

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 2.2.9 default

 $\langle \text{sum } p_T / d\eta d\phi \rangle$  [GeV]60  
50  
40  
30  
20  
10  
0Rivet 3.1.10,  $\geq 3.1\text{M}$  events  
mcplots.cern.ch [arXiv:1306.3436]

ATLAS\_2019\_I1736531

Ratio to ATLAS

2  
1  
0.52  
1  
0.50 200 400  $Z p_T$  [GeV]