

Gap fraction

Gap fraction vs Δy (LJ) ($150 < p_T < 180$)

- ATLAS
- Herwig++ 2.7.1 default
- Herwig 7.2.0 default
- ▲- Pythia 8.180 default
- ◆- Sherpa 2.2.8 default

2

1.8

1.6

1.4

1.2

1.0

0.8

0.6

0.4

0.2

0

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 the gap fraction and its ratio to ATLAS as a function of the rapidity gap size $|\Delta y|$ for 7000 GeV pp collisions. The top panel shows the gap fraction, and the bottom panel shows the ratio to ATLAS. The x-axis represents $|\Delta y|$ from 0 to 6. The y-axis for the top panel ranges from 0 to 2, and for the bottom panel from 0.5 to 2. The legend indicates the following series:

- ATLAS: Black squares with error bars.
- Herwig++ 2.7.1 default: Orange dashed line with open circles.
- Herwig 7.2.0 default: Green dashed line with open squares.
- Pythia 8.180 default: Blue solid line with solid triangles.
- Sherpa 2.2.8 default: Red dotted line with solid diamonds.

The bottom panel also includes a shaded histogram representing the distribution of the ratio to ATLAS, with yellow and green regions. The text 'ATLAS_2011_S9126244' is present in the top panel, and 'Rivet 3.1.0, $\geq 100k$ events' and 'mcplots.cern.ch [arXiv:1306.3436]' are on the right side.