

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
- MadGraph5 2.7.2.atlas3 lo
- ▲ Pythia 8.201 default
- ...◆ Sherpa 2.2.9 default

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

6

5

4

3

2

1

0

0

2

2

1

1

0.5

0.5

0

0

0

0

0

0

0

0

0

0

0

0

0

0

ATLAS_2019_I1736531

Ratio to ATLAS

2

2

1

1

0.5

0.5

0

0

0

0

0

0

0

200

400

 $Z p_{\text{T}}$ [GeV]Rivet 3.1.10, $\geq 400\text{k}$ events

mcplots.cern.ch [arXiv:1306.3436]