

Top Panel: $\frac{1}{\#} \frac{dN}{dp_T d\lambda}$ vs p_T^{jet} (GeV). The y-axis is logarithmic, ranging from 10^{-3} to 10^2 . The x-axis is linear, ranging from 0 to 1. The plot shows the distribution of the groomed LHA for dijet events. The data points (black squares) are compared with three Pythia models: Pythia 6.428 370 (red triangles), Pythia 6.428 default (orange squares), and Pythia 8.315 default (blue triangles). The Pythia 6.428 default model shows a significant deviation from the data at higher p_T^{jet} values, while the other models remain closer.

Bottom Panel: Ratio to CMS vs groomed LHA. The y-axis is linear, ranging from 0.5 to 2. The x-axis is linear, ranging from 0 to 1. The plot shows the ratio of the distribution to the CMS distribution. The data points (black squares) are compared with three Pythia models: Pythia 6.428 370 (red triangles), Pythia 6.428 default (orange squares), and Pythia 8.315 default (blue triangles). The ratio is generally close to 1, with some deviations at higher groomed LHA values. The Pythia 6.428 default model shows a significant deviation from the data at higher groomed LHA values, while the other models remain closer.

Legend:

- CMS
- △ Pythia 6.428 370
- Pythia 6.428 default
- ▲ Pythia 8.315 default

Text in plot: (CMS_2021_I1920187)

Text on right side: Rivet 4.1.0, ≥ 100k events, mcplots.cern.ch [arXiv:1306.3436]