

Abstract Submitted
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Search for High-Mass Resonances Decaying to K Lambda* REBECCA OSAR, Arizona State University, CLAS COLLABORATION — In nuclear particle physics, there is a discrepancy between theory and experiment concerning the numbers of existing nucleon resonances. Current models of nucleon resonances predict far more states than have been observed. To investigate this problem, $\Lambda(1520)$ baryons are reconstructed from a K^- and a proton from the CLAS12 detector. Using the reaction $ep \rightarrow K^+ K^- p$ with electrons of energy 10 GeV, the invariant mass of the $K^+ \Lambda(1520)$ system is used to determine yields, which are adjusted using efficiency corrections calculated from Monte Carlo simulation. The corrected yields of the $K^+ \Lambda(1520)$ system assist in uncovering the resonance spectrum. In this presentation, efficiency-corrected yields in terms of the center-of-mass energy W for the $K^+ \Lambda(1520)$ system in the range $W = 2$ to 5 GeV will be presented.

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