

Joint 20th International Workshop on Hadron Structure and Spectroscopy and 5th workshop on Correlations in Partonic and Hadronic Interactions



Contribution ID: 34

Type: **not specified**

Baryon Spectroscopy at GlueX

Wednesday 2 October 2024 10:00 (20 minutes)

Photoproduction of hadrons is an important experimental tool to understand the generation of hadrons as bound systems of quarks and gluons in the non-perturbative regime of QCD. The GlueX experiment, which is located in Hall D of Jefferson Lab, uses an intense photon beam with energies of up to 12 GeV that is incident on a liquid hydrogen target. A large acceptance spectrometer with near-complete neutral and charged particle coverage provides the excellent opportunity to study many different photoproduction processes. While the primary goal of the GlueX experiment is to study the spectrum of light-quark hybrid mesons, the GlueX data allows to get new insights into the baryon spectrum ranging from N^* , Δ^* resonances to single and doubly strange baryons, and to the photoproduction of charmonium states near threshold. Highlights of baryon spectroscopy results from the GlueX experiment will be discussed.

Primary author: Ms AFZAL, Farah (HISKP, University of Bonn)

Presenter: Ms AFZAL, Farah (HISKP, University of Bonn)

Session Classification: Wednesday Morning