5. Annual MT Meeting



Contribution ID: 116 Type: Poster

CMS Phase 2 Tracker Upgrade –Endcap Design and Reception Test

For the high-luminosity LHC (HL-LHC), CMS will install a completely new silicon tracker. Due to the anticipated increase in instantaneous luminosity by a factor of five compared to the LHC design value, the granularity will be significantly increased in order to cope with the higher track density. In addition, the tracker will provide information the first level trigger of CMS. The future tracker will consist of two barrel parts and two end caps (TEDD), one on each side. One end cap is made of five double-disks, each equipped with detector modules on all four faces to ensure a complete coverage. The backbone of the mechanical structure of the end caps are highly integrated half-disks. The contribution will give an introduction into the design of the TEDD and the half-disks, outline the status of the ongoing prototyping and R&D for the half-disks, and discuss possible reception test tasks for the production of final end caps.

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