Contribution ID : **69** Type : **parallel talk**

Photon Beam Asymmetry Measurement from the $\gamma n \to K^+\Sigma^-$ Reaction

Friday, 8 June 2018 18:40 (0:20)

Collaboration

CLAS Collaboration - Hall B, Jefferson Laboratory

Abstract content

Strangeness channels are important in the experimental search for missing baryon resonances. Phenomenological reaction models for the extraction of resonance parameters, such as coupled-channels analyses, require data for many observables, in different channels, and on different targets. The analysis presented in this work is the first measurement of the beam asymmetry over a wide range in the kaon azimuthal center-of-mass angle (which is essential for accessing the s-channel contribution) for the exclusive $\gamma n \to K^+\Sigma^-$ reaction, using the deuteron as a quasi-free neutron target. The data used were from the CLAS g13b run period (experiment E06-103) at Jefferson Lab, which used linearly polarized tagged real photons with energies between 1.1 and 2.3 GeV. Results are shown for photon energies between 1.7 and 2.3 GeV. They agree well (within uncertainties) with the beam asymmetries obtained at LEPS for forward angles.

Primary author(s) : MUNEVAR, Edwin (Universidad Distrital Francisco José de Caldas)

Co-author(s) : NADEL-TURONSKI, Pawel (Jefferson Laboratory); FELDMAN, Jerry (The George Washington University)

Presenter(s) : MUNEVAR, Edwin (Universidad Distrital Francisco José de Caldas)

Session Classification : Parallel Session B4