

Strangeness Physics with CLAS at Jefferson Lab

Volker Burkert (JLab)

I will give an overview of the ongoing research program using strangeness production with the CEBAF Large Acceptance Spectrometer (CLAS) at Jefferson Lab. The program encompasses differential cross section measurements in various channels with kaons and hyperons in the final state, as well as a variety of polarization observables including beam, target and recoil polarization. The measurement of the hyperon polarization in conjunction with other polarization observables allows complete measurements and the extraction of the production amplitude for several strangeness containing reaction channels, for example $\gamma + p \rightarrow K^+ + \Lambda$, and $\gamma + n \rightarrow K^0 + \Lambda$. Measurements of this type will allow the search for new excited nucleon states in a nearly model-independent way. Other parts of the program include measurement of exclusive structure functions in kaon electroproduction. The current status and future prospects of this program will be discussed.