

Jets

The figure consists of two panels sharing a common x-axis labeled 'LHA' ranging from 0 to 1.

Top Panel: The y-axis is labeled $\frac{1}{\text{mathrm d}N/\text{mathrm d}p_{\text{T}}/\text{mathrm d}p_{\text{T}}/\text{mathrm d}p_{\text{T}}}$. It shows two distributions:

- Pythia 8.183 default:** Represented by a blue line with upward-pointing triangle markers. The distribution starts at approximately 1000 at LHA=0.1, peaks at about 2000 at LHA=0.25, and then decreases to near zero at LHA=1.0.
- CMS:** Represented by black square markers with vertical error bars. The distribution is much flatter, remaining below 1000 across the entire LHA range.

Bottom Panel: The y-axis is labeled 'Ratio to CMS'. It shows the ratio of the Pythia 8.183 default distribution to the CMS distribution.

- The ratio is represented by a green line with a yellow shaded uncertainty band.
- The ratio starts at approximately 1.0 at LHA=0.1, remains relatively flat around 1.0, and ends at approximately 1.0 at LHA=1.0.
- The shaded band indicates the uncertainty, which is wider at lower LHA values and narrows as LHA increases.

mcplots.cern.ch [arXiv:1306.3436]

Rivet 3.1.10, 400

k events

2

10