

Z+Jet

Figure 1: Comparison of CMS and Herwig++/Herwig 7.2.1 default models for the width of the first jet substructure. The top panel shows the distribution of the width of the first jet substructure (λ_1^1) in CMS units. The bottom panel shows the ratio of the width of the first jet substructure to the CMS width. The x-axis is 'width' from 0 to 1. The left y-axis is 'dN/dln λ_1^1 ' from 0 to 10000. The right y-axis is 'Ratio to CMS' from 0.5 to 2. The legend indicates: CMS (black squares), Herwig++ 2.7.1 default (orange dashed line with circles), and Herwig 7.2.1 default (green dashed line with squares). The Herwig++ 2.7.1 default model shows a peak around width 0.2, while the Herwig 7.2.1 default model shows a peak around width 0.3. The CMS data points are shown as black squares. The ratio plot shows that the Herwig++ 2.7.1 default model is generally wider than CMS, while the Herwig 7.2.1 default model is generally narrower than CMS.

Rivet 3.1.10, $\geq 2.8\text{M}$ events
