PANIC2021 Conference



Contribution ID: 406 Type: Talk

Recent Results from the Gluonic eXcitation Experiment (GlueX) at JLab

Sunday 5 September 2021 16:30 (20 minutes)

The GlueX experiment conducts searches for hybrid mesons, using a linearly polarized photon beam, impinging on a liquid hydrogen target. The GlueX detector provides a close to 4π acceptance and allows to reconstruct both, neutral and charged particle tracks which are produced in the γp reactions.

GlueX is taking data in two phases and has collected $\sim 8.4\,\mathrm{PB}$ of raw data so far. The first phase data has been fully reconstructed and calibrated, whereas the second phase is still running, using a DIRC upgrade.

This talk will give a brief overview of the GlueX physics program, highlighting the latest results obtained from the phase one data analysis. This includes the determination of polarization observables, cross section measurements, as well as an outlook on the first steps towards an amplitude analysis of hybrid meson search channels.

Primary author: LERSCH, Daniel (Florida State University)

Presenter: LERSCH, Daniel (Florida State University)

Session Classification: Hadron spectroscopy and exotics

Track Classification: Hadron spectroscopy and exotics