

The figure consists of two panels. The top panel shows the charged-particle multiplicity distribution $\frac{1}{\sqrt{s}} \frac{dN}{d\eta} \frac{d^2N}{dp_T d\lambda}$ on a logarithmic scale (from 10^{-3} to 10^2) versus the width of the charged-particle region (from 0 to 1). The data points are from CMS (black squares) and several Pythia models: Pythia 6.428 345 (red dashed line with open circles), Pythia 6.428 346 (yellow dotted line with open squares), Pythia 6.428 370 (red solid line with open triangles), Pythia 6.428 default (orange dash-dotted line with open squares), and Pythia 8.210 default (blue solid line with solid triangles). The bottom panel shows the ratio of the multiplicity to the CMS data on a linear scale (from 0.5 to 2) versus the width of the charged-particle region. The ratio is shown for the same models as the top panel. The background of the bottom panel is shaded in yellow and green, indicating different regions of the distribution. The x-axis for both panels is labeled 'width (charged-only)'.