

Jets

Figure 1: Multiplicity distribution of jets in CMS data and various Pythia models. The top panel shows the normalized multiplicity distribution $\frac{1}{N} \frac{dN}{dp_T}$ versus multiplicity. The bottom panel shows the ratio of the Pythia models to the CMS data, with yellow bars for ratios above 1 and green bars for ratios below 1.

The top panel is titled "Multiplicity λ_0^0 (CMS jet substructure)". The legend indicates the following data series:

- CMS (Black squares)
- Pythia 6.428 370 (Red line with open triangles)
- Pythia 6.428 373 (Purple dotted line with open triangles)
- Pythia 6.428 374 (Blue dashed line with open circles)
- Pythia 6.428 375 (Cyan dotted line with open circles)
- Pythia 6.428 381 (Brown dashed line with open triangles)
- Pythia 6.428 382 (Magenta dotted line with open triangles)

The bottom panel is titled "Ratio to CMS". The y-axis is labeled "Ratio to CMS" and ranges from 0.5 to 2.0. The x-axis is labeled "multiplicity" and ranges from 0 to 60. The plot shows the ratio of the Pythia models to the CMS data, with yellow bars for ratios above 1 and green bars for ratios below 1.

A vertical number line with tick marks at 0, 1, and 2.

multiplicity