

Abstract Submitted
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Results from UCNA 2010¹ ROBERT PATTIE, North Carolina State University, UCNA COLLABORATION — We will present the results of a $\approx 0.7\%$ measurement of the electron momentum neutron spin angular correlation coefficient “A” using polarized ultracold neutrons (UCN) during the 2010 beam cycle at the Los Alamos Neutron Science Center (LANSCE) by the UCNA collaboration. Improvements made to the solid deuterium ultracold neutron source and the neutron guide system allowed us to achieve the a factor of two increase in the decay rate and overall statistics. Major systematic uncertainties, including detector calibration and linearity, electron backscattering, and neutron polarimetry, were reduced, bringing the full sytematic uncertainty to below 0.6% based on the investigations during the 2008-2009 beam cycles.

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