

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++ 2.6.1a default
- △- Herwig++ Powheg 2.7.1 default
- ▽- Herwig++ Powheg 2.7.1 LHC-UE-EE-4
- Herwig 7.2.1 default

Rivet 3.1.10, ≥ 400k events

mcplots.cern.ch [arXiv:1306.3436]

ATLAS_2019_I1736531

Ratio to ATLAS

2

1

0.5

 p_T [GeV]