

13000 GeV pp

Z (Drell-Yan)

 $p_T$  spectrum (ATLAS UE in Z production)

- ATLAS
- Herwig 7.2.1 default
- ▲— Pythia 8.308 default
- ◆···· Sherpa 1.4.5 default

 $1/N_{\text{ev}} dN_{\text{ev}}/d \text{ mean } p_T [\text{GeV}]^{-1}$ 

Rivet 3.1.10, ≥ 300k events

mcplots.cern.ch [arXiv:1306.3436]

ATLAS\_2019\_I1736531

Ratio to ATLAS

2

1

0.5

0

2

4

Mean  $p_T/d\eta d\phi$ 