

Large Area Picosecond Photodetectors for Use in Liquid Noble Detectors

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The development of large-area imaging photodetectors with sub-nanosecond time resolutions and millimeter-level spatial resolutions allows detailed track reconstruction based on the precise transit times and position of individual photons. The Large Area Picosecond Photodetector (LAPPD) collaboration has developed large area microchannel plate-based photodetectors with such high resolutions using scalable, industrial batch processes. In this talk we present a discussion of the LAPPD concept, recent developments in the project, and progress towards commercialization. We also discuss possible applications of these photosensors in the context of neutrino experiments using Cherenkov and scintillation light in liquid-noble detector systems.

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