

13000 GeV pp

Z (Drell-Yan)

Nch (ATLAS UE in Z production)

- ATLAS
- - □ Herwig 7.2.1 default
- - ○ MadGraph5 2.7.2.atlas3 lo
- - ▲ Pythia 8.212 default
- - ◆ Sherpa 2.2.9 default

Rivet 3.1.10, ≥ 400k events

mcplots.cern.ch [arXiv:1306.3436]

ATLAS_2019_I1736531

Ratio to ATLAS

2

1

0.5

 $N_{ch}/d\eta d\phi$ 