

Z+Jet

Figure 1 consists of two panels. The top panel is a plot of the multiplicity distribution $\frac{1}{N} \frac{dN}{d\lambda_0}$ versus multiplicity λ_0 . The x-axis ranges from 0 to 60, and the y-axis ranges from 0 to 220. The plot shows data from CMS (black squares) and two Monte Carlo models: Pythia 8.308 default (blue solid line with upward triangles) and Pythia 8.308 vincia-default (cyan dashed line with downward triangles). The CMS data shows a sharp peak at $\lambda_0 = 0$ and a smaller peak at $\lambda_0 = 19$. The Monte Carlo models show a broader distribution with a peak around $\lambda_0 = 19$. The bottom panel is a stacked histogram showing the ratio of the Monte Carlo models to the CMS data. The y-axis is labeled 'Ratio to CMS' and ranges from 0.5 to 2.0. The x-axis is labeled 'multiplicity' and ranges from 0 to 60. The histogram is divided into two regions: a green region for $\lambda_0 < 40$ and a yellow region for $\lambda_0 \geq 40$. The green region shows a ratio between 0.5 and 1.0, while the yellow region shows a ratio between 1.0 and 2.0. A horizontal line at ratio = 1.0 is shown for reference.

mcplots.cern.ch [arXiv:1306.3436]