

13000 GeV pp

Z (Drell-Yan)

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

- ATLAS
- - □ Herwig 7.2.1 default
- - ○ MadGraph5 2.7.2.atlas3 lo
- - ▲ Pythia 8.308 default
- - ◆ Sherpa 1.4.5 default

Rivet 3.1.10, $\geq 300k$ events

mcplots.cern.ch [arXiv:1306.3436]

ATLAS_2019_I1736531

Ratio to ATLAS

2

1

0.5

 $Z p_T$ [GeV] $\langle \sum p_{T,i} / d\eta d\phi \rangle$ [GeV]