

Jets

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

mcplots.cern.ch [arXiv:1306.3436]

2

0.5

pTD2

The figure displays the distribution of $(p_T^D)^2 \lambda_0^2$ (CMS jet substructure) for various Monte Carlo models. The top panel shows the distribution $\frac{1}{N} \frac{dN}{dp_T}$ for CMS (black squares), Pythia 6.428 345 (red dashed line with circles), Pythia 6.428 346 (yellow dotted line with squares), Pythia 6.428 370 (red solid line with triangles), Pythia 6.428 default (orange dashed line with squares), and Pythia 8.308 default (blue solid line with triangles). The bottom panel shows the ratio of the distribution to the CMS distribution, with a green shaded band indicating the ratio range. The x-axis is p_{TD2} , ranging from 0 to 1. The y-axis for the top panel is $\frac{1}{N} \frac{dN}{dp_T}$, ranging from 0 to 10000. The y-axis for the bottom panel is Ratio to CMS, ranging from 0.5 to 2.0.