

Jets

Figure 1 consists of two panels. The top panel is a log-linear plot showing the differential event rate $\frac{1}{N} \frac{dN}{dp_T d\lambda}$ versus groomed multiplicity (charged-only). The y-axis is logarithmic, ranging from 10^{-9} to 10 . The x-axis is linear, ranging from 0 to 100. The plot shows CMS data (black squares), Herwig 7.2.1 default (green dashed line with open squares), and Sherpa 2.2.9 default (red dotted line with red diamonds). The bottom panel is a linear plot showing the ratio of the Monte Carlo distributions to the CMS data versus groomed multiplicity (charged-only). The y-axis is linear, ranging from 0.5 to 2.0. The x-axis is linear, ranging from 0 to 100. The plot shows the ratio of the Monte Carlo distributions to the CMS data, with a horizontal line at 1.0. The top panel is labeled 'CMS, 13 TeV, AK4 jets, forward dijet region, $408 < p_T^{\text{jet}} < 481 \text{ GeV}$ '. The bottom panel is labeled 'Ratio to CMS'.