

13000 GeV pp

Z (Drell-Yan)

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

- ATLAS
- - □ Herwig 7.2.1 default
- ○ MadGraph5 2.7.2.atlas3 lo
- ▲ Pythia 8.308 default
- ◆ Sherpa 2.1.1 default

Rivet 3.1.10,  $\geq 300\text{k}$  events

mcplots.cern.ch [arXiv:1306.3436]

ATLAS\_2019\_I1736531

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

Ratio to ATLAS

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