

Performance of the reconstruction and identification of high-momentum muons collected with CMS in 13 TeV data

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The CMS detector at the LHC has recorded events from proton-proton collisions, with muon momenta reaching up to 1.8 TeV in the collected dimuon samples. These high-momentum muons allow direct access to new regimes in physics beyond the standard model. Because the physics and reconstruction of these muons are different from those of their lower-momentum counterparts, this talk presents for the first time dedicated studies of efficiencies, momentum assignment, resolution, scale, and showering of very high momentum muons produced at the LHC.

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