

Abstract Submitted  
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**Photoproduction of scalar mesons using CLAS at JLab<sup>1</sup>** SHLOKA CHANDAVAR, KENNETH HICKS, Ohio University, DUSTIN KELLER, University of Virginia, CLAS COLLABORATION — The standard quark model makes no allowance for the existence of gluons outside hadrons. However lattice QCD predicts bound states of pure gluons, called glueballs. According to lattice calculations, the lightest of these experimentally unverified particles is expected to have  $J^{PC} = 0^{++}$ . There are three known mesons candidates with this spin and parity that can mix with the glueball: the  $f_0(1370)$ , the  $f_0(1500)$  and the  $f_0(1710)$ . All of these particles have been reported in various experiments with the exception of photoproduction. The ZEUS collaboration observed a resonance at 1.7 GeV in  $ep$  collisions (with an exchanged virtual photon). To search for the presence of this resonance in photoproduction, the reaction  $\gamma p \rightarrow f_J p \rightarrow K_s^0 K_s^0 p \rightarrow 2(\pi^+ \pi^-) p$  was analyzed using data from two experiments conducted using the CLAS detector at JLab. The  $K_s K_s$  channel was chosen because this fixes the parity of the parent  $f_J$  particle to be positive. Preliminary results from analysis of these data will be presented

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