

Gap fraction

Gap fraction vs Δy (FB) ($150 < p_T < 180$ ($Q_0 = \bar{p}_T$))

- ATLAS
- - □ Herwig 7.2.0 default
- - ▲ Pythia 8.135 default
- - ◆ Sherpa 1.2.2p default

2.5

2

1.5

1

0.5

0

2

1

0.5

Rivet 3.1.0, $\geq 100k$ events

mcplots.cern.ch [arXiv:1306.3436]

ATLAS_2011_S9126244

Ratio to ATLAS

2

1

0.5

0

2

4

6

$|\Delta y|$

The figure displays two panels comparing ATLAS experimental data with three Monte Carlo models: Herwig 7.2.0, Pythia 8.135, and Sherpa 1.2.2p. The top panel shows the gap fraction as a function of the rapidity difference $|\Delta y|$ (ranging from 0 to 6). The bottom panel shows the ratio of the gap fraction to the ATLAS data, with a horizontal line at 1.0. The shaded regions in the bottom panel represent the uncertainty or comparison ranges for the models. The ATLAS data points are shown with error bars, and the Monte Carlo models are shown with lines and markers. The text 'ATLAS_2011_S9126244' is visible in the top panel.