

13000 GeV pp

Z (Drell-Yan)

N_{ch} (ATLAS UE in Z production)

■ ATLAS

---○ Herwig++ 2.6.3 default

---△ Herwig++ Powheg 2.7.1 default

---▼ Herwig++ Powheg 2.7.1 LHC-UE-EE-4

---□ Herwig 7.2.1 default

 $1/N_{\text{ev}} dN_{\text{ev}}/dN_{\text{ch}}/d\eta d\phi$

Rivet 3.1.10, ≥ 400k events

mcplots.cern.ch [arXiv:1306.3436]

Ratio to ATLAS

2

1

0.5

N_{ch}/dη dφ