

Jets

Rivet 3.1.10, 2.2M events

mcplots.cern.ch [arXiv:1306.3436]

2

1

0.5

Top Panel: Distribution of $(p_T^D)^2 \lambda_0^2$ (charged only) (CMS jet substructure). The x-axis is p_{TD2} (charged-only) from 0 to 1. The left y-axis is $\frac{1}{N} \frac{dN}{dp_T} \frac{d \ln \lambda_0^2}{d \ln \lambda_0^2}$ from 0 to 10000. The right y-axis is Rivet 3.1.10, 2.2M events. The legend shows CMS (black squares) and Pythia 8.308 default (blue line with triangles). The distribution peaks at $p_{TD2} \approx 0.1$ with a value of ≈ 10000 . The CMS data points are shown as black squares, and the Pythia model is shown as a blue line with triangles. The text "CMS_2021_I1920187" is present in the plot.

Bottom Panel: Ratio to CMS. The x-axis is p_{TD2} (charged-only) from 0 to 1. The y-axis is Ratio to CMS from 0.5 to 2. The plot shows a green band representing the ratio of the Pythia model to the CMS data. The ratio is mostly between 0.8 and 1.2, with some fluctuations. The text "mcplots.cern.ch [arXiv:1306.3436]" is present in the plot.