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The Silicon Drift Detector of the ALICE experiment

Monday 15 February 2010 15:15 (25 minutes)

ALICE is a general-purpose heavy-ion experiment, aimed at studying nuclear matter under the extreme density and temperature conditions that will be attained in Pb–Pb collisions at the LHC. The Inner Tracking System (ITS) is the detector of the ALICE central barrel located closest to the beam axis. Its two intermediate layers (radii $\approx$ 15 and 24 cm) are made of silicon drift detectors (SDD).
In this talk we will present the SDD status and the main results from the commissioning with cosmic rays in 2008 and 2009. We will show the layout of the detectors, the front-end electronics and the data acquisition. The status, the performance and the calibration strategy will also be discussed.
The results obtained so far demonstrate that the detector is well performing and ready for the forthcoming proton-proton data taking.

Summary (Additional text describing your work. Can be pasted here or give an URL to a PDF document):

http://www.cern.ch/~sitta/vci_abstract.pdf

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