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## Searches for non-resonant di-Higgs production with CMS

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A search is presented for the non-resonant production of two Higgs bosons decaying into two bottom quarks, and two photons or two tau leptons. The data collected with the CMS detector are used, corresponding to a maximum integrated luminosity of 19.7 inverse femtobarns for the proton-proton collisions at  $\sqrt{s} = 8$  TeV and 2.7 inverse femtobarns for the proton-proton collisions at  $\sqrt{s} = 13$  TeV. Good agreement is observed between data and predictions of the standard model (SM). Although the sensibility to the SM non-resonant production is really small, the limits constrain the parameter space for anomalous Higgs boson couplings, and allow the exclusion of some very extreme models.

### Summary

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