

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

- ATLAS
- ▲ Pythia 8.308 default
- ★ Pythia 8.308 tune-4c
- Pythia 8.308 tune-4cx

 $\langle \text{sum } p_T / d\eta d\phi \rangle$ [GeV]

6

5

4

3

2

1

0

ATLAS_2019_I1736531

Rivet 3.1.10, $\geq 3.2\text{M}$ events

mcplots.cern.ch [arXiv:1306.3436]

Ratio to ATLAS

2

1

0.5

2

1

0.5

0

200

400

 $Z p_T$ [GeV]