

Jets

Figure 1 consists of two vertically stacked plots sharing a common x-axis labeled "groomed thrust" ranging from 0 to 1.

The top plot shows the groomed thrust distribution $\frac{1}{N} \frac{dN}{d \ln \lambda_2^1}$ on the y-axis, ranging from 0 to 1000. The data is presented for four different models:

- CMS**: Black squares with error bars, representing experimental data.
- Herwig++ 2.5.0 default**: Orange dashed line with open circles.
- Herwig 7.2.1 default**: Green dashed line with open squares.
- Pythia 8.308 default**: Blue solid line with solid triangles.

 The distribution peaks sharply at low groomed thrust values (near 0) and then decreases. A label "Groomed thrust λ_2^1 (CMS jet substructure)" is present in the top right of the plot area.

The bottom plot shows the "Ratio to CMS" on the y-axis, ranging from 0.5 to 2.0. This plot displays the ratio of the theoretical distributions to the CMS data. The ratio is shown as a yellow histogram with a green shaded uncertainty band. A horizontal line is drawn at a ratio of 1.0. The ratio is generally close to 1.0 across the entire range of groomed thrust, with some fluctuations at lower values.

mcplots.cern.ch [arXiv:1306.3436]

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