

13000 GeV pp

Z (Drell-Yan)

 $p_T$  spectrum (ATLAS UE in Z production)

- ATLAS
- - □ Herwig 7.2.1 default
- - ▲ Pythia 8.170 default

 $1/N_{ch} dN_{ch}/dp_T$  [GeV]

4

3.5

3

2.5

2

1.5

1

0.5

0

ATLAS\_2019\_I1736531

Rivet 3.1.10,  $\geq 400k$  events

mcplots.cern.ch [arXiv:1306.3436]

Ratio to ATLAS

2

1

0.5

2

1

0.5

0

2

4

 $p_T$  [GeV]