Contribution ID: **180** Type: **Talk**

Muon Detector (CMS)

Wednesday, August 28, 2024 4:25 PM (25 minutes)

The CMS experiment at the LHC has started data taking in Run 3 at a pp collision energy of 13.6 TeV. A highly performing muon system has been crucial to achieving many of the physics results obtained by CMS. The legacy CMS muon detector system consists of Drift Tube chambers in the barrel and Cathode Strip Chambers in the endcap regions, plus Resistive Plate Chambers in both, barrel and endcap. Moreover to withstand the challenging conditions of increased luminosity and higher pileup expected during the high-luminosity LHC (HL-LHC), the Muon System will undergo specific upgrades targeting both the electronics and detectors to cope with the new challenging data-taking conditions and to improve the present tracking and triggering capabilities. These detector upgrades are based on the triple gas electron multiplier (GEM) and improved RPC (iRPC) technology, featuring improved time, spatial resolution, and enhanced rate capability. The presentation will give an overview of the Muon System operation, the upgrades, with the ongoing activities and plans.

Internet talk

Maybe

Is this an abstract from experimental collaboration?

Yes

Name of experiment and experimental site

CMS

Is the speaker for that presentation defined?

Yes

Details

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Session Classification: Workshop on Instruments and Methods

Track Classification: Workshops & Special Sessions: Workshop on Instruments and Methods