

Jets

The figure consists of two panels. The top panel shows the distribution of the groomed pTD2 variable on a logarithmic scale. The y-axis is labeled $\frac{1}{\#} \frac{dN}{dp_T} \frac{d\lambda}{d\lambda}$ and ranges from 10^{-1} to 10^2 . The x-axis is labeled 'groomed pTD2' and ranges from 0 to 1. The plot shows data points from CMS (black squares) and several Pythia 6.428 models: 350 (yellow squares), 370 (red triangles), 380 (green triangles), p0 (black circles), and p2010 (dashed black line). The distribution peaks around 0.15 and then decreases. The bottom panel shows the ratio of the groomed pTD2 distribution to the CMS data. The y-axis is labeled 'Ratio to CMS' and ranges from 0.5 to 2. The x-axis is the same as the top panel. The plot shows the ratio for the same Pythia 6.428 models. The ratios are mostly between 0.8 and 1.5, with shaded regions indicating the uncertainty bands. A horizontal line at 1.0 represents the ratio of 1.0. The text '(CMS_2021_I1920187)' is present in the bottom panel.