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Operation and Performance of the CMS Electromagnetic Calorimeter in Run2 and beyond

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During LHC Run2, the CMS detector was operated at the highest instantaneous luminosity. These conditions posed significant demands on the electromagnetic calorimeter (ECAL). Precision alignment, calibration, monitoring and accurate reconstruction are essential to provide a precise measurement of electron and photons, that in turn are key to a variety of physics analysis, ranging from Standard Model to Higgs physics to search for new phenomena. In this contribution the techniques will be described that were employed to achieve an energy resolution of better than 2% (4%) for electrons from Z boson decays in the central region (elsewhere), even in presence of harsh running conditions. The current status of the detector, and the plans for its upgrade for the High-Luminosity phase will be illustrated.

Is this abstract from experiment?

Yes

Name of experiment and experimental site

CMS Experiment

Is the speaker for that presentation defined?

Yes

Details

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