

13000 GeV pp

 $t\bar{t}$

ttbarej.ht (atlas2022-lh)

Rivet 4.1.0, $\geq 100k$ events

mcplots.cern.ch [arXiv:1306.3436]

(ATLAS_2022_I2037744)

- ATLAS
- ▲ Pythia 8.315 default
- ▼ Pythia 8.315 tune-AU2
- ◇ Pythia 8.315 tune-AU2lox
- Pythia 8.315 tune-AU2loxx
- ★ Pythia 8.315 tune-AU2m

Ratio to ATLAS

10^{-2}

10^{-3}

10^{-4}

10^{-5}

2

1

0.5

2

1

0.5

500

1000

1500

2000

2500

Invariant Mass (GeV)	ATLAS (fb)	Pythia 8.315 default (fb)	Pythia 8.315 tune-AU2 (fb)	Pythia 8.315 tune-AU2lox (fb)	Pythia 8.315 tune-AU2loxx (fb)	Pythia 8.315 tune-AU2m (fb)
550	~0.0004	~0.0004	~0.0005	~0.0004	~0.0004	~0.0004
850	~0.0025	~0.0025	~0.0025	~0.0025	~0.0025	~0.0025
1100	~0.0010	~0.0010	~0.0010	~0.0010	~0.0010	~0.0010
1300	~0.0005	~0.0005	~0.0005	~0.0005	~0.0005	~0.0005
1500	~0.0003	~0.0003	~0.0003	~0.0003	~0.0003	~0.0003
2050	~0.00003	~0.00003	~0.00003	~0.00003	~0.00003	~0.00003

Invariant Mass (GeV)	ATLAS (Ratio)	Pythia 8.315 default (Ratio)	Pythia 8.315 tune-AU2 (Ratio)	Pythia 8.315 tune-AU2lox (Ratio)	Pythia 8.315 tune-AU2loxx (Ratio)	Pythia 8.315 tune-AU2m (Ratio)
550	1.0	~0.75	~0.75	~0.75	~0.75	~0.75
850	1.0	~1.0	~0.8	~1.0	~1.0	~1.0
1100	1.0	~1.1	~0.7	~1.1	~1.1	~1.1
1300	1.0	~0.8	~1.0	~1.0	~1.0	~1.0
1500	1.0	~1.6	~2.3	~1.6	~0.9	~1.6
2050	1.0	~1.5	~2.3	~1.2	~0.8	~0.8