

Top Panel: $\frac{1}{N} \frac{dN}{dp_T d\lambda}$ vs. λ . The y-axis is logarithmic, ranging from 10^{-1} to 10^2 . The x-axis is λ , ranging from 0 to 1. The plot shows the distribution of dijet events in the central region ($120 < p_T^{\text{dijet}} < 150$ GeV) at 13 TeV. The data points (black squares) are compared with three Pythia 8.315 models: default (blue line with triangles), tune-4c (red dashed line with stars), and tune-4cx (orange dotted line with squares). The distribution peaks at $\lambda \approx 0.1$ and decreases as λ increases.

Bottom Panel: Ratio to CMS vs. λ . The y-axis is linear, ranging from 0.5 to 2. The x-axis is λ , ranging from 0 to 1. The plot shows the ratio of the event rate to the CMS data for the same conditions. The ratio is close to 1 for $\lambda > 0.5$ and decreases for $\lambda < 0.5$. The shaded regions represent the uncertainty bands for the ratio.

Legend for Top Panel:

- CMS
- ▲— Pythia 8.315 default
- - * - - Pythia 8.315 tune-4c
- ... □ ... Pythia 8.315 tune-4cx

Legend for Bottom Panel:

- Ratio to CMS (shaded regions)
- ▲— Pythia 8.315 default
- - * - - Pythia 8.315 tune-4c
- ... □ ... Pythia 8.315 tune-4cx

(CMS_2021_I1920187)

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mcplots.cern.ch [arXiv:2401.10621]

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