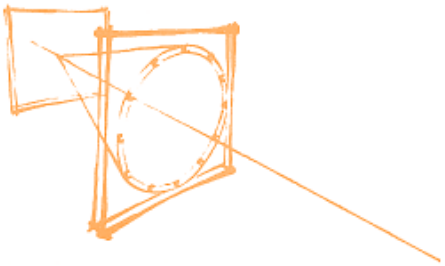

ID de Contribution: **19** Type: **Poster**

VHMPID detector for the ALICE experiment upgrade at LHC: simulation results from mirror segmentation studies

jeudi 6 mai 2010 10:00 (1 minute)

The Very High Momentum Charged Particle Identification (VHMPID) detector represents a possible upgrade for the ALICE experimental apparatus. It has been conceived to extend protons identification on a track-by-track basis up to p = 30 GeV/c. The VHMPID is a ring imaging Cherenkov with C4F10 gaseous radiator coupled to CsI-based photon detector. The focusing properties of a spherical mirror are exploited to focus Cherenkov photons on the photon detector, placed in its focal plane. Mirror segmentation is a critical parameter for the ring pattern recognition performances and for the capability to identify tracks close in the phase space. This feature is crucial for the contribution of VHMPID to the jets physics. We will present the results of detailed simulation studies that have been carried out in order to optimize the mirror segmentation.

Please indicate ”poster” or ”plenary” session. Final decision will be made by session coordinators.

poster

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Classification de Session: Poster Session 2 (Summary)

Classification de thématique: Technological aspects of Cherenkov detectors