

13000 GeV pp

Z (Drell-Yan)

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

- ATLAS
- ▲ Pythia 8.308 default
- - * Pythia 8.308 tune-4c
- - □ Pythia 8.308 tune-4cx

Rivet 3.1.10, $\geq 2.4\text{M}$ events

mcplots.cern.ch [arXiv:1306.3436]

ATLAS_2019_I1736531

 $1/N_{\text{ev}} dN_{\text{ev}}/dN_{\text{ch}}/d\eta d\phi$

Ratio to ATLAS

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