

Abstract Submitted
for the DNP10 Meeting of
The American Physical Society

Spin Asymmetry of the Nucleon Experiment (SANE) Analysis Overview JONATHAN MULHOLLAND, University of Virginia, SANE COLLABORATION — The Spin Asymmetries of the Nucleon Experiment (SANE) is an inclusive measurement of the parallel and near-perpendicular double spin asymmetries of the proton that provides access to the spin observable, A_1^p and structure functions, g_1^p and g_2^p . The experiment ran in early 2009, using the Thomas Jefferson National Facility's polarized electron beam and the University of Virginia's polarized frozen $^{14}\text{NH}_3$ target in Hall C, collecting data in a Q^2 region from 2.5 to 6.5 GeV^2 and a Bjorken x region of 0.3 to 0.8. Particle detection was accomplished using the Big Electron Telescope Array (BETA), a novel non-magnetic detector array with a 194msr acceptance. The experimental motivations and goals will be discussed in the context of current world data on the proton spin structure functions. The experimental methods will be presented along with an overview of the analysis status and results. Current collaboration analysis effort is focused primarily on the proton spin structure functions g_1 and g_2 , but also includes elastic and inelastic asymmetry data taken with the Hall C High Momentum Spectrometer in both single arm mode and in coincidence with BETA.

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Date submitted: 30 Jun 2010

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