

Abstract Submitted
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High Resolution 1p Shell Hypernuclear Spectroscopy at JLAB

MAURO IODICE, INFN/Roma', FOR THE JLAB HALL A COLLABORATION,
AND THE KAON COLLABORATION — Hypernuclear physics is a unique tool for providing information on the nature of the potential between nucleons and strange baryons. Information on the nature of the force between nucleons and strange baryons, i.e. the Lambda-N interaction, can be accessed by studying the spectroscopy of nuclei in which a nucleon has been replaced by a Lambda particle to form a bound state. The experiment E94107 at Jefferson Lab, Hall A, using a pair of high resolution spectrometers coupled to a pair of septum magnets, together with a RICH detector for particle identification, completed its first measurements of hypernuclear electroproduction on carbon and beryllium targets in June 2004. Data on oxygen using a windowless waterfall target were recently taken during June 2005. Results on Carbon and Beryllium and preliminary data on oxygen will be presented and compared with theoretical models.

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