

13000 GeV pp

Z (Drell-Yan)

 $\langle p_T \rangle$ vs p_T^Z (ATLAS UE in Z production) $\langle \sum p_{T, \perp} / d\eta d\phi \rangle$ [GeV]

- ATLAS
- △ Herwig++ Powheg 2.7.1 default
- 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]