

13000 GeV pp

 $t\bar{t}$ $\Delta\phi(t\bar{t}b\bar{a})$ (ATLAS semileptonic $t\bar{t}b\bar{a}$)

10

8

6

4

2

0

■ ATLAS

- - - □ Pythia 6.428 346

- - - △ Pythia 6.428 347

- - - ◇ Pythia 6.428 348

- - - + Pythia 6.428 349

- - - △ Pythia 6.428 370

Rivet 4.1.0, ≥ 100k events

mcplots.cern.ch [arXiv:1306.3436]

Ratio to ATLAS

2

1

0.5

2

1

0.5

0

1

2

3

(ATLAS 2019_11750330)