

# Jets

- CMS
- Herwig 7.2.1 default
- ▲ Pythia 8.170 default

Figure 1 consists of two vertically stacked plots sharing a common x-axis labeled 'groomed width' ranging from 0 to 1.

The top plot shows the distribution of groomed width. The left y-axis is labeled  $1/N \frac{dN}{d\text{groomed width}}$  and ranges from 0 to 0.0004. The right y-axis is labeled 'Rivet 3.1.10,  $\geq 3$ ' and ranges from 0 to 10000. The plot includes:
 

- Black squares representing CMS data points.
- A green dashed line with open squares representing the 'Herwig 7.2.1 default' model.
- A blue solid line with filled triangles representing the 'Pythia 8.170 default' model.
- A grey text label 'CMS\_2021\_I1920187' is placed near the data points.

 The distributions peak at a groomed width of approximately 0.05.

The bottom plot shows the 'Ratio to CMS' on the y-axis, ranging from 0.5 to 2.0. It displays:
 

- A green shaded band representing the ratio of the Herwig 7.2.1 default model to the CMS data.
- A yellow shaded band representing the ratio of the Pythia 8.170 default model to the CMS data.

 Both shaded bands are centered around a ratio of 1.0 across the entire range of groomed width.