Abstract Submitted
for the HAW14 Meeting of
The American Physical Society

Deeply Virtual Meson Production at Jefferson Lab VALERY KUBAROVSKY, Jefferson Lab, USA — A longstanding goal in nuclear and particle physics has been to describe the three dimensional structure of the nucleon in terms of the quarks and gluon fields. Exclusive electron scattering reactions at high momentum transfers directly related to Generalized Parton Distributions (GPDs). Most reactions studied, such as DVCS or vector meson electroproduction, are primarily sensitive to the chiral-even GPDs. Very little is known about the chiral-odd GPDs, except that H_T becomes the transversity function h_1 in the forward limit. It turns out that pseudoscalar meson electroproduction, and especially π^0 and η production, were identified as especially sensitive to the parton helicity-flip subprocesses. Dedicated experiments to study Deeply Virtual Meson Production have been carried out in Hall B at Jefferson Lab. The cross sections and asymmetries of the exclusive pseudoscalar meson electroproduction processes in a very wide kinematic range of Q^2, x_B and t have been measured with CLAS. The comparison of these data with the theoretical models will help us to better understand the connection of these processes with the longitudinal and transverse GPDs.

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Date submitted: 20 Jun 2014 Electronic form version 1.4