

Z+Jet

Figure 1 displays the multiplicity distribution of CMS data and the Pythia 8.308 default model. The top panel shows the multiplicity distribution (dN/dλ) for CMS data (black squares) and the Pythia 8.308 default model (blue line with triangles). The bottom panel shows the ratio of the Pythia 8.308 default model to the CMS data (green and yellow bars). The x-axis is multiplicity (0 to 60). The y-axis for the top panel is dN/dλ (0 to 220). The y-axis for the bottom panel is Ratio to CMS (0.5 to 2).

Multiplicity	CMS dN/dλ	Pythia 8.308 dN/dλ	Ratio to CMS
0	~1	~1	~1.0
5	~1	~18	~1.8
10	~1	~100	~1.0
15	~1	~80	~0.8
20	~1	~30	~0.8
25	~1	~10	~1.0
30	~1	~5	~0.8
35	~1	~2	~0.8
40	~1	~1	~1.0
45	~1	~1	~1.0
50	~1	~1	~1.0
55	~1	~1	~1.0
60	~1	~1	~1.0

■ CMS

—▲ Pythia 8.308 default

CMS_2021_I1920187

Ratio to CMS

multiplicity