

Abstract Submitted
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Λ photoproduction on the neutron PAWEL NADEL-TURONSKI, The George Washington University, CLAS COLLABORATION — Of the two elementary $\gamma n \rightarrow K\Lambda$ reactions, the $\gamma p \rightarrow K^+\Lambda$ channel has been studied extensively, but for $\gamma n \rightarrow K^0\Lambda$ there are no data at all. It is very important to measure the cross section for this latter process because this production channel is one of the main reaction channels that can be used to identify missing N^* resonances.¹ We have measured exclusive $K^0\Lambda$ photoproduction by detecting all four charged particles from the $K^0 \rightarrow \pi^+\pi^-$ and $\Lambda \rightarrow p\pi^-$ decays and reconstructing the invariant masses of both strange particles. The experiment was performed in Hall B at Jefferson Lab using tagged photons having energy up to 3.6 GeV and a liquid deuterium target. Events where the proton is a spectator were clearly identified. The recoil polarization of the lambda was also measured. ¹ T. Mart and C. Bennhold, Phys. Rev. C **61**, 012201 (2000)

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