

13000 GeV pp

Underlying Event

Average  $p_T$  vs  $N_{ch}$  ( $|\eta| < 2.5$ ,  $p_T > 0.5$  GeV,  $p_{T1} > 1$  GeV, (TRNSMIN))

- ATLAS
- - □ Herwig 7.0.2 default
- - △ Pythia 6.428 370
- - ▲ Pythia 8.308 default
- - ◆ Sherpa 2.2.9 default

Rivet 3.1.10,  $\geq 500k$  events

mcplots.cern.ch [arXiv:1306.3436]

ATLAS\_2017\_I1509919

Ratio to ATLAS

Ratio to ATLAS

0.5 1 2

0 5 10 15 20  $N_{ch}$  (Trans-min) $\langle \text{mean } p_T \rangle$  [GeV]