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The DUNE Far and Near Detector

Thursday, 6 July 2017 17:30 (15 minutes)

We present the plan for the Deep Underground Neutrino Experiment (DUNE) photon detector system and recent research and development work that has contributed to the design. DUNE will be composed of multiple liquid argon time projection chambers (TPCs). In order to determine the full 3D position of a particle in the detector its initial time must be known accurately. This initial time can be determined using the scintillation light, which is produced simultaneously with the charge signal the TPC collects but travels much faster. The DUNE photon detector system is designed to increase the amount of active area sensitive to light while not reducing the available fiducial volume in the liquid argon.

Experimental Collaboration

DUNE

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Session Classification: Detectors and data handling

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