

Jets

Rivet 3.1.10, 400k events

mcplots.cern.ch [arXiv:1306.3436]

2

0.5

width

Figure 1 consists of two panels. The top panel is a plot of the width λ_1 (CMS jet substructure) versus the width. The x-axis ranges from 0 to 1, and the y-axis ranges from 0 to 1000. The plot shows the width distribution for CMS (black squares) and Pythia 8.183 default (blue triangles) models. The Pythia 8.183 default model shows a much higher width distribution than the CMS model. The bottom panel is a plot of the ratio of the Pythia 8.183 default model to the CMS model, with a green band indicating the ratio is within 10% of 1.0. The x-axis ranges from 0 to 1, and the y-axis ranges from 0.5 to 2.0. The green band is centered around 1.0, indicating that the Pythia 8.183 default model is generally consistent with the CMS model for the width of the first jet substructure.