

7000 GeV pp

Jets

 $\overline{N}_{\text{jet}}$ N_{jet} vs Δy (FB) ($70 < p_T < 90$ ($Q_0 = \overline{p_T}$))

- ATLAS
- - □ Herwig 7.2.0 default
- - ▲ Pythia 8.212 default
- - ◆ Sherpa 1.4.5 default

1

0.8

0.6

0.4

0.2

0

2

1

0.5

Rivet 3.1.0, ≥ 5.4 M events

mcplots.cern.ch [arXiv:1306.3436]

ATLAS_2011_S9126244

Ratio to ATLAS

2

1

0.5

0

2

4

6

$|\Delta y|$

| $ \Delta y $ | ATLAS $\overline{N}_{\text{jet}}$ | Herwig 7.2.0 $\overline{N}_{\text{jet}}$ | Pythia 8.212 $\overline{N}_{\text{jet}}$ | Sherpa 1.4.5 $\overline{N}_{\text{jet}}$ | Herwig Ratio | Pythia Ratio | Sherpa Ratio |
|--------------|-----------------------------------|--|--|--|--------------|--------------|--------------|
| 0.2 | 0.01 | 0.01 | 0.01 | 0.01 | 0.8 | 1.0 | 1.2 |
| 0.7 | 0.04 | 0.04 | 0.04 | 0.04 | 0.9 | 1.0 | 1.1 |
| 1.2 | 0.07 | 0.07 | 0.07 | 0.07 | 1.0 | 0.9 | 0.9 |
| 1.7 | 0.10 | 0.10 | 0.10 | 0.09 | 1.1 | 1.0 | 0.9 |
| 2.2 | 0.13 | 0.13 | 0.13 | 0.11 | 1.1 | 1.1 | 0.9 |
| 2.7 | 0.16 | 0.17 | 0.16 | 0.13 | 1.2 | 1.1 | 0.85 |
| 3.2 | 0.19 | 0.21 | 0.19 | 0.16 | 1.2 | 1.1 | 0.88 |
| 3.7 | 0.23 | 0.25 | 0.23 | 0.19 | 1.1 | 1.1 | 0.85 |
| 4.2 | 0.27 | 0.30 | 0.27 | 0.23 | 1.1 | 1.1 | 0.88 |
| 4.7 | 0.32 | 0.35 | 0.32 | 0.27 | 1.0 | 1.0 | 0.85 |
| 5.2 | 0.38 | 0.41 | 0.38 | 0.31 | 0.95 | 0.9 | 0.8 |
| 5.7 | 0.44 | 0.46 | 0.41 | 0.35 | 1.0 | 0.9 | 0.8 |