

Abstract Submitted
for the DNP15 Meeting of
The American Physical Society

PVDIS with the proposed SoLID spectrometer at Jefferson Lab

PAUL SOUDER, Syracuse University, SOLID COLLABORATION — The SoLID spectrometer is a new facility proposed for the JLab 11 GeV upgrade that combines the ability to obtain data with both high luminosity and large acceptance. One application is to measure parity-violation in deep inelastic scattering, covering a large range of Q^2 and Bjorken x with high statistics. The experiment will search for new physics that involves vector coupling to the electron and axial vector coupling to the quarks. In addition, the results will probe the possibility that charge symmetry is violated at the quark level and also search for higher twist effects due to quark-quark correlations. The SoLID spectrometer is based on the CLEO solenoid which is being shipped from Cornell, instrumented with GEM tracking detectors, gas Ceremkov detectors, and a Shashlyk electron calorimeter.

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Date submitted: 01 Jul 2015

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