

Abstract Submitted
for the APR14 Meeting of
The American Physical Society

Multi-Anode-PMT Analysis for new RICH detector at JLab's CLAS12 spectrometer ANDREW WITCHGER, FATIHA BENMOKHTAR, None — Thomas Jefferson National Accelerator Facility (JLab) is performing a large-scale upgrade to the Continuous Electron Beam Accelerator Facility (CEBAF) to reach energies of 12GeV. CEBAF Large Acceptance Spectrometer (CLAS12) in Hall B is undergoing major upgrade too to run to collect data at these high energies. A new Ring Imaging CHerenkov (RICH) detector is being developed to provide better kaon – pion separation for CLAS12 in the 3 to 8 GeV/ c range. With this addition, when the electron beam hits the target, the resulting pions, kaons, and other particles will pass through a wall of translucent aerogel tiles and create Cherenkov radiation. This light can then be accurately detected by a large array of Multi-Anode Photo-Multiplier Tubes (MA-PMT). The supporting hardware and software systems for MA-PMTs were developed by the collaboration. I am presenting my work on the testing and analysis of these systems and results that will amplify the physical capabilities of the spectrometer.

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None

Date submitted: 10 Jan 2014

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