

Abstract Submitted  
for the HAW09 Meeting of  
The American Physical Society

**Beam Asymmetry for the  $\vec{\gamma}n \rightarrow K^+\vec{\Sigma}^-$  Reaction** 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) [1], 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 50 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, we are interested in the exclusive analysis of 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.

[1] P. Nadel-Turoński *et al.*, *Kaon Production on the Deuteron Using Polarized Photons*, PAC30 Proposal: PR-06-103, 2006.

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Date submitted: 06 Jul 2009

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