

Jets

Figure 1 consists of two panels. The top panel is a plot of the width of the first jet substructure, λ_1 , in units of the transverse momentum of the first jet, p_T , for CMS data (black squares) and two Monte Carlo models: Herwig 7.2.1 default (green dashed line with open squares) and Pythia 8.183 default (blue solid line with filled triangles). The x-axis is labeled 'width' and ranges from 0 to 1. The y-axis is labeled 'mathrm d N / mathrm d p_T mathrm d lambda_1' and ranges from 0 to 1000. The bottom panel shows the ratio of the Monte Carlo models to the CMS data, with the Herwig 7.2.1 default model (green) and the Pythia 8.183 default model (blue) both showing a ratio of approximately 1.0 across the range of widths. The y-axis is labeled 'Ratio to CMS' and ranges from 0.5 to 2.0. The x-axis is labeled 'width' and ranges from 0 to 1. The bottom panel also includes a horizontal line at 1.0 and a shaded region representing the ratio of the two Monte Carlo models.

mcplots.cern.ch [arXiv:1306.3436]

Rivet 3.1.10, $\geq 400k$ events