

Abstract Submitted
for the DNP08 Meeting of
The American Physical Society

Beam-Spin Asymmetry Measurements at CLAS M. AGHASYAN, INFN-Frascati, CLAS COLLABORATION — The single-spin asymmetries (SSA) that have been reported recently in semi-inclusive DIS by HERMES, COMPASS and CLAS, have emerged as a powerful tool to access the orbital motion of partons. SSAs could arise in the fragmentation of polarized quarks (Collins effect) and from the interference of wavefunctions with different orbital angular momentum (Sivers effect). The two mechanisms produce different kinematical dependences and their contributions could be separated in measurements of different beam and target single-spin asymmetries. This contribution presents recent results from Jefferson Lab's CLAS detector on beam SSAs in single neutral pion electroproduction off an unpolarized hydrogen targets in the DIS regime ($Q^2 > 1\text{GeV}^2, W^2 > 4\text{GeV}^2$). The measured kinematical dependences are compared with model predictions.

M. Aghasyan
INFN-Frascati

Date submitted: 25 Jun 2008

Electronic form version 1.4