Cross Sections of $K^0\Lambda$ Photoproduction off the Deuteron

NICHOLAS COMPTON, KEN HICKS, MAX CAMP, Ohio University, CLAS COLLABORATION — There has been great effort in mapping out the spectroscopic decay of proton resonances. Similar experiments of neutron resonances must also be investigated since the photocoupling will be different. The decay to $K^0\Lambda$ from a resonant neutron state was explored using g10 data from Jefferson National Laboratory. The data were obtained from a liquid deuterium target placed in the CEBAF Large Acceptance Spectrometer (CLAS). The photon beam energies analyzed range from 1.0 to 3.0 GeV. The hadrons $K^0$ and $\Lambda$ were identified by their corresponding decay products $\pi^+\pi^-$ and $p\pi^-$ respectively. The yield from this channel was determined using invariant mass cuts and missing mass techniques. The differential and total cross sections are now computed.

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