

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 2.5.5.atlas lo
- ▲ Pythia 8.308 default

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

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