

Top Panel: Differential event rate $\frac{1}{\#} \frac{dN}{dp_T d\lambda}$ versus p_T (GeV). The y-axis is logarithmic, ranging from 10^{-4} to 10^2 . The x-axis is linear, ranging from 0 to 1.0. The plot shows the distribution of p_T for Z+jet events in the region $326 < p_T^{\text{jet}} < 408$ GeV. The data points are from CMS (black squares) and the theoretical models are from Pythia 8.235 (various colors and line styles).

Bottom Panel: Ratio of the event rate to the CMS data versus width. The y-axis is linear, ranging from 0.5 to 2.5. The x-axis is linear, ranging from 0 to 1.0. The plot shows the ratio of the event rate to the CMS data for the same p_T region. The data points are from CMS (black squares) and the theoretical models are from Pythia 8.235 (various colors and line styles). The shaded regions represent the uncertainty bands for the models.

Legend for both panels:

- CMS
- ▲ Pythia 8.235 default
- ▼ Pythia 8.235 tune-AU2
- ◇ Pythia 8.235 tune-AU2lox
- Pythia 8.235 tune-AU2loxx
- ★ Pythia 8.235 tune-AU2m

Text in the top panel: CMS, 13 TeV, AK4 jets, Z+jet region, $326 < p_T^{\text{jet}} < 408$ GeV

Text in the bottom panel: (CMS_2021_I1920187)

Text on the right side: Rivet 4.1.0, $\geq 100k$ events
mcplots.cern.ch [arXiv:1306.3436]

(CMS_2021_I1920187)

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