

Abstract Submitted  
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**Calibration of Hypernuclear Missing Mass Spectra: Analysis of Various Target Effects**<sup>1</sup> CASEY NEVILLE, JOERG REINHOLD, Florida International University, JEFFERSON LAB E05-115 (HES/HKS) COLLABORATION — Jefferson Lab Experiment E05-115 aims to accurately measure the absolute mass of lambda hypernuclei for ground as well as excited states. This will be accomplished in missing mass analysis in  $(e,e'K^+)$  reaction spectroscopy on various targets. This requires precise measurement of momenta as well as masses of all particles involved in the reaction. Measured momenta need to be corrected for energy loss in the target. Energy loss calculations and Monte Carlo studies have been performed to evaluate radiative and ionization energy loss in the various targets. Further, it has been noted that the currently listed value for the  $\Lambda$ -hyperon mass, used for spectrometer calibration, should be adjusted. The published measurement of this mass relied on outdated values for the proton, pion, and kaon masses. We have reevaluated this and arrive at a  $\Lambda$ -mass differing by about 10 keV from published values.

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