

Top Panel: Differential Event Count

Y-axis: $\frac{1}{\#} \frac{dN}{dp_T d\lambda}$ (log scale, 10^{-10} to 10^{-1})

X-axis: groomed multiplicity (0 to 150)

Legend:

- CMS
- △ Pythia 6.428 370
- Pythia 6.428 atlas-csc
- * Pythia 6.428 d6t
- Pythia 6.428 default
- ▽ Pythia 6.428 dw
- Pythia 6.428 p0

Bottom Panel: Ratio to CMS

Y-axis: Ratio to CMS (0.5 to 2.0)

X-axis: groomed multiplicity (0 to 150)

Shaded regions indicate the ratio range for different models:

- Yellow: Pythia 6.428 default
- Green: Pythia 6.428 dw
- Red: Pythia 6.428 370

Vertical dashed line at groomed multiplicity ≈ 80.

Text: (CMS_2021_I1920187)

Text: mcplots.cern.ch [arXiv:2401.10621]

Text: Rivet 4.1.0, ≥ 100k events

Text: CMS, 13 TeV, AK8 jets, forward dijet region, $326 < p_T^{\text{dijet}} < 408$ GeV



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0.