

Jets

Figure 1 consists of two panels. The top panel is a plot 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 'dN/dln width' and ranges from 0 to 10000. The plot shows two distributions: CMS (black squares) and Pythia 8.183 default (blue triangles). The CMS distribution is a narrow peak at width = 0. The Pythia 8.183 default distribution is a broader peak at width ≈ 0.1. The bottom panel is a plot of the ratio of the width of the first jet substructure to the CMS width, $\lambda_1^1 / \lambda_1^1(\text{CMS})$. 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 horizontal line at 1.0, with shaded regions indicating the uncertainty. The shaded regions are yellow for width < 0.5 and green for width > 0.5.

■ CMS

Pythia 8.183 default

CMS_2021_I1920187

Ratio to CMS

width