

The CMS Muon System Upgrade for High Luminosity LHC

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To withstand the challenging conditions of increased luminosity and higher pileup expected during the high-luminosity LHC (HL-LHC), the muon spectrometer of the CMS experiment 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. The upgrade of the electronics will target the Drift Tubes (DT) in barrel, Cathode Strip Chambers (CSC) in end-caps and Resistive Plate Chambers (RPC) in barrel and end-caps of the present Muon system. For the detector upgrade, the deployment of new stations for the end-cap is planned, where the background rate is expected to be higher. These 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 upgrades, with the ongoing activities and plans.

Alternate track

I read the instructions above

Yes

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