

Gap fraction

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

- ATLAS
- △ Pythia 6.424 ambt1
- ⋯● Pythia 6.424 z1

2.5

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 shows the gap fraction, with ATLAS data points (black squares) and two Pythia model predictions (orange triangles for 'ambt1' and red dots for 'z1'). The bottom panel shows the ratio of the model predictions to the ATLAS data, with a green and yellow shaded region indicating the uncertainty. The top y-axis is 'Gap fraction' (0 to 2.5) and the bottom y-axis is 'Ratio to ATLAS' (0.5 to 2.0). The plot is titled 'Gap fraction vs Δy (FB) ($210 < p_T < 240$ ($Q_0 = \bar{p}_T$))' and includes the ATLAS experiment name 'ATLAS_2011_S9126244'.

$ \Delta y $	ATLAS Gap Fraction	Pythia 6.424 ambt1 Gap Fraction	Pythia 6.424 z1 Gap Fraction	Ratio to ATLAS (ambt1)	Ratio to ATLAS (z1)
0.5	1.0	1.0	1.0	1.0	1.0
1.0	0.95	0.95	0.95	1.0	1.0
1.5	0.95	0.95	0.95	1.0	1.0
2.0	0.9	0.95	0.9	1.05	0.95
2.5	0.85	0.9	0.8	1.05	0.9
3.0	0.8	0.8	0.75	1.0	0.95
3.5	0.8	0.35	0.7	0.45	0.9
4.0	0.7	0.8	0.8	1.15	1.1
4.5	0.45	0.75	1.0	1.65	2.2
5.0	0.3	-	-	-	-
5.5	0.0	-	-	-	-