

13000 GeV pp

Z (Drell-Yan)

Average  $\Sigma(p_T)$  (ATLAS UE in Z production)

- ATLAS
- ▲ Pythia 8.308 default
- -▲ Pythia 8.308 default-CD
- -▲ Pythia 8.308 default-DL
- ⋯▲ Pythia 8.308 default-MBR

 $\langle \text{sum } p_T / d\eta d\phi \rangle$  [GeV]5  
4  
3  
2  
1  
0Rivet 3.1.10,  $\geq 3.3\text{M}$  events  
mcplots.cern.ch [arXiv:1306.3436]

ATLAS\_2019\_I1736531

Ratio to ATLAS

2  
1  
0.52  
1  
0.50 200 400  
 $Z p_T$  [GeV]