

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 7.2.1 default
- - ▲ Pythia 8.170 default
- - ◆ Sherpa 2.2.9 default

Rivet 3.1.10, $\geq 400\text{k events}$

mcplots.cern.ch [arXiv:1306.3436]

ATLAS_2019_I1736531

Ratio to ATLAS

2

1

0.5

 $p_T [\text{GeV}]$ 