

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
- MadGraph5 2.4.3.atlas lo
- -○ MadGraph5 2.4.3.atlas lo1jet
- ⋯○ MadGraph5 2.4.3.atlas lo2jet

7

6

5

4

3

2

1

0

ATLAS_2019_I1736531

Rivet 3.1.10, $\geq 500\text{k events}$

mcplots.cern.ch [arXiv:1306.3436]

Ratio to ATLAS

2

1

0.5

2

1

0.5

0

200

400

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