

Z+Jet

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

Top Panel: The y-axis is labeled $\frac{1}{N} \frac{dN}{d \ln \tau}$ and ranges from 0 to 3000. It shows the distribution of groomed width for various Pythia 6.428 models compared to CMS data. The models are:

- Pythia 6.428 370 (red solid line with open triangles)
- Pythia 6.428 atlas-csc (red dashed line with open circles)
- Pythia 6.428 d6t (green dashed line with asterisks)
- Pythia 6.428 default (orange dash-dotted line with open squares)
- Pythia 6.428 dw (green dashed line with solid inverted triangles)
- Pythia 6.428 p0 (black solid line with open circles)

 The CMS data is shown as black squares. The distributions peak at low groomed width (around 0.05) and then decay. The Pythia 6.428 atlas-csc model shows the highest peak, while the Pythia 6.428 p0 model shows the lowest peak.

Bottom Panel: The y-axis is labeled 'Ratio to CMS' and ranges from 0.5 to 2. It shows the ratio of the groomed width distributions to the CMS distribution. The ratio is plotted for the same models as the top panel. The ratio is generally close to 1, with a central green band and yellow error bands. The Pythia 6.428 atlas-csc model has the highest ratio, while the Pythia 6.428 p0 model has the lowest ratio.

CMS_2021_I1920187

mcplots.cern.ch [arXiv:1306.3436]

Rivet 3.1.10, ≥ 2.4 M events