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Interference structure functions in $K^+\Lambda(\Sigma^0)$ electroproduction AVTO TKABLADZE, Ohio Unversity, PAWEL AMBROZEWICZ, Florida International University, DANIEL CARMAN, Ohio University, MAC MESTAYER, Jefferson Lab, BRIAN RAUE, Florida International University, CLAS COLLABORATION — The $K + \Lambda$ and $K^+\Sigma^0$ electroproduction cross sections were measured using the CLAS spectrometer at Jefferson Lab. Data were collected at beam energies of 2.5, 4.0, and 4.3 GeV, spanning a range of Q^2 from 0.5 to 2.5 $(\mathrm{GeV/c})^2$ and W from threshold up to 2.5 GeV. As part of the analysis of these data, the interference structure functions σ_{TT} and σ_{LT} have been extracted. These structure functions are crucial to separate resonant and non-resonant amplitudes of the underlying cross section. This measurement is a part of a larger CLAS program to measure cross section and polarization observables for strangeness production in the resonance region. A comparison of the results for overlapping Q^2 regions for the different beam energies allows us to reduce the model dependence in our acceptance calculations. The extracted cross sections and structure functions will be compared to existing theoretical models.

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