

13000 GeV pp

 $t\bar{t}$ Particle-level $t\bar{t}$ invariant mass, $|y^{t\bar{t}}| \in [0,0.2]$ Rivet 4.1.0, $\geq 100k$ events

mcplots.cern.ch [arXiv:2401.10621]

2

1

0.5

 $m^{t\bar{t}} \# [\text{TeV}]$ $d^2\sigma / d|y^{t\bar{t}}| dm^{t\bar{t}} \# [\text{fb}] \# [\text{TeV}^{-1}]$ 10^4 10^3 10^2

10

2

1

0.5

ATLAS

Pythia 8.315 default

Pythia 8.315 default-noFsr

Pythia 8.315 default-noRap

(ATLAS_2022_I2077575)

Ratio to ATLAS

 $m^{t\bar{t}} \# [\text{TeV}]$ 