

Jets

The figure displays the groomed multiplicity distribution λ_0^0 (CMS jet substructure) for CMS data and four Pythia 6.428 models (391, 393, 394, 395) using different grooming parameters. The top panel shows the probability distribution $\frac{1}{N} \frac{dN}{dp_T^0}$ versus groomed multiplicity. The bottom panel shows the ratio of the distributions to the CMS data, with yellow representing the 391 model and green representing the others. A horizontal line at 1.0 indicates the ratio to CMS.

Top Panel: Groomed multiplicity λ_0^0 (CMS jet substructure)

Legend:

- CMS (Black squares)
- Pythia 6.428 391 (Red dashed line with open squares)
- Pythia 6.428 393 (Blue dashed line with open circles)
- Pythia 6.428 394 (Green dashed line with open triangles)
- Pythia 6.428 395 (Magenta dashed line with open diamonds)

Bottom Panel: Ratio to CMS

Legend:

- Yellow: Pythia 6.428 391
- Green: Pythia 6.428 393, 394, 395

The x-axis for both panels is groomed multiplicity, ranging from 0 to 50. The y-axis for the top panel is $\frac{1}{N} \frac{dN}{dp_T^0}$, ranging from 0 to 120. The y-axis for the bottom panel is the Ratio to CMS, ranging from 0.5 to 2.0.

mcplots.cern.ch [arXiv:1306.3436]

Rivet 3.1.10, $\geq 1.8\text{M}$ events

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