

Jets

Figure 1: Multiplicity distribution of CMS data and Monte Carlo models for 13 TeV pp collisions. The top panel shows the distribution of multiplicity (0 to 100) with CMS data points (black squares), Herwig 7.2.1 default (green dashed line with squares), and Pythia 8.170 default (blue solid line with triangles). The bottom panel shows the ratio of the Monte Carlo models to the CMS data, with a horizontal line at 1.0. The ratio is mostly above 1.0 for multiplicities greater than 40, indicating that the models overpredict the multiplicity in that region.

Rivet 3.1.10, $\geq 300\text{k}$ events

mcplots.cern.ch [arXiv:1306.3436]

2

1

10

multiplicity