

Jets

Rivet 3.1.10, 300k events

mcplots.cern.ch [arXiv:1306.3436]

2

0.5

Figure 1 consists of two panels. The top panel is a plot of the width λ_1^1 (CMS jet substructure) for 13000 GeV pp collisions. The x-axis is labeled 'width' and ranges from 0 to 1. The y-axis is labeled 'dN/dln width' and ranges from 0 to 10000. The plot shows two distributions: CMS (black squares) and Pythia 8.170 default (blue triangles). The CMS distribution is a narrow peak centered around 0.5, while the Pythia 8.170 default distribution is broader and shifted towards lower width values. The bottom panel is a plot of the ratio of the width to the CMS width, $\lambda_1^1 / \lambda_1^1(\text{CMS})$, for the same conditions. 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 shaded band representing the ratio, which is centered around 1.0. The band is wider at lower width values and narrower at higher width values.