

7000 GeV pp

Underlying Event

 $N_{\text{chg}}$  density vs.  $\Delta\phi$ ,  $p_{\text{T}}^{\text{trk1}} > 5.0 \text{ GeV}$ ,  $\sqrt{s} = \{7 \text{ TeV}\}$ 

- ATLAS
- +— Epos 1.99.crmc.1.2 lhc
- - □ - - Herwig 7.2.1 default
- △ - Pythia 6.428 370
- ▲ - Pythia 8.315 default
- ◆ - Sherpa 2.2.9 default

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

mcplots.cern.ch [arXiv:2401.10621]

(ATLAS\_2010\_I879407)

2

1

0.5

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

3

2.5

2

1.5

1

0.5

0

Ratio to ATLAS

2

1

0.5

0

1

2

3

 $|\phi|$  (w.r.t. leading track) [rad]