

Fiducial Acceptance [%]

2.93 5.81 5.99 5.39 4.58 4.11 3.51 5.79 6.26 5.41 3.43 2.14 1.38 1.37 0.80 0.72 0.48 0.14 0.06

$H \rightarrow \gamma\gamma$

Signal Yield
 $\frac{\text{Signal Yield}}{\sigma(pp \rightarrow H+X) \text{BR}(H \rightarrow \gamma\gamma) \mathcal{L}_{\text{int}}}$ [%]

4

3

2

1

$0.0 < p_{\text{T}}^{\text{reco}}(\text{GeV}) < 5.0$
 $5.0 < p_{\text{T}}^{\text{reco}}(\text{GeV}) < 10.0$
 $10.0 < p_{\text{T}}^{\text{reco}}(\text{GeV}) < 15.0$
 $15.0 < p_{\text{T}}^{\text{reco}}(\text{GeV}) < 20.0$
 $20.0 < p_{\text{T}}^{\text{reco}}(\text{GeV}) < 25.0$
 $25.0 < p_{\text{T}}^{\text{reco}}(\text{GeV}) < 30.0$
 $30.0 < p_{\text{T}}^{\text{reco}}(\text{GeV}) < 35.0$
 $35.0 < p_{\text{T}}^{\text{reco}}(\text{GeV}) < 45.0$
 $45.0 < p_{\text{T}}^{\text{reco}}(\text{GeV}) < 60.0$
 $60.0 < p_{\text{T}}^{\text{reco}}(\text{GeV}) < 80.0$
 $80.0 < p_{\text{T}}^{\text{reco}}(\text{GeV}) < 100.0$
 $100.0 < p_{\text{T}}^{\text{reco}}(\text{GeV}) < 120.0$
 $120.0 < p_{\text{T}}^{\text{reco}}(\text{GeV}) < 140.0$
 $140.0 < p_{\text{T}}^{\text{reco}}(\text{GeV}) < 170.0$
 $170.0 < p_{\text{T}}^{\text{reco}}(\text{GeV}) < 200.0$
 $200.0 < p_{\text{T}}^{\text{reco}}(\text{GeV}) < 250.0$
 $250.0 < p_{\text{T}}^{\text{reco}}(\text{GeV}) < 350.0$
 $350.0 < p_{\text{T}}^{\text{reco}}(\text{GeV}) < 450.0$
 $450.0 < p_{\text{T}}^{\text{reco}}(\text{GeV})$

$0.0 < p_{\text{T}}^{\text{gen}}(\text{GeV}) < 5.0$
 $5.0 < p_{\text{T}}^{\text{gen}}(\text{GeV}) < 10.0$
 $10.0 < p_{\text{T}}^{\text{gen}}(\text{GeV}) < 15.0$
 $15.0 < p_{\text{T}}^{\text{gen}}(\text{GeV}) < 20.0$
 $20.0 < p_{\text{T}}^{\text{gen}}(\text{GeV}) < 25.0$
 $25.0 < p_{\text{T}}^{\text{gen}}(\text{GeV}) < 30.0$
 $30.0 < p_{\text{T}}^{\text{gen}}(\text{GeV}) < 35.0$
 $35.0 < p_{\text{T}}^{\text{gen}}(\text{GeV}) < 45.0$
 $45.0 < p_{\text{T}}^{\text{gen}}(\text{GeV}) < 60.0$
 $60.0 < p_{\text{T}}^{\text{gen}}(\text{GeV}) < 80.0$
 $80.0 < p_{\text{T}}^{\text{gen}}(\text{GeV}) < 100.0$
 $100.0 < p_{\text{T}}^{\text{gen}}(\text{GeV}) < 120.0$
 $120.0 < p_{\text{T}}^{\text{gen}}(\text{GeV}) < 140.0$
 $140.0 < p_{\text{T}}^{\text{gen}}(\text{GeV}) < 170.0$
 $170.0 < p_{\text{T}}^{\text{gen}}(\text{GeV}) < 200.0$
 $200.0 < p_{\text{T}}^{\text{gen}}(\text{GeV}) < 250.0$
 $250.0 < p_{\text{T}}^{\text{gen}}(\text{GeV}) < 350.0$
 $350.0 < p_{\text{T}}^{\text{gen}}(\text{GeV}) < 450.0$
 $450.0 < p_{\text{T}}^{\text{gen}}(\text{GeV})$

GEANT4
 MADGRAPH5_aMC@NLO,
 NNLOPS
 PYTHIA8

