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Contribution ID: 4461 Type: **Oral Competition (Graduate Student) / Compétition orale (Étudiant(e) du 2e ou 3e cycle)**

(G*) An aerogel Cherenkov threshold counter for the Water Cherenkov Test Experiment

Monday 27 May 2024 17:00 (15 minutes)

Aerogel threshold Cherenkov counters are developed to identify pions and muons in the range of 240-980 MeV/c for the T9 beam test facility at CERN PS East Hall. These counters are part of the Water Cherenkov Test experiment (WCTE) particle identification system. The WCTE is a test-beam experiment to test the design and capabilities of the photosensor system under development for the Hyper-Kamiokande Intermediate Water Cherenkov Detector. In this talk, I will cover the WCTE goals, the T9 beam monitor system and particle identification with a focus on aerogel threshold Cherenkov counters. Results obtained from a beam test using prototypes of the T9 beam monitor system in the summer of 2023 will be also presented.

Keyword-1

Aerogel Cherenkov threshold

Keyword-2

Particle identification

Keyword-3

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