

CMS Phase 2 Tracker Upgrade for HL-LHC

Monday, 2 February 2026 14:30 (15 minutes)

For the HL-LHC operations, the CMS tracker is required to be replaced with an improved tracking system to achieve the unique objectives associated with the CMS Physics program. The CMS Phase 2 tracker have been designed with high granularity for the track reconstruction in the challenging HL-LHC environment consisting large number of pile-up events. Additionally, the new CMS tracker would be enhanced with the ability for track-triggering at the hardware level, along with less material budget within the CMS tracking volume. At present the production of the Inner Tracker (IT) and Outer Tracker (OT) modules are being carried out in different CMS institutes/universities across the world, while the integration and commissioning of the tracking detectors into the CMS experimental cavern is planned to start in 2028. This presentation would be a highlight of the uniqueness and novelty of the CMS Phase 2 tracker.

Position

Speaker to be decided

Affiliation

Speaker to be decided

Country

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