

7000 GeV pp

Underlying Event

Toward  $N_{\text{chg}}$  density vs.  $p_{\text{T}}^{\text{trk1}}$ ,  $\sqrt{s} = \{7 \text{ TeV}\}$ ,  $p_{\text{T}} > \{100 \text{ MeV}\}$ 

- ATLAS
- - □ Herwig 7.2.1 default
- - ▲ Pythia 8.315 default
- - ◆ Sherpa 2.2.9 default

 $\langle d^2 N_{\text{chg}} / d\eta d\phi \rangle$ 

7

6

5

4

3

2

1

0

Rivet 4.1.0,  $\geq 100\text{k}$  events

mcplots.cern.ch [arXiv:2401.10621]

(ATLAS\_2010\_I879407)

Ratio to ATLAS

2

1

0.5

2

1

0.5

 $p_{\text{T}}$  (leading track) [GeV]