







CMS $137 \text{ fb}^{-1} (13 \text{ TeV})$ $\text{H} \rightarrow \gamma\gamma$
 $|\eta^j| < 4.7$

-  MADGRAPH5_aMC@NLO, NNLOPS ggH + HX
-  MADGRAPH5_aMC@NLO ggH + HX
-  POWHEG ggH + HX
-  HX = MADGRAPH5_aMC@NLO VBF+VH+ttH
-  Data, stat \oplus syst unc.
-  syst unc.

p-value(nominal SM): 0.619

 $\Delta\sigma_{\text{fid}}/\Delta\tau_{\text{C}}^j(\text{fb}/\text{GeV})$ $\sigma_{\text{fid}}(\tau_{\text{C}}^j < 15.0 \text{ GeV})/15.0 \text{ GeV}$ $\sigma_{\text{fid}}(\tau_{\text{C}}^j > 80.0 \text{ GeV})$
30.0 GeVRatio to
prediction $\tau_{\text{C}}^j(\text{GeV})$ 