

Jets

The figure displays the groomed p_{TD2} distribution for CMS data and various Pythia 6.428 models. The top panel shows the differential event count $\frac{dN}{d\ln(p_{TD2})}$ versus groomed p_{TD2} on a log-linear scale. The bottom panel shows the ratio of each model to the CMS data, with a histogram and a green line indicating the ratio is generally close to 1.0.

Legend:

- CMS
- Pythia 6.428 350
- ▲ Pythia 6.428 351
- ▼ Pythia 6.428 352
- △ Pythia 6.428 353
- Pythia 6.428 354
- ☆ Pythia 6.428 355
- Pythia 6.428 356
- Pythia 6.428 357
- Pythia 6.428 358
- Pythia 6.428 359

Y-axis labels (top panel): $\frac{dN}{d\ln(p_{TD2})}$, $\frac{dN}{d\ln(p_{TD2})}$, $\frac{dN}{d\ln(p_{TD2})}$, $\frac{dN}{d\ln(p_{TD2})}$, $\frac{dN}{d\ln(p_{TD2})}$, $\frac{dN}{d\ln(p_{TD2})}$, $\frac{dN}{d\ln(p_{TD2})}$, $\frac{dN}{d\ln(p_{TD2})}$, $\frac{dN}{d\ln(p_{TD2})}$, $\frac{dN}{d\ln(p_{TD2})}$, $\frac{dN}{d\ln(p_{TD2})}$, $\frac{dN}{d\ln(p_{TD2})}$

Y-axis labels (bottom panel): Ratio to CMS, 0.5, 1, 2

X-axis label: groomed p_{TD2}

Text in plot: Groomed $(p_T^D)^2 \lambda_0^2$ (CMS jet substructure), CMS 2021_11920187, Rivet 3.1.10, ≥ 2.4 M events, mcplots.cern.ch [arXiv:1306.3436]

Rivet 3.1.10, $\geq 2.4\text{M}$ events

mcplots.cern.ch [arXiv:1306.3436]

2

1

0.5

groomed pTD2