

Abstract Submitted
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Status of the UCNA Experiment: A Measurement of the Neutron Beta-Asymmetry with Ultracold Neutrons BRAD PLASTER, University of Kentucky and Caltech, FOR THE UCNA COLLABORATION — The UCNA experiment at the Los Alamos Neutron Science Center (LANSCE) has been designed to extract a precise value (goal of 0.2%) for the neutron beta-asymmetry from measurements of the angular correlation between the neutron spin and the electron momentum (the beta-asymmetry) in polarized ultracold neutron beta-decay. Ultracold neutrons are produced by the downscattering of spallation neutrons in a solid deuterium source, spin-polarized via transport through a 7.0-Tesla field, and then directed to the center of a cylindrical decay trap situated within a solenoidal electron spectrometer. A status report on progress towards a first-step measurement of the beta-asymmetry at the $\sim 1\%$ level during the LANSCE 2007 running cycle will be presented.

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