

13000 GeV pp

Z (Drell-Yan)

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

- ATLAS
- △ Herwig++ Powheg 2.7.1 default
- MadGraph5 2.7.2.atlas3 lo
- ◆ Sherpa 1.3.0 default

Rivet 3.1.10, $\geq 500k$ events

mcplots.cern.ch [arXiv:1306.3436]

ATLAS_2019_I1736531

 $\langle \sum p_T / d\eta d\phi \rangle$ [GeV]

Ratio to ATLAS

 $Z p_T$ [GeV]