

13000 GeV pp

Z (Drell-Yan)

 $\langle p_T \rangle$  vs  $p_T^Z$  (ATLAS UE in Z production)

- ATLAS
- ▲ Pythia 8.308 default
- ▲ Pythia 8.308 default-noFsr
- ▲ Pythia 8.308 default-noRap

 $\langle \text{mean } p_{T, \phi} \rangle$  [GeV]3  
2.5  
2  
1.5  
1  
0.5  
2  
1  
0.5Rivet 3.1.10,  $\geq 3.2\text{M}$  events

mcplots.cern.ch [arXiv:1306.3436]

ATLAS\_2019\_I1736531

Ratio to ATLAS

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