

13000 GeV pp

 $t\bar{t}$  $\Delta\phi(t\bar{t}b\bar{a})$  (atlas2022-boosthad)

■ ATLAS  
—▲ Pythia 8.315 default

 $10^4$  $10^3$  $10^2$ 

10

Rivet 4.1.0, 100k events

mcplots.cern.ch [arXiv:1306.3436]

(ATLAS\_2022\_I2077575)

Ratio to ATLAS

2

1

0.5

2

1

0.5

0

1

2

3

3.1

3.2

3.3

3.4

3.5

3.6

3.7

3.8

3.9

4.0

4.1

4.2

4.3

4.4

4.5

4.6

4.7

4.8

4.9

5.0

5.1

5.2

5.3

5.4

5.5

5.6

5.7

5.8

5.9

6.0

6.1

6.2

6.3

6.4

6.5

6.6

6.7

6.8

6.9

7.0

7.1

7.2

7.3

7.4

7.5

7.6

7.7

7.8

7.9

8.0

8.1

8.2

8.3

8.4

8.5

8.6

8.7

8.8

8.9

9.0

9.1

9.2

9.3

9.4

9.5

9.6

9.7

9.8

9.9

10.0

10.1

10.2

10.3

10.4

10.5

10.6

10.7

10.8

10.9

11.0

11.1

11.2

11.3

11.4

11.5

11.6

11.7

11.8

11.9

12.0

12.1

12.2

12.3

12.4

12.5

12.6

12.7

12.8

12.9

13.0

13.1

13.2

13.3

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13.8

13.9

14.0

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14.9

15.0

15.1

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16.0

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17.0

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18.0

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18.8

18.9

19.0

19.1

19.2

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19.7

19.8

19.9

20.0

20.1

20.2

20.3

20.4

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20.6

20.7

20.8

20.9

21.0

21.1

21.2

21.3

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21.5

21.6

21.7

21.8

21.9

22.0

22.1

22.2

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22.9

23.0

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25.0

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25.9

26.0

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27.0

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27.9

28.0

28.1

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28.9

29.0

29.1

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29.9

30.0

30.1

30.2

30.3

30.4

30.5

30.6

30.7

30.8

30.9

31.0

31.1

31.2

31.3

31.4

31.5

31.6

31.7

31.8

31.9

32.0

32.1

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36.0

36.1

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36.7

36.8

36.9

37.0

37.1

37.2

37.3

37.4

37.5

37.6

37.7

37.8

37.9

38.0

38.1

38.2

38.3