

The figure consists of two panels sharing a common x-axis labeled "groomed multiplicity" ranging from 0 to 40.

Top Panel: Shows the differential distribution $\frac{1}{N} \frac{dN}{d\lambda} \frac{d\lambda}{d\mu}$ versus groomed multiplicity. The y-axis ranges from -0.02 to 0.16. Data points with error bars are shown for CMS (black squares) and several Pythia 6.428 models: 359 (cyan dashed line with squares), 370 (red solid line with triangles), a (green solid line with triangles), dw (green dashed line with inverted triangles), p0 (grey solid line with circles), and pro-q2o (green dotted line with stars). The distributions are peaked around a multiplicity of 10-15. A label "(CMS_2021_I1920187)" is present in the lower right of the top panel.

Bottom Panel: Shows the ratio of the distributions to the CMS data, Ratio to CMS , versus groomed multiplicity. The y-axis ranges from 0.5 to 2.5. The plot includes the same data series as the top panel, with the ratio values generally close to 1.0. The background is shaded with yellow and green horizontal bands. A horizontal line is drawn at Ratio to CMS = 1.0.

Text at the top of the figure: "CMS, 13 TeV, AK8 jets, forward dijet region, $50 < p_T^{\text{dijet}} < 65 \text{ GeV}$ ".

Text on the right side of the figure: "Rivet 4.1.0, $\geq 100k$ events" and "mcplots.cern.ch [arXiv:1306.3436]".

Rivet 4.1.0, $\geq 100\text{k}$ events

mcplots.cern.ch [arXiv:1306.3436]

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