

Gap fraction

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

- ATLAS
- - □ Herwig 7.1.0 default
- - ▲ Pythia 8.301 default
- - ◆ Sherpa 2.2.8 default

2.5

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 absolute rapidity difference  $|\Delta y|$  from 0 to 6. The top panel shows the 'Gap fraction' on the left y-axis (0 to 2.5) and the number of events on the right y-axis (0 to 100k). The bottom panel shows the 'Ratio to ATLAS' on the left y-axis (0.5 to 2) and the number of events on the right y-axis (0.5 to 2). A horizontal line is drawn at a ratio of 1.0. Data points with error bars are shown for ATLAS (black squares), Herwig 7.1.0 (green dashed line with open squares), Pythia 8.301 (blue solid line with solid triangles), and Sherpa 2.2.8 (red dotted line with solid diamonds). A yellow and green shaded region is present in the bottom panel for  $|\Delta y| > 4$ , indicating a specific data region or uncertainty. The text 'ATLAS\_2011\_S9126244' is located in the bottom panel, and 'Rivet 3.1.0,  $\geq 100k$  events' and 'mcplots.cern.ch [arXiv:1306.3436]' are on the right side.

$ \Delta y $	ATLAS	Herwig 7.1.0	Pythia 8.301	Sherpa 2.2.8
0.2	1.0	1.0	1.0	1.0
0.8	0.95	0.95	0.95	0.95
1.4	0.95	0.85	0.9	0.95
1.8	0.95	0.95	0.9	0.95
2.2	0.9	0.9	0.9	0.9
2.6	0.85	0.75	0.85	0.85
3.0	0.85	0.85	0.85	0.7
3.4	0.8	0.6	0.8	0.6
3.8	0.7	0.6	0.8	0.6
4.2	0.7	0.85	1.0	0.6
4.6	0.5	0.5	0.5	0.5
5.0	0.3	1.0	0.3	0.3
5.4	0.0	0.0	0.0	0.0