

Abstract Submitted  
for the DNP19 Meeting of  
The American Physical Society

**Analysis of  $K^*K$  states photoproduced from the proton** SEBASTIAN COLE, Arizona State University, GLUEX COLLABORATION — No comprehensive theoretical description of hadronic matter can be achieved without a solid knowledge of the excited meson states. Of particular interest are the "exotic" states that can not be described by the constituent quark model. The meson spectrum decaying into  $K^*K$  may contain such an exotic in the form of a hybrid-meson state, where a gluon has been promoted to being a real constituent. However, while the meson spectrum decaying into  $K^*K$  may prove very useful in understanding hadronic matter, that spectrum has not been fully explored. Jefferson Lab data from the GlueX collaboration for the  $\gamma p \rightarrow pK^*K$  reactions have been taken using a linearly polarized photon beam with energies of about 9 GeV at the coherent edge. Preliminary results of the  $K^*K$  meson spectrum will be presented.

Sebastian Cole  
Arizona State University

Date submitted: 01 Jul 2019

Electronic form version 1.4