

13000 GeV pp

Z (Drell-Yan)

 $\langle p_T \rangle$ vs p_T^Z (ATLAS UE in Z production) $\langle \text{sum } p_{T,dn} d\phi \rangle$ [GeV]

- ATLAS
- ▲ Pythia 8.308 default
- -▲ Pythia 8.308 default-CD
- -▲ Pythia 8.308 default-DL
- ⋯▲ Pythia 8.308 default-MBR

6

5

4

3

2

1

0

ATLAS_2019_I1736531

Rivet 3.1.10, $\geq 3.3\text{M}$ events

mcplots.cern.ch [arXiv:1306.3436]

Ratio to ATLAS

2

1

0.5

2

1

0.5

0

200

400

 $Z p_T$ [GeV]