

13000 GeV pp

Z (Drell-Yan)

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

- ATLAS
- ▲ Pythia 8.212 default
- - * Pythia 8.212 tune-4c
- - □ Pythia 8.212 tune-4cx

Rivet 3.1.10, ≥ 300k events

mcplots.cern.ch [arXiv:1306.3436]

ATLAS_2019_I1736531

Ratio to ATLAS

2

1

0.5

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