

# Search for high mass resonances decaying into four lepton final state at 13 TeV with the CMS detector

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A search for heavy resonances decaying into four-lepton final states in pp collisions is performed. This search is based on the data collected in CMS detector at the LHC. The full 2016 dataset corresponding to an integrated luminosity of 36 /fb at the center-of-mass energy of 13 TeV is used. Benchmark signal samples are generated using Monte Carlo simulation. Event selection takes into account the inefficiency arising from the boosted signature. Data-driven method is used to determine backgrounds with respect to fake muons. Upper limits on the cross section times branching ratio as a function of resonance mass are presented.

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