

The CLAS12 Ring Imaging Cherenkov Counter

Valery Kubarovsky
Jefferson Lab
For the CLAS collaboration

A ring imaging Cherenkov detector (RICH) has been designed, constructed and installed in the CLAS12 spectrometer at Jefferson Laboratory (JLab) to significantly improve the particle identification in the momentum range between $3 \sim \text{GeV}/c$ and $8 \sim \text{GeV}/c$. The detector adopts a novel technology of hybrid optics solution with aerogel radiator, light planar and spherical mirrors, and highly segmented photon detectors with the Hamamatsu multi-anode photomultipliers H8500 and H12700. We will report on the initial performance of the RICH during the commissioning of the detector and the first physics data taking period.