

Gap fraction

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

- ATLAS
- - □ Herwig 7.0.0 default
- - ▲ Pythia 8.212 default
- - ◆ Sherpa 1.4.0 default

2

1.5

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

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 plots the gap fraction, with data points and error bars for ATLAS (black squares), Herwig 7.0.0 (green dashed line with squares), Pythia 8.212 (blue solid line with triangles), and Sherpa 1.4.0 (red dotted line with diamonds). The bottom panel plots the ratio of the gap fraction to the ATLAS measurement, with the same data series. A horizontal line is drawn at a ratio of 1.0. A shaded region in the bottom panel, colored yellow and green, highlights the area where the ratio deviates significantly from 1.0 for $|\Delta y| > 4$.