

Abstract Submitted
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Novel Cerenkov Detector for Particle Identification KAMURAN DILSIZ, HASAN OGUL, EMRAH TIRAS, University of Iowa, FERMILAB T1041 COLLABORATION — Particle identification based on Cerenkov radiation has been utilized in many detector systems mostly with ring imaging Cerenkov detectors. Gas Cerenkov detectors have also been instrumented in the Fermilab and CERN test beam lines for beam users. Here we describe a novel, tracking Cerenkov detector constructed with a quartz-based crystal read out with multiple, directly coupled photomultiplier tubes. Upon optimization, the idea can be generalized to particle identification systems in the future collider detector experiments as well as Compton polarimeters.

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None

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