CPAD Workshop 2023



Contribution ID: 32

Type: Oral

LAPPD Based TOF system at Fermilab Test Beam Facility

Thursday, 9 November 2023 11:20 (20 minutes)

To meet the demands of modern detector designs, a new time of flight (TOF) detector based on Large Area Picosecond Photo Detectors (LAPPD) is being developed for the Fermilab Test Beam Facility (FTBF). An array of LAPPDs will be deployed in combination with a multichannel 10 Gsps DAQ based on the PSEC4 ASIC. Timing synchronization over long distance will be achieved using a White Rabbit timing system. Results from the pilot system, demonstrating 19 ps TOF resolution, will be shared along with the upcoming plans for the deployment of a 50 m baseline TOF system allowing pion/kaon separation up to ~30 GeV.

Early Career

No

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Track Classification: RDC Parallel Sessions: RDC11: Fast Timing