Abstract Submitted
for the APR21 Meeting of
The American Physical Society

Background study and preliminary amplitude analysis results for $\gamma p \to \eta'\pi^0 p$ at GlueX[1] RUPESH DOTEL, Florida International University, GLUEX COLLABORATION — The GlueX experiment at Hall-D in Jefferson Lab uses a tagged photon beam with linear polarization peaking around 9 GeV on a liquid hydrogen target to study the spectrum of conventional mesons and search for hybrid exotic mesons. The spectrometer is designed to have an almost 4π acceptance and good efficiency especially suited to study multi-particle final states in both charged and neutral modes. This talk will report on the analysis of $\gamma p \to \eta'\pi^0 p$ focusing on the background systematics underneath the η' signal and preliminary results from amplitude analysis of the $\eta'\pi^0$ invariant mass spectrum.

[1]This work was partially supported by the U.S. Department of Energy, Office of Science, Office of Nuclear Physics under contracts DE-SC0013620 and DE-AC05-06OR23177.

Rupesh Dotel
Florida International University

Date submitted: 08 Jan 2021 Electronic form version 1.4