

Abstract Submitted
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Cascade Spectroscopy and Recent Photo-production Results from CLAS DENNIS WEYGAND, Jefferson Laboratory, CLAS COLLABORATION — Doubly-strange baryon resonances provide insights into the baryon structure. The SU(3) flavor symmetry implies that for every N^* and Δ^* resonance, there will be a corresponding Ξ^* (cascade resonance). Therefore, one can investigate the non-strange baryons at energies above approximately 1.5 GeV via the cascade spectra where many N^* and Δ^* resonances are broad and overlapping, and thus requiring complex coupled channel partial wave decomposition for analysis. The cascade resonances in the range from 1.5 to 2.5 GeV however are narrower and more readily observed; properties can be determined from mass spectra and moment analysis. Preliminary results from a recent high-luminosity and high energy (~ 5.4 GeV) photo-production experiment at the Jefferson Laboratory CLAS detector will be presented.

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