

Jets

The figure displays the groomed width distribution, λ_1 (CMS jet substructure), for CMS data and several Pythia models. The x-axis represents the groomed width on a logarithmic scale from 0 to 1. The top panel shows the differential distribution $dN/d\ln(\lambda_1)$ on a logarithmic y-axis from 100 to 10,000. The bottom panel shows the ratio of the distributions to the CMS data on a linear y-axis from 0.5 to 2.0.

Legend:

- $\blacksquare$ CMS
- $\triangle$ Pythia 6.428 370
- $\square$ Pythia 6.428 391
- $\blacksquare$ Pythia 6.428 default
- $\blacktriangle$ Pythia 8.170 default

Top Panel Data (Approximate values):

Groomed width (λ_1)	CMS	Pythia 6.428 370	Pythia 6.428 391	Pythia 6.428 default	Pythia 8.170 default
0.05	~100	~100	~100	~100	~100
0.1	~100	~1000	~1000	~1000	~1000
0.2	~100	~100	~100	~100	~100
0.4	~100	~100	~100	~100	~100
0.7	~100	~100	~100	~100	~100

Bottom Panel Data (Approximate values):

Groomed width (λ_1)	Ratio to CMS
0.05	~1.0
0.1	~1.0
0.2	~1.0
0.4	~1.0
0.7	~1.0

mcplots.cern.ch [arXiv:1306.3436]

Rivet 3.1.10, $\geq 300\text{k}$ events