

13000 GeV pp

Underlying Event

 $\langle N_{\text{ch}} \rangle$ vs ϕ^{lead} ($|\eta| < 2.5$, $p_{\text{T}} > 0.5$ GeV, $p_{\text{T}1} > 1$ GeV)

- ATLAS
- Herwig++ 2.7.1 default
- Herwig 7.2.1 default
- ▲ Pythia 8.308 default
- ▼ Pythia 8.308 vincia-default
- ◆ Sherpa 2.2.9 default

Rivet 3.1.10, ≥ 2.1 M events

mcplots.cern.ch [arXiv:1306.3436]

ATLAS_2017_I1509919

Ratio to ATLAS

2

1

0.5

 $|\Delta \phi|$ [degrees]