

Z+Jet

Figure 1 consists of two panels. The top panel is a plot of the distribution of groomed p_{TD2} for various Pythia 6.428 tunes (390, 391, 392, 396, 397, 398) compared to CMS data (black squares). The x-axis is labeled 'groomed p_{TD2} ' and ranges from 0 to 1. The y-axis is labeled '1/N dN/dln(p_{TD2})' and ranges from 0 to 3000. The CMS data is shown as black squares, and the Pythia 6.428 tunes are shown as dashed lines with different markers. The bottom panel is a plot of the ratio of the Pythia 6.428 distributions to the CMS distribution, labeled 'Ratio to CMS'. The y-axis ranges from 0.5 to 2.0. The ratio is shown as a green band, indicating the ratio is within 10% of 1.0. The x-axis is the same as the top panel. The legend for the top panel includes: Pythia 6.428 390 (red circles), Pythia 6.428 391 (blue squares), Pythia 6.428 392 (green diamonds), Pythia 6.428 396 (cyan stars), Pythia 6.428 397 (magenta stars), and Pythia 6.428 398 (black triangles). The CMS data is represented by black squares. The bottom panel also includes a horizontal line at 1.0 and a green band representing the 10% deviation from 1.0.

Rivet 3.1.10, $\geq 2.6\text{M}$ events

mcplots.cern.ch [arXiv:1306.3436]

2

1

0.5

groomed pTD2