

13000 GeV pp

Underlying Event

 $\langle N_{\text{ch}} \rangle$ vs ϕ^{lead} ($|\eta| < 2.5$, $p_{\text{T}} > 0.5$ GeV, $p_{\text{T}1} > 10$ GeV)

- ATLAS
- Herwig 7.2.1 default
- ▲ Pythia 8.308 default
- ...◆ Sherpa 1.4.3 default

5

4

3

2

1

0

2

1

0.5

0

50

100

150

 $|\Delta \phi|$ [degrees]

ATLAS_2017_I1509919

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

mcplots.cern.ch [arXiv:1306.3436]

2

1

0.5

Ratio to ATLAS

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