

Z+Jet

Figure 1: LHA $\lambda_{0.5}^1$ (CMS jet substructure). The figure consists of two panels. The top panel is a line plot showing the distribution of LHA $\lambda_{0.5}^1$ for CMS data (black squares) and three Pythia models: Pythia 6.428 370 (red triangles), Pythia 6.428 default (orange squares), and Pythia 8.170 default (blue triangles). The x-axis is LHA $\lambda_{0.5}^1$ (0 to 1) and the y-axis is $1/N \frac{dN}{d\ln \lambda_{0.5}^1}$ (0 to 1000). The bottom panel is a stacked histogram showing the ratio of the Pythia models to the CMS data. The y-axis is 'Ratio to CMS' (0.5 to 2) and the x-axis is 'LHA' (0 to 1). The histogram is colored yellow for ratios between 0.5 and 1, and green for ratios between 1 and 2. A horizontal line is drawn at a ratio of 1.0.

Rivet 3.1.10, $\geq 400k$ events

mcplots.cern.ch [arXiv:1306.3436]

2

0.5

LHA