

13000 GeV pp

Z (Drell-Yan)

 $p_T$  spectrum (ATLAS UE in Z production) $1/N_{\text{ch}} dN_{\text{ch}}/dp_T$  [GeV]

- ATLAS
- △ Herwig++ Powheg 2.7.1 default
- Herwig 7.2.1 default
- ▲ Pythia 8.308 default
- ◆ Sherpa 1.4.5 default

Rivet 3.1.10, ≥ 300k events

mcplots.cern.ch [arXiv:1306.3436]

ATLAS\_2019\_I1736531

Ratio to ATLAS

2

1

0.5

 $p_T$  [GeV]