

13000 GeV pp

Z (Drell-Yan)

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

- ATLAS
- △ Herwig++ Powheg 2.7.1 default
- MadGraph5 2.7.2.atlas3 lo
- ◆ Sherpa 2.2.9 default

 $\langle \text{sum } p_{T,i} / d\eta d\phi \rangle$ [GeV]60
50
40
30
20
10
0Rivet 3.1.10, ≥ 2.4 M events
mcplots.cern.ch [arXiv:1306.3436]

ATLAS_2019_I1736531

Ratio to ATLAS

2
1
0.52
1
0.5 $Z p_T$ [GeV]

0

200

400