

Abstract Submitted  
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**UCNB: Precise Measurement of the Neutrino Asymmetry from Polarized  $\beta$ -decay** AARON SPROW, University of Kentucky, UCNB COLLABORATION — The UCNB experiment aims to measure the neutrino asymmetry,  $B$ , from free neutron decay using the ultracold neutron source at the Los Alamos Neutron Science Center. A precise measurement of  $B$  yields insight into physics such as right-handed currents, and provides a sensitive channel to probe for exotic scalar and tensor couplings. By instrumenting the existing UCNA spectrometer with thick, highly-segmented silicon detectors, coincident electron and proton pairs from UCN decays have been directly measured, allowing for a determination of  $B$ . Presented here will be an analysis of the 2015-2016 data and a study of the potential sources of systematic error for a measurement of the  $B$  coefficient. The goal of the UCNB experiment is to determine the neutrino asymmetry to a precision of  $\delta B/B \approx 10^{-3}$ .

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