

Gap fraction

Gap fraction vs Δy (FB) ($150 < p_T < 180$ ($Q_0 = \bar{p}_T$))

- ATLAS
- Herwig++ 2.6.1a default
- Herwig 7.1.1 default
- ▲- Pythia 8.301 default
- ▼- Pythia 8.301 vincia-default
- ◆- Sherpa 2.1.1 default

2.5

2

1.5

1

0.5

0

2

1

0.5

0

Rivet 3.1.0, $\geq 100k$ events

mcplots.cern.ch [arXiv:1306.3436]

ATLAS_2011_S9126244

Ratio to ATLAS

2

1

0.5

0

2

4

6

$|\Delta y|$

The figure consists of two vertically stacked panels sharing a common x-axis representing the rapidity difference $|\Delta y|$ from 0 to 6. The top panel shows the 'Gap fraction' on the y-axis, ranging from 0 to 2.5. The bottom panel shows the 'Ratio to ATLAS' on the y-axis, ranging from 0.5 to 2.0. Both panels include data points with error bars for ATLAS (black squares) and several Monte Carlo models: Herwig++ 2.6.1a (orange dashed line with circles), Herwig 7.1.1 (green dashed line with squares), Pythia 8.301 (blue solid line with triangles), Pythia 8.301 vincia-default (cyan dashed line with inverted triangles), and Sherpa 2.1.1 (red dotted line with diamonds). The top panel also features a horizontal line at a gap fraction of 1.0. The bottom panel includes a horizontal line at a ratio of 1.0 and a shaded region (yellow and green) representing the ATLAS uncertainty band. The text 'ATLAS_2011_S9126244' is centered in the top panel. On the right side, there are two vertical labels: 'Rivet 3.1.0, $\geq 100k$ events' for the top panel and 'mcplots.cern.ch [arXiv:1306.3436]' for the bottom panel.