

13000 GeV pp

Z (Drell-Yan)

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

■ ATLAS
—▲ Pythia 8.180 default

Rivet 3.1.10, 400k events

mcplots.cern.ch [arXiv:1306.3436]

ATLAS_2019_I1736531

 $\langle N_{\text{ch}}/d\eta d\phi \rangle$

Ratio to ATLAS

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

0

200

400

2.5

2.0

1.5

1.0

0.5

0

2

1

0.5

2

1

0.5