

Jets

The figure consists of two panels sharing a common x-axis labeled 'groomed width' ranging from 0 to 1.

Top Panel: A log-linear plot showing the differential distribution $\frac{dN}{d\ln(w_{\text{groomed}})}$ versus groomed width. The y-axis is logarithmic, ranging from 1000 to 10000. The plot compares four models:

- Pythia 6.428 370 (Red line with open triangles)
- Pythia 6.428 391 (Black dashed line with open squares)
- Pythia 6.428 default (Orange dash-dotted line with open squares)
- Pythia 8.308 default (Blue solid line with filled triangles)

 All models show a sharp peak at low groomed width (around 0.05) and then decay rapidly. The CMS data is represented by black squares with error bars, which are mostly below the 1000 level for groomed width > 0.1.

Bottom Panel: A plot showing the 'Ratio to CMS' versus groomed width. The y-axis is linear, ranging from 0.5 to 2.0. A solid black line represents the ratio of the model distributions to the CMS data. A green shaded band indicates the 1σ uncertainty, and a yellow shaded band indicates the 2σ uncertainty. The ratio is generally close to 1, with some fluctuations at low groomed width.

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mcplots.cern.ch [arXiv:1306.3436]

Rivet 3.1.10, $\geq 2.3\text{M}$ events