

Z+Jet

Figure 1 consists of two panels. The top panel is a line plot showing the multiplicity distribution of jets in CMS and Monte Carlo models. The x-axis is 'multiplicity' (0 to 60) and the y-axis is $\frac{1}{N} \frac{dN}{d\lambda_0}$ (0 to 160). The legend indicates three data series: CMS (black squares), Herwig++ 2.7.1 default (orange dashed line with open circles), and Herwig 7.2.1 default (green dashed line with open squares). The CMS data shows a sharp peak at multiplicity 0. The Herwig++ model shows a peak at multiplicity 15, and the Herwig 7.2.1 model shows a peak at multiplicity 10. The bottom panel is a stacked histogram showing the ratio of the Monte Carlo models to the CMS data. The x-axis is 'multiplicity' (0 to 60) and the y-axis is 'Ratio to CMS' (0.5 to 2.0). The histogram is divided into two regions: a green region for multiplicity 0 to 40 and a yellow region for multiplicity 40 to 60. The ratio is generally higher in the green region, indicating a higher multiplicity distribution compared to CMS.