

Abstract Submitted
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Studies of Multi-Anode PMTs for a Ring Imaging Cherenkov for CLAS12 ANDREW LENDACKY, FATIHA BENMOKHTAR, Duquesne University, VALERY KUBAROVSKY, Thomas Jefferson National Accelerator Facility, ANDREY KIM, University of Connecticut — At Thomas Jefferson National Accelerator Facility (TJNAF), the CLAS12 detector in Hall B is undergoing an upgrade. A Ring Imaging Cherenkov (R.I.C.H) detector is being built to improve particle identification in the 3-8 GeV/c momentum range. Approximately four hundred Hamamatsu H121700 Multi-Anode Photomultiplier Tubes (MA-PMTs) are being used in this detector to measure photons emitted through Cherenkov Radiation. These MA-PMTs' characteristics are being tested and measured, and I will be presenting my work about the crosstalk study. Crosstalk is the occurrence of incident light striking one area of the photocathode, but is additionally measured in nearby areas. By using a Class 3b laser in the 470 nm wavelength, and an optical density resembling the single photon emission spectrum, the crosstalk for the H121700 MA-PMTs are measured and categorized into a database for future reference.

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