

Gap fraction

Gap fraction vs  $\Delta y$  (LJ) ( $240 < p_T < 270$ )

- ATLAS
- △— Pythia 6.428 370
- - □ - - Pythia 6.428 391
- - ■ - - Pythia 6.428 default
- ▲— Pythia 8.205 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

1

0.5

0

2

4

6

$|\Delta y|$

The figure displays two panels sharing a common x-axis representing the rapidity difference  $|\Delta y|$  from 0 to 6. The top panel shows the gap fraction, with data points and error bars for ATLAS (black squares) and four Pythia models: Pythia 6.428 370 (red triangles), Pythia 6.428 391 (black squares), Pythia 6.428 default (orange squares), and Pythia 8.205 default (blue triangles). The bottom panel shows the ratio of the gap fraction to the ATLAS data, with a horizontal line at 1.0. The background in the bottom panel is shaded in green and yellow, indicating the distribution of the ratio. 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.