

Abstract Submitted
for the APR10 Meeting of
The American Physical Society

Exclusive Analysis of the $\vec{\gamma}n \rightarrow K^+\vec{\Sigma}^-$ Reaction at $E_\gamma=1.1-2.3$ GeV EDWIN MUNEVAR, BARRY BERMAN, The George Washington University, CLAS COLLABORATION — Strangeness channels have been shown to be important for the experimental search for missing resonances. They are uniquely suited because they allow the possibility of determining several spin observables. A recent experiment performed at Jefferson Lab (g13 run period) [?], using a liquid deuterium target with linearly and circularly polarized tagged photon beams covering energies from threshold to 2.3 GeV, and using the CLAS detector, provides high-quality data (about 52 billion triggers) with good kinematic coverage and many experimental observables available for each reaction channel. We have analyzed these data to measure strangeness photoproduction on the neutron, in particular, for the $\vec{\gamma}n \rightarrow K^+\vec{\Sigma}^-$ reaction. A preliminary first exclusive measurement of the photon beam asymmetry for this reaction will be presented.

Edwin Munevar
The George Washington University

Date submitted: 23 Oct 2009

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