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Search for nonresonant Higgs boson pair production in final states with a pair of b-quarks and a pair of photons in $\sqrt{s}=13$ TeV pp collisions data at CMS experiment

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The trilinear self-coupling of Higgs can directly be accessed at the LHC by inclusive production of Higgs pair. A search for the non-resonant Higgs pair production via gluon-gluon fusion (ggF) and as well as Vector Boson Fusion (VBF) processes has been performed recently by CMS collaboration with the complete LHC Run-2 proton-proton collision data at center of mass energy of $\sqrt{s}=13$ TeV, in the most sensitive $2\gamma + 2b$ jets inclusive final state. This presentation emphasizes on the results of the production cross section of inclusive diHiggs production as well as estimates of relevant coupling parameters.

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