Abstract Submitted for the APR21 Meeting of The American Physical Society

Analysis of the Photoproduction Reaction $\gamma p \to K^+ K^- \pi^+ \pi^- p'$ at GlueX¹ ANDREW HURLEY, William Mary, GLUEX COLLABORATION — Within the broader efforts to study the spectrum of light-quark mesons, the GlueX experiment provides a large photoproduction data set with nearly 4π acceptance that allows the study of a wide variety of final states. In this talk we will discuss the analysis of the reaction $\gamma p \to K^+ K^- \pi^+ \pi^- p'$ as measured by the GlueX experiment. This reaction was selected to study the photoproduction of the $\phi(2170)$, a state with a yet undetermined interpretation seen in several measurements in e^+e^- experiments. This analysis will focus on various properties of the final state particles as we lay the ground work for the amplitude analysis likely necessary for understanding the rich number of processes involved.

¹This work is supported by the U.S. Department of Energy, Office of Science, Office of Nuclear Physics under Early Career Award contract DE-SC0018224.

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Date submitted: 08 Jan 2021

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