

Abstract Submitted
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Calibration of the UCNA Beta Spectrometer MICHAEL MENDENHALL, Caltech, UCNA COLLABORATION — The UCNA experiment measures the angular correlation between the polarization direction of a neutron and the momentum of the electron emitted in beta decay. Polarized ultracold neutrons decay in a 1T magnetic field, which conducts the emitted betas to detectors on either side of the decay region. Measuring the energy spectrum of the electrons is necessary due to energy dependence of the observed asymmetry and electron backscattering corrections. The beta detectors consist of a wire-chamber for position tracking and a plastic scintillator calorimeter. This talk describes how conversion electron sources and the beta spectrum endpoint are used to calibrate the position-dependent energy response of the scintillators, and how the calibration of the detectors is monitored and stabilized throughout the 2008 run.

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