

Jets

The figure displays two panels related to the distribution of Thrust λ_2^1 (CMS jet substructure).

Top Panel: Shows the distribution of Thrust λ_2^1 (CMS jet substructure) on a logarithmic scale. The x-axis is labeled "thrust" and ranges from 0 to 1. The y-axis is labeled "1/N dN/dln lambda_2^1" and ranges from 0 to 10000. The plot compares CMS data (black squares) and Pythia 8.308 default (blue triangles). The Pythia 8.308 default distribution is significantly higher than the CMS data at low thrust values, peaking around 0.1. The CMS data is shown as a series of black squares, mostly below 1000. A legend indicates "CMS" (black square) and "Pythia 8.308 default" (blue triangle). A reference line "CMS_2021_I1920187" is shown.

Bottom Panel: Shows the ratio of the Pythia 8.308 default distribution to the CMS distribution, labeled "Ratio to CMS". The y-axis ranges from 0.5 to 2. The plot shows a shaded region (yellow and green) representing the uncertainty or range of the ratio. The ratio is generally close to 1, indicating a good agreement between the two distributions at higher thrust values, but deviates at lower thrust values.

mcplots.cern.ch [arXiv:1306.3436]

Rivet 3.1.10, 2.7M ev

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0.

thrust