

Figure 1 displays the comparison of groomed multiplicity distributions between CMS data and Pythia 6.428 models. The top panel shows the differential distribution $\frac{dN}{dp_T d\lambda}$ on a logarithmic scale. The bottom panel shows the ratio of the distributions to the CMS data, with shaded regions indicating the 68% and 95% confidence levels. The x-axis for both panels is groomed multiplicity, ranging from 0 to 150. The top panel's y-axis ranges from 10^{-9} to 10^{-1} . The bottom panel's y-axis ranges from 0.5 to 2.0. The legend identifies the CMS data (black squares) and four Pythia 6.428 models (350, 357, 358, 359) with different line styles and markers. A vertical line at groomed multiplicity ≈ 85 marks the transition to the high-multiplicity region.

mcplots.cern.ch [arXiv:2401.10621]

2

1

0.5

groomed multiplicity