

Abstract Submitted  
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**Overview of Neutron Beta Correlation Parameter Analysis from the UCNA Experiment** XUAN SUN, California Institute of Technology, UCNA COLLABORATION — The UCNA experiment, operated at the Ultracold Neutron Facility at the Los Alamos Neutron Science Center, uses ultracold neutrons (UCN) to measure the free-neutron  $\beta$ -decay correlation parameter,  $A$ , between the neutron spin direction and  $\beta$  momentum direction. Measurements of  $A$  presently provide the most precise value of  $g_A/g_V$ , the ratio of the axial-vector and vector coupling constants of the nucleon weak interaction. The UCNA experiment has previously analyzed and reported on a measurement of  $A$  from a 2010 dataset. Additional datasets were also taken in 2011-2012 and 2012-2013. Improvements in energy calibrations, polarimetry, and statistics are expected to provide a more precise measurement of  $A$  from the later datasets. We provide a review of the experimental apparatus and give an updated overview on the state of the 2011-2012 and 2012-2013 dataset analysis with respect to the  $A$  measurement.

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