

Z+Jet

Figure 1 consists of two panels. The top panel is a plot of the distribution of the width of the parton shower, $\mathcal{N}(\mathbf{p}_T)$, for the CMS data (black squares), Pythia 6.428 370 (red triangles), and Pythia 6.428 default (orange squares). The x-axis is labeled 'width' and ranges from 0 to 1. The y-axis is labeled ' $\mathcal{N}(\mathbf{p}_T)$ ' and ranges from 0 to 1000. The CMS data is shown as a black line with squares, Pythia 6.428 370 as a red line with triangles, and Pythia 6.428 default as an orange line with squares. The bottom panel is a plot of the ratio of the width of the parton shower to the CMS data, $\mathcal{N}(\mathbf{p}_T) / \mathcal{N}(\mathbf{p}_T)_{\text{CMS}}$, for the same three models. The x-axis is labeled 'width' and ranges from 0 to 1. The y-axis is labeled 'Ratio to CMS' and ranges from 0.5 to 2. The plot shows a green band representing the 1-sigma uncertainty and a yellow band representing the 2-sigma uncertainty. A horizontal line is drawn at a ratio of 1.0.

Rivet 3.1.10, $\geq 2.7\text{M}$ events