

Abstract Submitted  
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**Electroproduction of Hyperons at Low Momentum Transfer** ARMANDO ACHA, PETE MARKOWITZ, Florida International University , HALL A COLLABORATION, JLAB COLLABORATION — A  $H(e,e'K)$  measurement was performed at Hall A, TJNAF as part of the hypernuclear experiment E94-107. E94-107 hypernuclear spectroscopy measurements on  ${}^9\text{Be}$ ,  ${}^{12}\text{C}$  and  ${}^{16}\text{O}$  targets allow the study of the  $\Lambda$ -N interaction. However, one important ingredient to the hypernuclear cross section calculation is the elementary cross section for production of hyperons,  $\Lambda$  and  $\Sigma^0$ . This was measured using a hydrogen (i.e. a proton) target. In addition, there is not much data available for electroproduction of hyperons at low  $Q^2$  and  $\Theta_{CM}$  and the available theoretical models differ a lot in this kinematical region of  $W$ . The measurement of the elementary cross section will help not only in the hypernuclear spectroscopy studies but also in constraining existing theoretical models for the elementary reaction. Measurements of the differential cross sections will be reported as well as their results binned in  $Q^2$ ,  $W$  and  $\Theta_{CM}$  to understand the dependence on these variables. To extract the cross sections a Hall A Monte Carlo simulation (MCEEP) was used in comparison, assuming a smooth dependence of these variables. Details of the calculations and results will be shown.

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