

13000 GeV pp

 $t\bar{t}$ $t\bar{t}H\bar{t}$ (ATLAS semileptonic $t\bar{t}$) 10^{-2} 10^{-3} 10^{-4} 10^{-5}

■ ATLAS

▲ Pythia 8.315 default

— Pythia 8.315 tune-A14-CTEQL1

- - - Pythia 8.315 tune-A14-MSTW2008LO

⋯ Pythia 8.315 tune-A14-NNPDF2.3LO

- - Δ Pythia 8.315 tune-CUETP8S1

(ATLAS_2019_I1750330)

Rivet 4.1.0, $\geq 100k$ events

mcplots.cern.ch [arXiv:1306.3436]

Ratio to ATLAS

2

1

0.5

2

1

0.5

500

1000

1500

2000

2500