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Preliminary Results of T and F Asymmetries for KLambda Photoproduction from the Proton NATALIE WALFORD, FRANZ KLEIN, The Catholic University of America, CLAS COLLABORATION — The search for undiscovered excited states of the nucleon continues to be a focus of experiments at Jefferson Lab. A large effort has been launched using the CLAS detector to provide the database, which will allow nearly model-independent partial wave analyses to be carried out in the search for such states. Polarization observables play a crucial role in this effort, as they are essential in disentangling overlapping resonant and non-resonant amplitudes. Recent coupled-channel analyses [1] have found strong sensitivity of the K-Lambda channel to several higher mass nucleon resonances. In 2010, double-polarization data were taken at JLab using circularly polarized photons incident on a transversely polarized frozen spin target (FROST) [2] comprising butanol, operated at the low temperature of 30mK. The reaction products were detected in CLAS using tagged photons. We will present preliminary data of the T and F asymmetries of the K-Lambda final state with comparisons to predictions of recent multipole analyses. There are very few published measurements of the T asymmetry and none of the F asymmetry for the K-Lambda channel. This work is the first of its kind and will significantly broaden the world database for this reaction.

 A.V. Anisovich et al., Eur. Phys. J. A48 (2012) 15.2] C.D. Keith et al., Nucl. Instr. Meth. A694 (2012) 27.

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