Abstract Submitted
for the APR14 Meeting of
The American Physical Society

UCNB Experimental Overview: Recent Progress and Future Goals BRYAN ZECK, Los Alamos Natl Lab, UCNB COLLABORATION — The UCNB experiment is an effort to measure the neutrino-asymmetry B, between the neutrino momentum and the neutron spin in polarized neutron beta-decay. Bottled ultracold neutrons are held in a magnetic field until they decay, and a 30 kV accelerating potential allows both the electrons and protons to be detected by thin dead layer pixellated silicon detectors. Proton-electron coincidences have been directly observed, and a second detector has been implemented. Continued improvements are planned, including better data acquisition, improved electrostatic configuration, and improvements to the decay trap to prevent neutron loss and escape.

Bryan Zeck
Los Alamos Natl Lab

Date submitted: 10 Jan 2014 Electronic form version 1.4