Abstract Submitted
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Polarization observables for double charged pion photo-production with polarized HD target[1] PENG PENG, University of Virginia — A complete characterization of the spectrum of N* and Delta resonances for nucleon is essential to understand the internal structure of the nucleon. However, both the recent Lattice QCD calculation and the conventional Constitute Quark Model have predicted more resonances than experimentally observed. In order to identify the missing resonances using partial wave analysis, polarization observables are needed to be measured in experiment. The work presented in this talk is to analyze the polarization observables for double charged pion photo-production with polarized HD target (G14 experiment in Jlab). With circularly polarized beam, and longitudinal polarized target, both proton and neutron, three polarization observables in the double pion photo-production are measured. The proton data will be compared with an earlier Jlab experiment G9, and the new neutron data will also be presented.

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