







**CMS** $137 \text{ fb}^{-1}$  (13 TeV) $\text{H} \rightarrow \gamma\gamma$  $|\eta^j| < 2.5$  $p_{\text{T}}^j > 30 \text{ GeV}$ 

-  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): 0.688

 $\Delta\sigma_{\text{fid}}/\Delta n_{\text{jets}}(\text{fb})$  $10^3$  $10^2$  $10^1$  $10^0$ 

Ratio to prediction

2

0

0

1

2

3

 $\geq 4$  $n_{\text{jets}}$ 