

13000 GeV pp

Z (Drell-Yan)

Scalar $\Sigma(p_T)$ (ATLAS UE in Z production) $1/N_{\text{ch}} dN_{\text{ch}}/dp_T [\text{GeV}]$

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

Rivet 3.1.10, $\geq 2.4\text{M}$ events

mcplots.cern.ch [arXiv:1306.3436]

ATLAS_2019_I1736531

Ratio to ATLAS

2

2

1

1

0.5

0.5

0

2

4

 $p_T [\text{GeV}]$ 