

Abstract Submitted
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Performance of Photon Detectors in ProtoDUNE NILAY BOSTAN,
The University of Iowa, DUNE COLLABORATION — In preparation for physics
with DUNE, the ProtoDUNE detector has collected data at CERN with beam mo-
mentum of 0.3, 0.5, 1, 2, 3, 6, and 7 GeV/c. Three types of photon-collecting
methods are implemented in the single-phase module of ProtoDUNE; these modules
(dip-coated light guides, double-shift light guides, and ARAPUCA) convert incident
liquid argon scintillation photons into longer wavelengths to be recorded by SiPM
detectors. ProtoDUNE data has been analyzed for its utility for physics analysis, in-
cluding time and energy measurement and particle identification, by measuring the
detection efficiency, stability, timing and energy resolution of the photon detectors.

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