

7000 GeV pp

Underlying Event

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

- ATLAS
- Herwig++ 2.7.1 default
- Herwig 7.2.1 default
- ▲ Pythia 8.315 default
- ▼ Pythia 8.315 vincia-default
- ◆ Sherpa 2.2.4 default

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

mcplots.cern.ch [arXiv:1306.3436]

(ATLAS\_2010\_I879407)

Ratio to ATLAS

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