The 5th international conference on particle physics and astrophysics



Contribution ID : 613

Type : Oral talk

Electron and photon performance in CMS in Run2 and prospects for Run3

Tuesday, 6 October 2020 17:45 (20)

The rich physics program of CMS experiment depends on the ability to trigger, reconstruct and identify events with electrons and photons with the CMS detector with excellent efficiency and precision. This talk will present an overview of reconstruction and identification of electrons and photons in the CMS detector at the Run2 of LHC, and plans for upcoming Run3. The reconstruction of the energy and momentum of isolated electrons and photons in CMS, combining information from electromagnetic calorimeter and tracking detector, will be briefly described. The key variables used to discriminate between electromagnetic objects and jets will be discussed as well. The cut-based and multivariate identification criteria of electrons and photons are based on these variables. The performance of triggering, reconstruction and identification of electrons and photons will be reported.

Primary author(s): COLLABORATION, CMS; MUKHERJEE, Swagata (RWTH Aachen University)
Presenter(s): MUKHERJEE, Swagata (RWTH Aachen University)
Session Classification: High Energy Physics

Track Classification : High energy physics