

The figure consists of two panels. The top panel shows the groomed multiplicity distribution, $\frac{1}{N} \frac{dN}{d\lambda} \frac{d\lambda}{dp_T}$, on a logarithmic scale from 10^{-8} to 10^{-1} . The x-axis is groomed multiplicity from 0 to 100. The y-axis is labeled $\frac{1}{N} \frac{dN}{d\lambda} \frac{d\lambda}{dp_T}$. The plot includes data from CMS (black squares) and several Monte Carlo models: Herwig++ 2.6.3 default (orange dashed line with circles), Herwig 7.2.1 default (green dashed line with squares), Pythia 8.315 default (blue solid line with triangles), Pythia 8.315 vincia-default (cyan dashed line with triangles), and Sherpa 2.2.9 default (red dotted line with diamonds). The bottom panel shows the ratio of the groomed multiplicity distribution to the CMS data, $\frac{N_{MC}}{N_{CMS}}$, on a linear scale from 0.5 to 2.5. The x-axis is groomed multiplicity from 0 to 100. The y-axis is labeled 'Ratio to CMS'. The plot includes the same Monte Carlo models as the top panel, with shaded regions indicating the ratio of the model to the CMS data. The legend in the top panel identifies the models: CMS (black square), Herwig++ 2.6.3 default (orange dashed line with circles), Herwig 7.2.1 default (green dashed line with squares), Pythia 8.315 default (blue solid line with triangles), Pythia 8.315 vincia-default (cyan dashed line with triangles), and Sherpa 2.2.9 default (red dotted line with diamonds). The text '(CMS_2021_I1920187)' is present in the bottom panel.