

Muon reconstruction and identification performance at CMS during Run 2

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The Compact Muon Solenoid (CMS) detector is one of the main experiments of the Large Hadron Collider (LHC). Many aspects of its broad physics program rely on our ability to trigger, reconstruct and identify events with muons in a wide range of momenta, from a few GeV to the TeV scale. We study the performance of muon identification and isolation in CMS in pp collision data at 13 TeV recorded during the Run 2 of the LHC. Additionally, techniques for the identification of muons produced in Z and W bosons, and tau decays for the use in SM precision measurements and searches for BSM physics are presented. Finally, the performance on benchmark models is shown.

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