

Search for a Narrow Resonance Produced in 13 TeV pp Collisions Decaying to Electron Pair or Muon Pair Final States

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A search for a new narrow resonance decaying to an electron pair or a muon pair is performed using 13 TeV pp collision data collected by the CMS experiment at the CERN. The electron event sample used corresponds to an integrated luminosity of 2.6 fb^{-1} while the muon event sample used corresponds to an integrated luminosity of 2.8 fb^{-1} . No evidence for such a resonance is observed and limits are set at the 95% confidence level on a new massive narrow spin 1 boson decaying into electron or muon pairs. These limits exclude a sequential standard model Z'_{SSM} resonance with a mass lighter than 3.15 TeV and superstring-inspired Z'_ψ with a mass lighter than 2.60 TeV.

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