

Z+Jet

Figure 1 consists of two panels. The top panel is a plot of the distribution $\frac{dN}{d\ln(p_T)}$ versus p_T (GeV). The x-axis ranges from 0 to 1.0, and the y-axis ranges from 0 to 1000. The plot shows data points for CMS (black squares) and three Pythia 6.428 models: Pythia 6.428 370 (red triangles), Pythia 6.428 391 (dashed squares), and Pythia 6.428 default (orange squares). The CMS data shows a sharp peak at $p_T \approx 0.15$ GeV. The Pythia models show a broader distribution with a peak at $p_T \approx 0.2$ GeV. The bottom panel is a plot of the ratio of the Pythia models to the CMS data, $\frac{\text{Pythia}}{\text{CMS}}$, versus p_T (GeV). The x-axis ranges from 0 to 1.0, and the y-axis ranges from 0.5 to 2.0. The plot shows a green band representing the ratio being within 10% of 1.0, and a yellow band representing the ratio being between 0.8 and 1.2. The ratio is generally close to 1.0 for $p_T > 0.4$ GeV.

mcplots.cern.ch [arXiv:1306.3436]