

13000 GeV pp

Z (Drell-Yan)

 $\langle N_{\text{ch}} \rangle$ vs p_{T}^{Z} (ATLAS UE in Z production) $\langle N_{\text{ch}}/d\eta d\phi \rangle$

- ATLAS
- ▲ Pythia 8.308 default
- ▼ Pythia 8.308 tune-1
- Pythia 8.308 tune-2c
- Pythia 8.308 tune-2m

Rivet 3.1.10, $\geq 3.3\text{M}$ events

mcplots.cern.ch [arXiv:1306.3436]

ATLAS_2019_I1736531

Ratio to ATLAS

0.5

1

2

0.5

1

2

0

200

400

 $Z p_{\text{T}}$ [GeV]