

13000 GeV pp

 $t\bar{t}$ Particle-level $t\bar{t}$ invariant mass, $|y^{t,1}| \in [1,2]$ Rivet 4.1.0, $\geq 100k$ events

mcplots.cern.ch [arXiv:2401.10621]

2

1

0.5

4

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

10

1

2

1

0.5



ATLAS



Pythia 6.428 346



Pythia 6.428 347



Pythia 6.428 348



Pythia 6.428 349



Pythia 6.428 370

(ATLAS_2022_I2077575)

Ratio to ATLAS

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