

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

ATLAS 2019 I1736531

Rivet 3.1.10, ≥ 300k events

mcplots.cern.ch [arXiv:1306.3436]

Ratio to ATLAS

2

1

0.5

 $N_{ch}/d\eta d\phi$  $1/N_{ev} dN_{ev}/dN_{ch}/d\eta d\phi$ 

7

6

5

4

3

2

1

0

0

2

4