

13000 GeV pp

Z (Drell-Yan)

 $\langle N_{\text{ch}} \rangle$ vs p_{T}^Z (ATLAS UE in Z production)

- ATLAS
—▲ Pythia 8.176 default

Rivet 3.1.10, 300k events

mcplots.cern.ch [arXiv:1306.3436]

ATLAS_2019_I1736531

 $\langle N_{\text{ch}}/d\eta d\phi \rangle$

Ratio to ATLAS

 $Z p_{\text{T}}$ [GeV]

0

200

400

0.5

1.0

1.5

2.0

2.5

3

2

1

0.5

0

-0.5

-1

-1.5

-2

-2.5

-3

-3.5

-4

-4.5

-5

-5.5

-6

3

2

1

0.5

0

-0.5

-1

-1.5

-2

-2.5

-3

-3.5

-4

-4.5

-5

0

200

400

0.5

1.0

1.5

2.0

2.5

3.0

3.5

4.0

4.5

5.0

5.5

6.0

6.5

7.0

7.5

8.0

8.5

9.0

9.5

10.0

3

2

1

0.5

0

-0.5

-1

-1.5

-2

-2.5

-3

-3.5

-4

-4.5

-5