

Figure 1: Z+jet cross-section and its ratio to CMS data. The top panel shows the differential cross-section $\frac{1}{\#} \frac{dN}{dp_T} \frac{d\lambda}{d\lambda}$ as a function of the jet transverse momentum p_T^{jet} for the Z+jet region, $254 < p_T^{\text{jet}} < 326$ GeV. The bottom panel shows the ratio of the cross-section to the CMS data as a function of the width of the Z+jet region. The ratio is defined as $\text{Ratio to CMS} = \frac{\text{Model Cross-section}}{\text{CMS Cross-section}}$. The ratio is shown for various Pythia 6.428 models: 345, 346, 370, ambt1, z1, and z2. The ratio is compared to the CMS data (black squares) and the ratio is shown for various Pythia 6.428 models. The ratio is compared to the CMS data (black squares) and the ratio is shown for various Pythia 6.428 models. The ratio is compared to the CMS data (black squares) and the ratio is shown for various Pythia 6.428 models.

(CMS_2021_I1920187)

Rivet 4.1.0, $\geq 100\text{k}$ events

mcplots.cern.ch [arXiv:2401.10621]

2

1

0.5

width