

Gap fraction

Gap fraction vs Δy (LJ) ($180 < p_T < 210$)

- ATLAS
- - □ Herwig 7.1.0 default
- - ◆ Sherpa 2.2.8 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 absolute rapidity difference $|\Delta y|$ from 0 to 6. The top panel plots the gap fraction, which decreases from approximately 0.95 at $|\Delta y| = 0.5$ to about 0.1 at $|\Delta y| = 5.8$. The bottom panel plots the ratio of the gap fraction to the ATLAS data, with a horizontal line at 1.0. The ratio is mostly between 0.8 and 1.2, with a significant increase to above 2.0 for $|\Delta y| > 5.0$. The bottom panel also features a yellow shaded region and a green shaded region, likely representing different simulation models or uncertainty bands.