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**Recent Spectroscopic Investigation of P-Shell  $\Lambda$ -Hypernuclei by the  $(e, e'K^+)$  Reaction** CHUNHUA CHEN, Hampton University, HKS-HES COLLABORATION — Hypernuclei is a unique laboratory to study YN interaction. P-shell  $\Lambda$ -hypernuclei has its advantage to study both the fine structure and cluster structure of hypernuclei. 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 in wide mass range. The experimental system especially the optics and the kinematics have been carefully studied. The updated calibration status and the p-shell spectroscopy of  ${}_{\Lambda}^{12}\text{B}$ ,  ${}_{\Lambda}^7\text{He}$ , and  ${}_{\Lambda}^{10}\text{Be}$  will be discussed in this talk.

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