

Abstract Submitted
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Photoproduction of the Cascade Baryons at GlueX¹ ASHLEY ERNST, Florida State University, GLUEX COLLABORATION — Multi-strange baryons play an important role in understanding the strong interaction and despite their importance, little is known about such hyperons. Almost all knowledge of the Cascades today stems from Kaon-nucleon interactions in bubble chamber experiments performed in the 1960s and 1970s, of which only the octet and decuplet ground states, $\Xi(1320)$ and $\Xi(1530)$ respectively, are well established. This research uses the GlueX experiment at Jefferson Laboratory to map out the spectrum of doubly-strange Cascade resonances, as well as to measure the spin-parity for each of the detected resonances. The first physics run for GlueX has recently been completed and a clear signature of the $\Xi(1320)$ is observed. The systematics of the Cascade spectrum will be presented motivated by prior discoveries in the N^* program.

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Ashley Ernst
Florida State University

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