-proton coincidences from the beta decay of polarized, ultracold neutrons SKY SJUE, LANL, UCNB COLLABORATION — The UCNB experiment will measure the neutrino asymmetry parameter, B, from the decay of polarized neutrons at the Los Alamos ultracold neutron (UCN) source. The protons will be accelerated above the noise threshold by applying -30 kV bias simultaneously to the detectors and data acquisition. Source data has been taken with Si detectors and data acquisition floated to -14 kV. Fabrication is in progress on a full detector assembly designed to instrument 128 pixels of a Si detector with 11.5-cm active diameter, floated to -30 kV, with cryogenic cooling to maintain a temperature of 100 K at the detector and front end electronics. We will present an overview on the status of implementation of the full system in the superconducting solenoid magnet spectrometer at the Los Alamos UCN source.

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