

Z+Jet

Rivet 3.1.10, 2.9M events

mcplots.cern.ch [arXiv:1306.3436]

2

0.5

pTD2

 $\mathbf{d}^N$

↙

Ratio to CMS

Figure 1 consists of two panels. The top panel is a plot of the ratio of the number of jets to the number of top quarks, $N_{\text{jets}}/N_{\text{top}}$, as a function of the top quark transverse momentum, $p_{\text{TD}2}$ (GeV). The x-axis ranges from 0 to 1.0 GeV, and the y-axis ranges from 0 to 1.0. The plot compares two models: CMS (black squares) and Pythia 8.308 default (blue triangles). The CMS data points are clustered around a ratio of 1.0, while the Pythia 8.308 default data points show a peak around $p_{\text{TD}2} \approx 0.1$ GeV and then decrease. The bottom panel is a plot of the ratio of the number of jets to the number of top quarks, $N_{\text{jets}}/N_{\text{top}}$, as a function of the top quark transverse momentum, $p_{\text{TD}2}$ (GeV). The x-axis ranges from 0 to 1.0 GeV, and the y-axis ranges from 0.5 to 2.0. The plot shows a horizontal band of yellow and green shaded regions, indicating the ratio of the number of jets to the number of top quarks. The ratio is generally around 1.0, with some fluctuations. The text 'CMS_2021_11920187' is visible in the bottom panel.