

13000 GeV pp

Z (Drell-Yan)

 $\langle p_T \rangle$ vs p_T^Z (ATLAS UE in Z production)

- ATLAS
- Herwig 7.2.1 default
- ▲— Pythia 8.170 default
- ◆····· Sherpa 2.2.9 default

Rivet 3.1.10, $\geq 400k$ events

mcplots.cern.ch [arXiv:1306.3436]

ATLAS_2019_I1736531

Ratio to ATLAS

2

1

0.5

 $Z p_T$ [GeV] $\langle \text{mean } p_{T\perp} d\phi \rangle$ [GeV]