DNP12-2012-020037

Abstract for an Invited Paper for the DNP12 Meeting of the American Physical Society

## Measurement of Parity Violation Asymmetry in Deep Inelastic Scattering at JLab<sup>1</sup> XIAOCHAO ZHENG, University of Virginia

The parity violation asymmetry in electron-deuteron deep inelastic scattering is sensitive to the electron-quark neutral weak couplings. During the JLab 6 GeV PVDIS experiment in 2009, this asymmetry was measured at two four momentum transfer squared values of 1.1 and 1.9 GeV squared, to statistical precisions of 3 and 4 percent, respectively. In this talk I will review the experiment and present preliminary results on the asymmetries as well as the quark weak axial charge.

<sup>1</sup>This work is supported by the National Science Foundation and the Department of Energy.