Abstract Submitted
for the HAW09 Meeting of
The American Physical Society

Timelike Compton Scattering with CLAS STEPAN STEPANYAN, Jefferson Lab, CLAS COLLABORATION — Deeply Virtual Compton Scattering (DVCS), \Epg, has been under intense theoretical and experimental studies in recent years as a new tool to access Generalized Parton Distributions (GPDs) of the nucleon. The simplest observables in DVCS for studying GPDs are spin dependent cross section differences. These asymmetries measure the imaginary part of Compton Form-Factors (CFFs), where GPDs enter at specific kinematical point, $\xi = x$. Here ξ is the generalized Bjorken variable and x is the light-cone momentum fraction of the struck quark. The real part of CFF is proportional to the integral of GPDs over x and can only be accessed in the measurements of the DVCS cross section or the beam charge asymmetry. Studying the real part is important for modeling GPDs. It is sensitive to the so-called D-term, introduced in the modeling of GPDs to ensure the polynomiality of their Mellin moments. Photoproduction of lepton pairs, or so-called Time-like Compton Scattering (TCS), is an inverse process to DVCS and offers additional constraints on GPDs. In particular, TCS can be used as an effective tool to study the real part of the Compton amplitude using the azimuthal angular asymmetry arising from exchange of l^+ and l^- momenta. In this report, first analysis of the Time-like Compton Scattering using the CLAS electroproduction data will be presented. Details of the extraction of quasi-real photoproduction of lepton pairs will be discussed.

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Date submitted: 30 Jun 2009 Electronic form version 1.4