

Z+Jet

Figure 1 consists of two vertically stacked plots sharing a common x-axis labeled 'multiplicity' ranging from 0 to 40.

The top plot shows the multiplicity distribution $\frac{1}{N} \frac{dN}{d\lambda_0}$ on the left y-axis (ranging from 0 to 180) and the number of events on the right y-axis (ranging from 0 to 2.8M). The data is presented for three sources: 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 very low, flat distribution. The Monte Carlo models show a peak around multiplicity 12-13. The Herwig 7.2.1 default model has a slightly higher peak than the Herwig++ 2.7.1 default model. A text label 'CMS_2021_I1920187' is present near the CMS data points.

The bottom plot shows the 'Ratio to CMS' on the y-axis (ranging from 0.5 to 2.0). It displays the ratio of the Monte Carlo models to the CMS data. The Herwig++ 2.7.1 default model (orange) and Herwig 7.2.1 default model (green) are shown as stacked horizontal bars. The Herwig 7.2.1 default model is consistently higher than the Herwig++ 2.7.1 default model, with both models showing a ratio that is mostly between 1.0 and 1.5, with some fluctuations.