

Abstract Submitted
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Deeply virtual π^0 electroproduction measurements with CLAS12 at Jefferson Lab ANDREY KIM, University of Connecticut, CLAS COLLABORATION — The recently upgraded Continuous Electron Beam Accelerator Facility (CEBAF) at Jefferson Lab combined with CEBAF Large Acceptance Spectrometer (CLAS12) provides rich opportunities to measure deeply virtual exclusive reactions such as hard electroproduction of photons and mesons. This presentation will focus on the measurements of deeply virtual π^0 production (DV π^0 P) with CLAS12 and the planned analysis in terms of underlying Generalized Parton Distributions (GPD). The experimental measurements of π^0 electroproduction allow us to constrain largely unknown chiral-odd GPDs \bar{E}_T and H_T which contain information on quark transverse spin densities in unpolarized and polarized nucleons. The first data collected during 2018 and 2019 using 10.6 GeV polarized electron beam on liquid hydrogen target provide unique access to a large kinematic range with photon virtuality Q^2 up to 8 GeV². In this talk we will report the current status of the DV π^0 P analysis and present preliminary results from CLAS12 data.

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