

13000 GeV pp

Z (Drell-Yan)

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

■ ATLAS

---△ Herwig++ Powheg 2.7.1 default

---◆ Sherpa 2.2.9 default

Rivet 3.1.10, $\geq 2.6\text{M}$ events

mcplots.cern.ch [arXiv:1306.3436]

ATLAS_2019_I1736531

Ratio to ATLAS

0.5

1

2

0.5

1

2

0

2

4

 p_T [GeV]