

Jets

Rivet 3.1.10, 400k events

mcplots.cern.ch [arXiv:1306.3436]

2

0.5

The figure displays two panels related to the distribution of p_{TD2} (charged-only) for CMS data and Pythia 8.170 default simulation.

Top Panel: The distribution of p_{TD2} (charged-only) for CMS data (black squares) and Pythia 8.170 default simulation (blue triangles). The x-axis is p_{TD2} (charged-only) ranging from 0 to 1. The y-axis is $\frac{1}{N} \frac{dN}{dp_{TD2}}$ ranging from 0 to 1000. The Pythia 8.170 default simulation shows a peak around $p_{TD2} \approx 0.15$, while the CMS data is relatively flat.

Bottom Panel: The ratio of the Pythia 8.170 default simulation to the CMS data, Ratio to CMS , ranging from 0.5 to 2. The x-axis is p_{TD2} (charged-only) ranging from 0 to 1. The ratio is shown as a green band, and the uncertainty is indicated by yellow bands. The ratio is generally close to 1, indicating good agreement between the simulation and data.