

13000 GeV pp

Z (Drell-Yan)

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

- ATLAS
- Herwig 7.2.1 default
- ▲ Pythia 8.176 default
- ◆ Sherpa 2.2.9 default

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

6

5

4

3

2

1

0

Rivet 3.1.10, $\geq 300\text{k events}$

mcplots.cern.ch [arXiv:1306.3436]

ATLAS_2019_I1736531

Ratio to ATLAS

2

1

0.5

2

1

0.5

0

200

400

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