

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

 $\langle \text{sum } p_{T\eta} / d\eta d\phi \rangle [\text{GeV}]$ Rivet 3.1.10,  $\geq 2.4\text{M}$  events

mcplots.cern.ch [arXiv:1306.3436]

ATLAS\_2019\_I1736531

Ratio to ATLAS

2

1

0.5

 $Z p_T [\text{GeV}]$ 