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Tracker Alignment (CMS)

Wednesday, 1 September 2021 17:00 (30 minutes)

In order to provide optimal reconstruction of charged tracks, the positions of the nearly twenty-thousands silicon sensors of the central tracking system of the CMS detector must be determined at a better precision than their in- trinsic resolution, under a procedure called alignment. At CMS, the alignment also includes the orientation and surface deformations of the sensors. Data- driven methods to carefully align the detector and validate the alignment are presented in the context of the legacy alignment for CMS Run-2 data, corresponding to the data accumulated from 2016 to 2018. Systematic distortions are discussed, such as weak modes and variations of the conditions during data taking over time, in particular effects related to the radiation damages. Finally, we discuss prospects for CMS Run-3.

Is this abstract from experiment?

Yes

Name of experiment and experimental site

CMS

Is the speaker for that presentation defined?

Yes

Details

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Internet talk

No

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