

7000 GeV pp

Underlying Event

 N_{chg} density vs. $\Delta\phi$, $p_{\text{T}}^{\text{trk1}} > 2.0 \text{ GeV}$, $\sqrt{s} = \{7 \text{ TeV}\}$

- ATLAS
- +— Epos 1.99.crmc.1.6.0 lhc
- - - □ Herwig 7.2.1 default
- - - △ Pythia 6.428 370
- - - ▲ Pythia 8.301 default
- · - · ◆ Sherpa 2.2.9 default

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

mcplots.cern.ch [arXiv:1306.3436]

(ATLAS_2010_I879407)

Ratio to ATLAS

2

1

0.5

 $|\phi|$ (w.r.t. leading track) [rad] $\# \langle d^2 N_{\text{chg}} / d\eta d\phi \rangle$

2

1.8

1.6

1.4

1.2

1.0

0.8

0.6

0.4

0.2

0

2

1

0.5

0

1

2

3