

## **Search for the $Y(2175)$ in Photo-production at GlueX**

A long-standing goal of particle physics has been to understand how the quark and the gluonic degrees of freedom that are present in the fundamental Quantum Chromodynamics Lagrangian manifest themselves in the spectrum of hadrons. Of particular interest is how the gluonic excitations give rise to exotic states. One class of such states are hybrid mesons, these states are predicted by phenomenological models and Lattice Quantum Chromodynamics calculations. A candidate for hybrid mesons is  $Y(2175)$ , observed in electron-positron experiments. We will present the first attempts to search for this hybrid state in photo-production at the GlueX experiment in Jefferson Lab's Hall D, which had its first full production run in spring of 2017.