

Top Panel: $\frac{dN}{dp_T d\lambda}$ vs p_T . The y-axis is logarithmic, ranging from 10^{-8} to 10^0 . The x-axis is linear, ranging from 0 to 100. Data points are shown for CMS (black squares) and several Pythia 6.428 models (various colored lines and markers). The distribution peaks around $p_T \approx 10$ and then decreases.

Bottom Panel: Ratio to CMS vs groomed multiplicity. The y-axis is linear, ranging from 0.5 to 2. The x-axis is linear, ranging from 0 to 100. The plot shows the ratio of the distribution to the CMS data for the same models as the top panel. The ratio is generally close to 1 for $p_T < 50$ and increases for $p_T > 50$. The plot is overlaid with a green and yellow shaded region representing the uncertainty band.

Legend:

- CMS
- △— Pythia 6.428 370
- ...△... Pythia 6.428 373
- -○- - Pythia 6.428 374
- -○- - Pythia 6.428 375
- -△- - Pythia 6.428 381
- -▽- - Pythia 6.428 382

Text in the plot: (CMS_2021_I1920187)