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aCORN: A precision measurement of the electron-antineutrino correlation in neutron decay[1] FRED WIETFELDT, Tulane University, ACORN COLLABORATION — The aCORN experiment uses a unique method to determine the electron-antineutrino correlation ("a" coefficient) in neutron decay from an asymmetry between fast and slow recoil proton groups. High precision proton spectroscopy, which has limited previous experiments to the 5% uncertainty level, is not needed. aCORN is now running on the NG-6 neutron physics end position at the NIST Center for Neutron Research (NCNR). The goal of the current run is 2%. In late 2013 aCORN will be moved to the new high-flux NG-C end position at the NCNR for a second run with a goal of 0.5%. A brief status report will be presented.

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