

Jets

The figure displays the thrust distribution and its ratio to CMS data. The top panel shows the differential event rate $\frac{dN}{d\ln(\text{thrust})}$ versus thrust on a log-linear scale. The bottom panel shows the ratio of the models to the CMS data, with a green cross representing the ratio and a yellow band representing the uncertainty.

Top Panel: Thrust Distribution

The x-axis is thrust (ranging from 0 to 1). The y-axis is $\frac{dN}{d\ln(\text{thrust})}$ (ranging from 0 to 10000). The plot compares CMS data (black squares) with five Pythia models:

- Pythia 6.428 370 (red line with open triangles)
- Pythia 6.428 391 (black dashed line with open squares)
- Pythia 6.428 default (orange dashed line with open squares)
- Pythia 8.308 default (blue solid line with solid triangles)

Bottom Panel: Ratio to CMS

The y-axis is the Ratio to CMS (ranging from 0.5 to 2). The x-axis is thrust (ranging from 0 to 1). The plot shows the ratio of the models to the CMS data, with a green cross representing the ratio and a yellow band representing the uncertainty.

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

mcplots.cern.ch [arXiv:1306.3436]

2

1

0.5

thrust