## Abstract Submitted for the DNP07 Meeting of The American Physical Society

aCORN Backscatter-suppressing Electron Detector<sup>1</sup> CARROLL TRULL, Tulane University, ACORN COLLABORATION — A description and status report of the beta spectrometer for the upcoming experiment, aCORN, will be presented. The experiment measures the electron-antineutrino correlation in neutron beta decay. Electron backscatter from the electron energy detector produces a low-energy tail that can cause a large systematic error in the experiment. The spectrometer is designed to veto more than 90% of the backscattered electrons and measure the electron energy with a resolution of better than 20%. A prototype was built and tested, and the final version has now been assembled.

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