

Z+Jet

Figure 1 consists of two panels. The top panel is a plot of the distribution of groomed p_{TD2} for three different models: CMS (black squares), Herwig 7.2.1 default (green dashed line with open squares), and Pythia 8.308 default (blue solid line with solid triangles). The x-axis is labeled 'groomed pTD2' and ranges from 0 to 1. The y-axis is labeled '1/N dN/dln(p_{TD2})' and ranges from 0 to 1000. The CMS distribution is a very narrow peak at $p_{TD2} \approx 0.05$. The Herwig distribution is a broader peak at $p_{TD2} \approx 0.1$. The Pythia distribution is the broadest, peaking at $p_{TD2} \approx 0.1$ and extending to $p_{TD2} \approx 0.6$. The bottom panel shows the ratio of the distributions to the CMS distribution, labeled 'Ratio to CMS'. The x-axis is the same as the top panel. The y-axis ranges from 0.5 to 2.0. A horizontal line is drawn at 1.0. The ratio for the Herwig distribution is shown in green, and the ratio for the Pythia distribution is shown in blue. Both ratios are significantly higher than 1.0 for $p_{TD2} > 0.1$.

mcplots.cern.ch [arXiv:1306.3436]

1

0.