

13000 GeV pp

Underlying Event

 $\langle N_{ch} \rangle$  vs  $\phi^{lead}$  ( $|\eta| < 2.5$ ,  $p_T > 0.5$  GeV,  $p_{T1} > 10$  GeV)

- ATLAS
- - □ Herwig 7.2.1 default
- - ▲ Pythia 8.226 default
- - ◆ Sherpa 2.2.9 default

5

4

3

2

1

0

ATLAS\_2017\_I1509919

Rivet 3.1.10,  $\geq 600k$  events

mcplots.cern.ch [arXiv:1306.3436]

Ratio to ATLAS

2

1

0.5

2

1

0.5

 $|\Delta\phi|$  [degrees] $\langle N_{ch} / \Delta\eta \Delta\phi \rangle$