

Fiducial Acceptance [%]

$n_{\text{jets}}^{\text{reco}} = 0$

$n_{\text{jets}}^{\text{reco}} = 1$

$n_{\text{jets}}^{\text{reco}} = 2$

$n_{\text{jets}}^{\text{reco}} = 3$

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

GEANT4
MADGRAPH5_aMC@NLO,
NNLOPS
PYTHIA8

37.90

16.18

4.64

1.01

0.56

18.40

1.28

0.06

1.61

6.92

0.35

0.01

0.22

0.75

1.97

0.10

0.02

0.06

0.23

0.38

0.04

0.02

0.08

0.28

$n_{\text{jets}}^{\text{gen}} = 0$

$n_{\text{jets}}^{\text{gen}} = 1$

$n_{\text{jets}}^{\text{gen}} = 2$

$n_{\text{jets}}^{\text{gen}} = 3$

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

$H \rightarrow \gamma\gamma$
 $|\eta^j| < 2.5$
 $p_{\text{T}}^j > 30 \text{ GeV}$

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

25

20

15

10

5

