

13000 GeV pp

Z (Drell-Yan)

Average  $\Sigma(p_T)$  (ATLAS UE in Z production)

- ATLAS
- △ Herwig++ Powheg 2.7.1 default
- Herwig 7.2.1 default
- ◆ Sherpa 2.2.9 default

 $\langle \text{sum } p_{T, \text{dn}} d\phi \rangle$  [GeV]Rivet 3.1.10,  $\geq 3.1\text{M}$  events

mcplots.cern.ch [arXiv:1306.3436]

ATLAS\_2019\_I1736531

Ratio to ATLAS

2

1

0.5

2  
1  
0.5

0

200

400

 $Z p_T$  [GeV]