

Z+Jet

Figure 1 consists of two panels. The top panel is a plot of the ratio of the total cross section to the CMS result, $\sigma_{\text{tot}} / \sigma_{\text{CMS}}$, as a function of thrust. The x-axis is labeled 'thrust' and ranges from 0 to 1. The y-axis is labeled ' $\sigma_{\text{tot}} / \sigma_{\text{CMS}}$ ' and ranges from 0 to 1. The plot shows three data series: Pythia 6.428 370 (red line with open triangles), Pythia 6.428 default (orange line with open squares), and Pythia 8.170 default (blue line with open triangles). All three series show a sharp increase in the ratio as thrust decreases, with the Pythia 8.170 default model showing the highest ratio at low thrust. The bottom panel is a plot of the ratio of the total cross section to the CMS result, $\sigma_{\text{tot}} / \sigma_{\text{CMS}}$, as a function of thrust. The x-axis is labeled 'thrust' and ranges from 0 to 1. The y-axis is labeled ' $\sigma_{\text{tot}} / \sigma_{\text{CMS}}$ ' and ranges from 0.5 to 2. The plot shows three data series: Pythia 6.428 370 (red line with open triangles), Pythia 6.428 default (orange line with open squares), and Pythia 8.170 default (blue line with open triangles). All three series show a sharp increase in the ratio as thrust decreases, with the Pythia 8.170 default model showing the highest ratio at low thrust. The bottom panel also includes a horizontal band representing the ratio of the total cross section to the CMS result for the three models, with a green band for Pythia 6.428 370, a yellow band for Pythia 6.428 default, and a blue band for Pythia 8.170 default.

mcplots.cern.ch [arXiv:1306.3436]

0.5