Optimization of RICH Electronics

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Abstract

The Ring Imaging Cherenkov (RICH) Detector provides particle identification for the CLEO III detector at the Cornell Electron Storage Ring (CESR) at Cornell University. The RICH was installed and has been functioning well since August 1999. In order to provide high quality particle identification, the operation of the RICH and its electronics are continually monitored. This summer's research experience was designed to explore the electronics' performance in detail, diagnose any problems that have arisen since installation and develop solutions that will improve the performance and useful lifetime of the RICH.