

13000 GeV pp

 $t\bar{t}$ $\Delta\phi(t\bar{t}b\bar{a})$ (ATLAS semileptonic $t\bar{t}b\bar{a}$) 10^3 10^2

10

1



ATLAS



Pythia 8.230 default



Pythia 8.230 default-CD



Pythia 8.230 default-DL



Pythia 8.230 default-MBR

Rivet 4.1.0, $\geq 100k$ events

mcplots.cern.ch [arXiv:1306.3436]

(ATLAS_2019_I1750330)

Ratio to ATLAS

2

1

0.5

2

1

0.5

0

1

2

3

