Abstract Submitted for the DNP17 Meeting of The American Physical Society

 J/ψ **Photoproduction at GlueX** LUKE ROBISON, Northwestern University, GLUEX COLLABORATION — The GlueX experiment at Jefferson Labs Hall D in Newport News, VA is devoted to the study of hadron spectroscopy by using a photon beam of up to 12 GeV in energy, incident on a proton target. We present the first measurements in 40 years of J/ψ photoproduction from the threshold of 8.2 GeV up to ~ 11.5 GeV. This measurement provides insight into the gluon distribution and multi-quark correlations in the nucleon. We measure the energy dependence of the cross section of J/ψ photoproduction: $\gamma p \to J/\psi$, $J/\psi \to e^+e^-$. Preliminary results for these measurements are presented and compared to the theoretical models and previous photoproduction measurements in this energy range.

Luke Robison Northwestern University

Date submitted: 29 Jun 2017 Electronic form version 1.4