

Jets

The figure displays the multiplicity distribution of jets in CMS data and various Monte Carlo models. The top panel shows the normalized multiplicity distribution $\frac{1}{N} \frac{dN}{dp_T}$ for CMS (black squares), Pythia 6.428 370 (red line with open triangles), Pythia 6.428 default (orange dashed line with open squares), and Pythia 8.308 default (blue line with solid triangles). The bottom panel shows the ratio of the Monte Carlo models to the CMS data, with yellow bars for Pythia 6.428 370 and green bars for Pythia 8.308 default. The x-axis is multiplicity (0 to 60) and the y-axis is the ratio to CMS (0.5 to 2.0).

Multiplicity	CMS $\frac{1}{N} \frac{dN}{dp_T}$	Pythia 6.428 370 $\frac{1}{N} \frac{dN}{dp_T}$	Pythia 6.428 default $\frac{1}{N} \frac{dN}{dp_T}$	Pythia 8.308 default $\frac{1}{N} \frac{dN}{dp_T}$	Ratio to CMS (Pythia 6.428 370)	Ratio to CMS (Pythia 8.308 default)
5	~1	~1	~1	~1	~1.0	~1.0
10	~1	~40	~40	~48	~1.0	~1.0
15	~1	~45	~45	~55	~1.0	~1.0
20	~1	~15	~15	~15	~1.0	~1.0
25	~1	~1	~1	~1	~1.0	~1.0
30	~1	~1	~1	~1	~1.0	~1.0
35	~1	~1	~1	~1	~1.0	~1.0
40	~1	~1	~1	~1	~1.0	~1.0
45	~1	~1	~1	~1	~1.0	~1.0
50	~1	~1	~1	~1	~1.0	~1.0
55	~1	~1	~1	~1	~1.0	~1.0
60	~1	~1	~1	~1	~1.0	~1.0

Rivet 3.1.10, $\geq 2.7\text{M}$ events

mcplots.cern.ch [arXiv:1306.3436]

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