

## Search for high-mass resonances decaying into dilepton final state at 13 TeV with CMS

*Friday, July 6, 2018 8:15 PM (15 minutes)*

A search for new high-mass resonances decaying into electron or muon pairs is performed using full data obtained from 2016 proton-proton collisions at 13 TeV. The search exploits data collected by the CMS experiment at a center-of-mass energy of 13 TeV, corresponding to an integrated luminosity of 36 /fb. No significant deviations are observed from the Standard-model expectation. Upper limits on the product of a new resonance production cross section and branching fraction to dileptons are calculated in a model-independent manner. A lower mass limit is set at 95% confidence level for new spin-1 resonance arising in the sequential standard model, superstring-inspired model and spin-2 Kaluza–Klein graviton arising in the Randall–Sundrum model of extra dimensions.

**Primary authors:** MEYER, Arnd (Rheinisch Westfaelische Tech. Hoch. (DE)); OH, Minseok (Seoul National University (KR))

**Presenter:** OH, Minseok (Seoul National University (KR))

**Session Classification:** POSTER

**Track Classification:** Posters