

Search for heavy scalar resonances in the 4-lepton final state in the CMS experiment

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A search for scalar resonances decaying to four leptons is presented, with the data collected by the CMS detector from 2016 to 2018 at center-of-mass energy of 13 TeV, corresponding to an integrated luminosity of 138 fb⁻¹. A model-independent approach is introduced and applied. Large mass region is covered from 130 GeV to 3 TeV, and different production mechanisms and width assumptions are tested.

Alternate track

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Yes

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