

13000 GeV pp

Z (Drell-Yan)

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

■ ATLAS

---○ Herwig++ 2.7.1 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, $\geq 2.7\text{M}$ events

mcplots.cern.ch [arXiv:1306.3436]

ATLAS_2019_I1736531

Ratio to ATLAS

2

1

0.5

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

0

200

400