

Abstract Submitted
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Hypernuclear Spectroscopy in JLab's Hall A: experimental aspects FRANCO GARIBALDI, INFN/Roma', FOR THE JLAB HALL A COLLABORATION, AND THE KAON COLLABORATION — With the addition of two superconducting septum magnets and a Ring Imaging Cerenkov detector (RICH), the high resolution spectrometer pair in Hall A at Jefferson Lab have become a powerful tool for high resolution Hypernuclear spectroscopy. With both spectrometers set at 6° , the very good momentum resolution capability, the state of the art particle identification, and the very high quality CEBAF beam enable us to observe bound states in Lambda-hypernuclei with sub-MeV FWHM resolutions. The use of the proximity focusing RICH detector for kaon identification in the 2 GeV/c region of momenta reduced the large pion and proton backgrounds in the hypernuclear spectra to a negligible level. The basic parameters, the data analysis procedure, and the resulting performance of the RICH detector obtained during the hypernuclear spectroscopy experiment will be presented and compared with Monte Carlo simulations. Technical and optical features of the two septum magnets will also be discussed.

Pete Markowitz
FIU

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