




CMS 137 fb^{-1} (13 TeV) $\text{H} \rightarrow \gamma\gamma$ $|\eta^{j_1}| < 2.5$ $p_T^{j_1} > 30 \text{ GeV}$  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): 0.067

 $\Delta\sigma_{\text{fid}}/\Delta|y^{j_1}| \text{ (fb)}$

40

30

20

10

0

Ratio to prediction

0.0

0.5

1.0

1.5

2.0

2.5

 $|y^{j_1}|$