

13000 GeV pp

Jets

Thrust λ_{2^1} (CMS jet substructure)Rivet 4.1.0, $\geq 100k$ events

mcplots.cern.ch [arXiv:1306.3436]

(CMS_2021_I1920187)

- CMS
- Pythia 6.428 350
- △— Pythia 6.428 370
- △— Pythia 6.428 380
- Pythia 6.428 p0
- - □ - - Pythia 6.428 p2010

Ratio to CMS

10²

10

1

10⁻¹

10⁻²

2

1

0.5

2

1

0.5

0

0.5

1

The figure consists of two vertically stacked panels sharing a common x-axis representing the Thrust λ_{2^1} (CMS jet substructure) from 0 to 1. The top panel shows the distribution of Thrust λ_{2^1} on a logarithmic y-axis from 10⁻² to 10². The bottom panel shows the ratio of the distribution to the CMS distribution on a linear y-axis from 0.5 to 2.0. Both panels include data points and error bars for CMS (black squares) and several Pythia 6.428 models (350, 370, 380, p0, p2010) using different markers and line styles. The top panel also includes a legend. The bottom panel includes a shaded yellow region around the ratio 1.0. The text 'Rivet 4.1.0, $\geq 100k$ events' and 'mcplots.cern.ch [arXiv:1306.3436]' are on the right, and '(CMS_2021_I1920187)' is in the center of the top panel.

Thrust λ_{2^1}	CMS	Pythia 6.428 350	Pythia 6.428 370	Pythia 6.428 380	Pythia 6.428 p0	Pythia 6.428 p2010
0.05	12	12	12	12	12	12
0.1	5	5	5	5	5	5
0.2	1.5	1.5	1.5	1.5	1.5	1.5
0.6	0.05	0.05	0.05	0.05	0.05	0.05