

The figure displays the groomed multiplicity distribution for the central dijet region at 13 TeV, defined by $408 < p_T^{\text{jets}} < 481$ GeV. The top panel shows the differential distribution $\frac{1}{N} \frac{dN}{d\lambda} \frac{d\lambda}{dp_T}$ on a logarithmic scale from 10^{-6} to 10^{-1} . The bottom panel shows the ratio of the distribution to the CMS data on a linear scale from 0.5 to 2.5.

The x-axis for both panels is the groomed multiplicity (charged-only), ranging from 0 to 100. The y-axis for the top panel is $\frac{1}{N} \frac{dN}{d\lambda} \frac{d\lambda}{dp_T}$. The y-axis for the bottom panel is the Ratio to CMS.

The legend identifies the following data series:

- CMS**: Black solid line with square markers.
- Herwig++ 2.6.3 default**: Orange dashed line with open circle markers.
- Herwig 7.2.1 default**: Green dashed line with open square markers.
- Pythia 8.315 default**: Blue solid line with upward-pointing triangle markers.
- Pythia 8.315 vincia-default**: Cyan dash-dotted line with downward-pointing triangle markers.
- Sherpa 2.2.9 default**: Red dotted line with diamond markers.

The bottom panel includes a horizontal line at a ratio of 1.0 and shaded regions (yellow and green) representing the uncertainty bands. A vertical line is drawn at a groomed multiplicity of approximately 75.

Text in the top right corner: CMS, 13 TeV, AK8 jets, central dijet region, $408 < p_T^{\text{jets}} < 481$ GeV

Text in the bottom right corner: Rivet 4.1.0, $\geq 100k$ events

Text in the bottom right corner: mcplots.cern.ch [arXiv:1306.3436]

Text in the bottom right corner: (CMS_2021_I1920187)