

Abstract Submitted
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Ξ spectroscopy in photoproduction on a proton target at Jefferson Lab LEI GUO, Jefferson Lab, CLAS COLLABORATION — The CLAS Collaboration at Jefferson Lab conducted a photoproduction experiment on a proton target using a tagged photon beam with an energy range of 1.6-3.8 GeV during May-July 2004. With an integrated luminosity of about 70 pb^{-1} , this experiment provides the largest data set for photon-proton reactions ever collected. The reaction $\gamma p \rightarrow K^+ K^+ \Xi^-(1320)$ has been investigated with the two K^+ 's detected by CLAS and $\Xi^-(1320)$ constructed from missing four momentum. The preliminary results of the cross section measurement of $\Xi^-(1320)$ for the photon energy range of 2.7-3.8 GeV will be presented. In search for excited cascade states, the reaction of $\gamma p \rightarrow K^+ K^+ \pi^-(\Xi^0(1320))$ has been explored. Preliminary results of excited cascade states decaying into $\Xi^0 \pi^-$ will be shown. The feasibility of searching for pentaquark cascade states in photoproduction on a proton target will also be discussed.

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