

Abstract Submitted
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Photoproduction of scalar mesons using CLAS at JLab¹ SHLOKA CHANDAVAR, KENNETH HICKS, Ohio University, DENNIS WEYGAND, Old Dominion University, CLAS COLLABORATION — The search for glueballs has been ongoing for decades. The lightest glueball has been predicted by quenched lattice QCD to have a mass in the range of 1.0-1.7 GeV and $J^{PC} = 0^{++}$. The mixing of glueball states with neighbouring meson states complicates their identification. The $f_0(1500)$ is one of several candidates for the lightest glueball, whose presence in the $K_s^0 K_s^0$ channel is investigated in photoproduction using the CEBAF Large Acceptance Spectrometer (CLAS) at Jefferson Lab. This is done by studying the reaction, $\gamma p \rightarrow f_J p \rightarrow K_s^0 K_s^0 p \rightarrow 2(\pi^+ \pi^-) p$ using data from the g12 experiment. A brief description of this analysis, along with a preliminary partial wave analysis results will be presented.

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