

Z+Jet

Figure 1 consists of two panels. The top panel is a line plot showing the distribution of the width of the first jet substructure, λ_1 , for three different models: CMS (black squares), Pythia 8.308 default (blue triangles), and Pythia 8.308 default-noCR (purple triangles). The x-axis is labeled 'width' and ranges from 0 to 1. The y-axis is labeled $\frac{1}{N} \frac{dN}{d\lambda_1}$ and ranges from 0 to 1000. The CMS distribution is a very narrow peak at $\lambda_1 \approx 0.1$. The Pythia 8.308 default distribution is a broader peak at $\lambda_1 \approx 0.2$. The Pythia 8.308 default-noCR distribution is a broader peak at $\lambda_1 \approx 0.2$. The bottom panel is a stacked histogram showing the ratio of the width to the CMS distribution, $\frac{\lambda_1}{\lambda_1^{\text{CMS}}}$, for the same three models. 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 CMS distribution is a narrow peak at $\lambda_1 \approx 0.1$. The Pythia 8.308 default distribution is a broader peak at $\lambda_1 \approx 0.2$. The Pythia 8.308 default-noCR distribution is a broader peak at $\lambda_1 \approx 0.2$.

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