

7000 GeV pp

Underlying Event

Average Charged Particle Density(TWRD) ( $|\eta| < 2.5, p_T > 0.1$  GeV)

- ATLAS
- △— Pythia 6.428 370
- - □ - - Pythia 6.428 391
- - ■ - - Pythia 6.428 default
- ▲— Pythia 8.176 default

5

4

3

2

1

0

0

2

1

0

0

0

0

2

1

0.5

0

5

10

15

20

 $p_T$  (leading track) [GeV]

ATLAS\_2010\_S8894728

Rivet 3.1.0,  $\geq 7.2$ M events

mcplots.cern.ch [arXiv:1306.3436]

2

1

0.5

0.5

1

0.5

0.5

0.5

0.5

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

Ratio to ATLAS