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**Spectroscopic Investigation of Lambda Hypernuclei in the Wide Mass Region by the Reaction  $(e,e'K)$**  CHUNHUA CHEN, Hampton University — The third-generation  $(e,e'K^+)$  hypernuclear experiment E05115 at Jlab HallC was carried out in 2009. The goal of the experiment is to obtain high precision spectroscopy for medium-heavy hypernuclei  ${}_{\Lambda}^{52}\text{V}$  as well as light p shell hypernuclei  ${}_{\Lambda}^{12}\text{B}$ ,  ${}_{\Lambda}^7\text{He}$ ,  ${}_{\Lambda}^9\text{Li}$  and  ${}_{\Lambda}^{10}\text{Be}$ . The newly developed HES(High-resolution Electron Spectrometer) was employed in this experiment. Compared to last Jlab HallC hypernuclear experiment which run in 2005, the higher beam energy and brand new electron spectrometer makes the “tilt method” work more effectively. In this talk, I will present the experimental setup, the improved spectrometer calibration procedure as well as the preliminary spectrum.

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