

7000 GeV pp

Underlying Event

Transverse N_{chg} density vs. $|\eta^{\text{trk1}}|$, $\sqrt{s} = \{7 \text{ TeV}\}$, $p_T > \{100 \text{ MeV}\}$ $\# \langle d^2 N_{\text{chg}} / d\eta d\phi \rangle$

- ATLAS
- +— Epos 1.99.crmc.1.6.0 lhc
- - □ - - Herwig 7.2.1 default
- - △ - - Pythia 6.428 370
- - ▲ - - Pythia 8.315 default
- ... ♦ ... Sherpa 2.2.9 default

Rivet 4.1.0, $\geq 100k$ events

mcplots.cern.ch [arXiv:2401.10621]

(ATLAS_2010_I879407)

Ratio to ATLAS

2

1

0.5

 $|\eta|$ (leading track)