

Jets

Figure 1 consists of two panels. The top panel is a plot of the distribution of the width of the first jet substructure, λ_1^1 , in units of CMS jet substructure. The x-axis is labeled 'width' and ranges from 0 to 1. The y-axis is labeled $\frac{dN}{d\ln \lambda_1^1}$ and ranges from 0 to 1000. Two data series are shown: CMS (black squares) and Pythia 8.209 default (blue line with triangles). The Pythia 8.209 default distribution shows a sharp peak at width ~0.15, while the CMS distribution is much flatter. The bottom panel shows the ratio of the width of the first jet substructure to the CMS jet substructure. The x-axis is the same as the top panel. The y-axis is labeled 'Ratio to CMS' and ranges from 0.5 to 2. A horizontal line is drawn at a ratio of 1.0. The plot is filled with a green shaded region, indicating the ratio is between 0.8 and 1.2, and a yellow shaded region, indicating the ratio is between 0.6 and 1.4.

Rivet 3.1.10, 400k events

mcplots.cern.ch [arXiv:1306.3436]

2

1

0.

width