

Measurement of Higgs self coupling from non-resonant Higgs pair production in CMS experiment

The trilinear self-coupling (λ) of Higgs can directly be accessed at the LHC by inclusive production of Higgs boson pair. A search for the non-resonant Higgs pair production via gluon-gluon fusion and as well as Vector Boson Fusion processes has been performed recently by CMS collaboration in various final state with the complete LHC Run-2 proton-proton collision data at center of mass energy of $\sqrt{s}=13$ TeV. This presentation emphasizes on the results of the production cross section of inclusive diHiggs production as well as estimates of relevant coupling parameters predicted by standard model (SM) and constraints on some of the effective couplings of HH in the beyond standard model (BSM) scenario.

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