

Abstract Submitted
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Analyzing aCORN Experiment Data ROBERT KOSAR, Hamilton College, ACORN COLLABORATION — A precise measurement of the electron-antineutrino angular correlation coefficient in neutron beta decays, parameterized by “a”, can be used to test the standard electroweak model. The aCORN collaboration will measure “a” to 1% uncertainty. aCORN employs a kinematic approach to divide decays into two classes; the relative probability of a decay being in each class is related to “a”. The results of aCORN’s preliminary data run, completed last spring, are being analyzed to prepare for the physics run starting in February 2012. An algorithm to extract “a” from the data and the effects of the experimental parameters on the measured value of “a” are discussed.

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