

Initial performance of the GlueX DIRC detector.

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The GlueX experiment at Jefferson Laboratory aims to perform quantitative tests of non-perturbative QCD by studying the spectrum of light-quark mesons and baryons. A Detector of Internally Reflected Cherenkov light (DIRC) was installed to enhance the particle identification (PID) capability of the GlueX experiment by providing clean π/K separation up to 3.7 GeV/c momentum in the forward region ($\theta < 11$ deg), which will allow the study of hybrid mesons decaying into kaon final states with significantly higher efficiency and purity.

The new PID system is build using radiators from the decommissioned BaBar DIRC counter, combined with new compact photon cameras based on the SuperB FDIRC concept. The full system was successfully installed and commissioned with beam during 2019/2020.

We will discuss the status of the DIRC detector and its performance.

TIPP2020 abstract resubmission?

No, this is an entirely new submission.

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