

13000 GeV pp

Z (Drell-Yan)

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

- ATLAS
- Herwig++ 2.7.1 default
- Herwig 7.2.1 default
- ▲- Pythia 8.170 default
- ◆- Sherpa 2.2.5 default

8
7
6
5
4
3
2
1
0

Rivet 3.1.10, ≥ 400k events

mcplots.cern.ch [arXiv:1306.3436]

ATLAS_2019_I1736531

Ratio to ATLAS

2
1
0.52
1
0.50 200 400 $Z p_{\text{T}}$ [GeV]