

13000 GeV pp

Z (Drell-Yan)

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

- ATLAS
- - □ Herwig 7.2.1 default
- ○ MadGraph5 2.7.2.atlas3 lo
- ▲ Pythia 8.209 default
- ◆ Sherpa 2.2.9 default

Rivet 3.1.10, $\geq 400\text{k}$ 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]