

Gap fraction

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

- ATLAS
- - □ Herwig 7.2.0 default
- - ▲ Pythia 8.135 default
- - ◆ Sherpa 2.1.0 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

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 plots the 'Gap fraction' on the y-axis (0 to 2), while the bottom panel plots the 'Ratio to ATLAS' on the y-axis (0.5 to 2). Both panels include data points with error bars for ATLAS (black squares), Herwig 7.2.0 (green squares), Pythia 8.135 (blue triangles), and Sherpa 2.1.0 (red diamonds). A horizontal line is drawn at 1.0 in both panels. The bottom panel also features a 2D histogram in the background, with green and yellow regions.

$ \Delta y $	ATLAS Gap Fraction	Herwig 7.2.0 Gap Fraction	Pythia 8.135 Gap Fraction	Sherpa 2.1.0 Gap Fraction	ATLAS Ratio to ATLAS	Herwig 7.2.0 Ratio to ATLAS	Pythia 8.135 Ratio to ATLAS	Sherpa 2.1.0 Ratio to ATLAS
0.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1.0	0.95	0.95	0.95	1.0	0.95	0.95	0.95	1.0
1.5	0.95	0.95	0.95	0.85	0.95	0.95	0.95	0.85
2.0	0.9	0.85	0.95	0.95	0.9	0.85	0.95	0.95
2.5	0.85	0.85	0.75	0.9	0.85	0.85	0.75	0.9
3.0	0.8	0.75	0.8	0.8	0.8	0.75	0.8	0.8
3.5	0.8	0.65	0.75	0.85	0.8	0.65	0.75	0.85
4.0	0.7	0.7	0.75	0.45	0.7	0.7	0.75	0.45
4.5	0.45	0.4	0.45	0.55	0.45	0.4	0.45	0.55
5.0	0.35	-	-	-	0.35	-	-	-
5.5	0.0	-	-	-	0.0	-	-	-