

CMS 137 fb^{-1} (13 TeV) $\text{H} \rightarrow \gamma\gamma$ $\Delta\sigma_{\text{fid}} / \Delta|\cos\theta^*| \text{ (fb)}$

200

150

100

50

0

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): 0.874

Ratio to prediction

1.0

0.5

0.0

0.2

0.4

0.6

0.8

1.0

 $|\cos\theta^*|$ 