XII International Workshop on Ring Imaging Cherenkov Detectors - RICH2025



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Front-End electronics for RICH detectors: general requirements, design criteria and examples of current projects

Friday, September 19, 2025 8:35 AM (30 minutes)

This talk will give an overview of the electronics requirements for today's and future RICH detectors. Key challenges in the design of RICH detectors are reviewed along with their impact on front-end electronics designs. This includes requirements for resolution in space and time, signal coupling to single-photon sensors and front-end data processing. Additional detector integration aspects are considered such as power consumption, geometry, data throughput and radiation hardness. Different designs are explored to seek a common ground for RICH detectors and to highlight where additional constraints lead to more application-specific developments

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