

13000 GeV pp

Z (Drell-Yan)

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

- ATLAS
- Herwig++ 2.6.2 default
- △- Herwig++ Powheg 2.7.1 default
- ▽- Herwig++ Powheg 2.7.1 LHC-UE-EE-4
- Herwig 7.2.1 default

Rivet 3.1.10, ≥ 400k events

mcplots.cern.ch [arXiv:1306.3436]

ATLAS_2019_I1736531

 $1/N_{\text{ev}} dN_{\text{ev}}/dN_{\text{ch}}/d\eta d\phi$

Ratio to ATLAS

 $Z p_T$ [GeV]