

Abstract Submitted
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Overview of the Hypernuclear Spectroscopy Experiment E01-011 at Jefferson Lab. VICTOR M. RODRIGUEZ, University of Houston, HKS COLLABORATION — Experiment E01-011, “Spectroscopic Study of Λ Hypernuclei up to Medium-Heavy Mass Region Through the $(e, e' K^+)$ Reaction”, (HKS), was successfully completed during a 2005 summer run in Hall C at the Jefferson Laboratory. Data were taken using C12, Si28, Li6, Li7, and Be9 targets. The experimental geometry included a new High Resolution Kaon Spectrometer (HKS), and implemented a “Tilt Method” for the electron spectrometer in order to increase the yield and the signal to accidental ratio. The experiment was designed to achieve a hypernuclear energy resolution of ~ 400 KeV with rates that match or exceed those obtained using mesonic reactions. These studies will help define the hyperon-nucleon interaction, and the Λ effective mass in nuclear media.

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