

Z+Jet

Figure 1 consists of two panels. The top panel is a plot of the distribution of p_T for three different models: CMS (black squares), Pythia 8.170 default (blue triangles), and Pythia 8.170 tune-4cx (orange squares). The x-axis is p_T in GeV, ranging from 0 to 1.0. The y-axis is $\frac{1}{N} \frac{dN}{dp_T}$, ranging from 0 to 4000. The bottom panel is a plot of the ratio of the width of the p_T distribution to the CMS width, $\frac{\sigma_{p_T}}{\sigma_{p_T}^{\text{CMS}}}$, as a function of width. The x-axis is width, ranging from 0 to 1.0. The y-axis is the ratio, ranging from 0.5 to 2.0. A horizontal line at 1.0 indicates the ratio is exactly 1.0. A green band between 0.9 and 1.1 indicates the ratio is within 10% of 1.0. The plot shows that the ratio is close to 1.0 for widths between 0.2 and 0.5, and increases to about 1.5 for widths greater than 0.5.

mcplots.cern.ch [arXiv:1306.3436]