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Hyperon Spectroscopy with GlueX: $\Lambda(1520) \rightarrow \Sigma^0\gamma$ NILANGA WICKRAMAARACHCHI, GRZEGORZ KALICY, The Catholic University of America, GLUEX COLLABORATION COLLABORATION — Radiative decay widths of hyperons are important inputs to extract information about the SU(3) structure of the wave functions of the hyperons. Measuring the wave function can discriminate between theoretical models of their structure. There have been only few measurements so far for the radiative decay of excited state hyperons. The branching fraction for $\Lambda(1520) \rightarrow \Sigma^0\gamma$ in particular has not been measured so far. The GlueX experiment at Jefferson Lab provides an excellent opportunity to study excited state hyperons in photoproduction with a photon beam in the energy range 3.0 - 11.6 GeV incident on a liquid hydrogen target. In this talk, we focus on the preliminary results from analyzing the reaction $\gamma p \rightarrow K^+\Lambda(1520)$ with $\Lambda(1520) \rightarrow \Sigma^0\gamma$ decay mode using the data collected during the first phase of the GlueX experiment.

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