

13000 GeV pp

Z (Drell-Yan)

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

- ATLAS
- Herwig++ 2.7.1 default
- Herwig 7.2.1 default

Rivet 3.1.10, $\geq 2.9\text{M}$ events

mcplots.cern.ch [arXiv:1306.3436]

ATLAS_2019_11736531

Ratio to ATLAS

2
1
0.52
1
0.5 p_T [GeV]