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Strangeness Production on the Neutron in the Deuteron with Polarized Photons: $\vec{\gamma}n \rightarrow K^+\vec{\Sigma}^-$ EDWIN MUNEVAR, BARRY BERMAN, The George Washington University, THE CLAS COLLABORATION — As in the case of atomic systems, the measurement of the excited spectrum of nucleons provides valuable information about their internal composition. The study of the extra excited states of the nucleon (missing resonances) predicted by the constituent quark model but not found experimentally are key in the understanding of the nucleon structure. The experimental search for these missing states is believed to be more effective using strangeness channels because they offer the possibility of determining several spin observables. A recent experiment done using the CLAS system at JLab, based on a liquid deuterium target and a polarized photon beam covering from threshold to 2.5 GeV provides high-quality data (about 52 billion triggers) in strangeness production on the neutron. These neutron channels are important for constraining phenomenological models. A brief description of this experiment along with a very preliminary analysis for the $\vec{\gamma}n \rightarrow K^+\vec{\Sigma}^-$ reaction will be presented

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