Abstract Submitted for the APR11 Meeting of The American Physical Society

Transverse Asymmetries from Nuclei in Electron Scattering ROBERT MICHAELS, Jefferson Lab, HAPPEX COLLABORATION COLLAB-ORATION — Measurements at Jefferson Lab of the transverse asymmetry A_T in few-GeV electron scattering from various nuclei at forward angles will be presented. The electron's spin is polarized transverse to its momentum. The asymmetry arises from the interference of one-photon and two-photon exchange and is a potentially important systematic for parity-violating electron scattering experiments. The nuclei measured are H, ²H, ⁴He, ¹²C, and ²⁰⁸Pb at corresponding kinematics (E, θ) (GeV, degrees) = (3.18, 6), (6.06, 13), (2.75, 6), (1.05, 5) and (1.05, 5). The asymmetries are a few parts per million (ppm) and will be compared to available theoretical calculations.

> Robert Michaels Jefferson Lab

Date submitted: 13 Jan 2011

Electronic form version 1.4