

CMS, 13 TeV, AK8 jets, forward dijet region, $254 < p_T^{\text{jet}} < 326$ GeV
 (CMS_2021_I1920187)

The top panel shows the differential event rate $\frac{dN}{dp_T d\lambda}$ versus groomed multiplicity. The y-axis is logarithmic, ranging from 10^{-7} to 1 . The x-axis is groomed multiplicity, ranging from 0 to 150. The data points are shown for CMS (black squares) and several Pythia 6.428 models: Pythia 6.428 359 (red dashed line with squares), Pythia 6.428 370 (red solid line with triangles), Pythia 6.428 a (green solid line with triangles), Pythia 6.428 dw (green dashed line with inverted triangles), Pythia 6.428 p0 (black solid line with circles), and Pythia 6.428 pro-q2o (green dotted line with stars).

The bottom panel shows the ratio of the event rate to the CMS data, Ratio to CMS , versus groomed multiplicity. The y-axis is linear, ranging from 0.5 to 2. The x-axis is groomed multiplicity, ranging from 0 to 150. The data points are shown for the same models as the top panel. The ratio is generally close to 1, indicating good agreement with the CMS data. A horizontal line at 1.0 is shown for reference.