

Gap fraction

Gap fraction vs Δy (FB) ($210 < p_T < 240$ ($Q_0 = \bar{p}_T$))

- ATLAS
- - □ Herwig 7.2.0 default
- - ◆ Sherpa 1.4.5 default

2

1.5

1

0.5

0

ATLAS_2011_S9126244

Rivet 3.1.0, $\geq 100k$ events

mcplots.cern.ch [arXiv:1306.3436]

Ratio to ATLAS

2

1

0.5

2

1

0.5

0

2

4

6

$|\Delta y|$

The figure displays two panels sharing a common x-axis representing the rapidity difference $|\Delta y|$ from 0 to 6. The top panel shows the gap fraction, with data points and error bars for ATLAS (black squares), Herwig 7.2.0 (green squares), and Sherpa 1.4.5 (red diamonds). The bottom panel shows the ratio of the gap fraction to the ATLAS data, with a horizontal line at 1.0 and a histogram representing the distribution of the ratio. The histogram is colored in shades of green and yellow, indicating the spread of the ratio values.

$ \Delta y $	ATLAS Gap Fraction	Herwig 7.2.0 Gap Fraction	Sherpa 1.4.5 Gap Fraction	Ratio to ATLAS
0.5	1.0	1.0	1.0	1.0
1.0	0.95	0.95	0.95	1.0
1.5	0.9	0.9	0.9	1.0
2.0	0.85	0.85	0.85	1.0
2.5	0.8	0.8	0.8	1.0
3.0	0.75	0.75	0.75	1.0
3.5	0.7	0.65	0.7	1.0
4.0	0.65	0.6	0.65	1.0
4.5	0.5	0.45	0.5	1.0
5.0	0.35	0.3	0.4	1.0
5.5	0.2	0.15	0.2	1.0