

Abstract Submitted
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aCORN on the new NIST cold neutron beam line¹ MD HASSAN,
Tulane University, ACORN COLLABORATION — The aCORN experiment is measuring the electron-antineutrino angular correlation a in neutron beta decay. Precision measurement of a will improve the determination of the nucleon axial vector coupling constant G_A , and along with other decay parameters can be used to test the validity and self-consistency of the Standard Model and to explore the physics beyond it. The goal of the aCORN experiment is to determine a to a relative accuracy of 1%. After two years on the NG-6 beam line at NIST, aCORN has now moved to a new higher flux NG-C beam line with some apparatus upgrades. The characterization of the new beam line and the upgrades to the apparatus will be presented.

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