

Search for heavy resonances decaying to two Z bosons at CMS

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A search for heavy resonances decaying to two Z bosons in the four-lepton final state is presented, using the data collected by the CMS detector from 2016 to 2018, corresponding to an integrated luminosity of 138 fb^{-1} . No significant excess is observed, and upper limits on the production cross section multiplied by the branching ratio are computed as a function of the resonance mass and width, for different production modes. The results are projected to an integrated luminosity of 4 fb^{-1} and 6 fb^{-1} to estimate the sensitivities to be reached during the High-Luminosity LHC phases.

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