Abstract Submitted for the APR15 Meeting of The American Physical Society

Measuring the antineutrino-beta Correlation in the Nab Experiment AARON SPROW, University of Kentucky, NAB COLLABORATION — The Nab experiment will be performed at the Spallation Neutron Source to measure the electron-neutrino correlation parameter a and the Fierz interference term b for unpolarized neutron beta decays. We instrumented a segmented silicon detector with fast preamplifier channels and are developing a data acquisition system with digital pulse processing for this experiment. In collaboration with UCNB, we tested the system performance with neutron beta decay events and calibration sources. We will present an overview of the Nab experiment and results of these tests.

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Date submitted: 09 Jan 2015 Electronic form version 1.4