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The CMS Electromagnetic Calorimeter Calibration and Performance During LHC Run2 ALEJANDRO SANCHEZ, Carnegie Mellon Univ, CMS COLLABORATION COLLABORATION — The electromagnetic calorimeter (ECAL) of the CMS detector is a homogenous, scintillating, lead tungstate crystal calorimeter, designed to achieve excellent energy resolution. Precise calibration of the CMS ECAL is crucial for maintaining the excellent performance required for many physics analyses. The energy response of the CMS ECAL has been precisely calibrated exploiting the full Run2 (2015-18) data. A dedicated calibration of each detector channel has been performed with physics events exploiting electrons from W and Z boson decays, photons from π^0/η decays, and from the azimuthally symmetric energy distribution of minimum bias events. A special effort has been made to precisely calibrate the very forward region ($|\eta| > 2.5$) of the ECAL where the crystal transparency is extremely low. This region is crucial for jet and transverse missing energy reconstruction and dedicated algorithms are developed to monitor this region during the LHC Run3 (2021-24). We present the calibration strategies that have been implemented and the resulting performance achieved by ECAL for LHC Run 2. The procedures being developed to monitor and correct the response of channels in the very forward regions of ECAL during LHC Run 3 will be described in detail.

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