

Jets

Rivet 3.1.10, $\geq 2.5\text{M}$ events

mcplots.cern.ch [arXiv:1306.3436]

2

0.5

pTD2

The figure displays the ratio of Pythia 6.428 models to CMS data for the observable $(p_T^D)^2 \lambda_0^2$ (CMS jet substructure).

Top Panel: A line plot showing the ratio of the models to the CMS data. The x-axis is p_{TD2} (ranging from 0 to 1). The y-axis is the ratio (ranging from 0.5 to 2.0). The legend indicates:

- CMS (Black squares)
- Pythia 6.428 345 (Red dashed line with open circles)
- Pythia 6.428 370 (Red solid line with open triangles)
- Pythia 6.428 ambt1 (Orange solid line with open triangles)
- Pythia 6.428 z2 (Green solid line with solid circles)

The CMS data points are shown as black squares. The Pythia models are shown as lines with markers. The ratio of the models to the CMS data is shown as a green band in the bottom panel.

Bottom Panel: A histogram showing the ratio of the models to the CMS data. The x-axis is p_{TD2} (ranging from 0 to 1). The y-axis is the ratio (ranging from 0.5 to 2.0). The histogram is colored green, indicating the ratio of the models to the CMS data. A horizontal line is drawn at a ratio of 1.0.

The figure is labeled with "CMS_2021_I1920187" and "mcplots.cern.ch [arXiv:1306.3436]".