

Z+Jet

The figure displays the multiplicity distribution of CMS data and Pythia 8.308 default simulation. The top panel shows the distribution of multiplicity (λ_0^0) for CMS (black squares) and Pythia 8.308 default (blue line with triangles). The bottom panel shows the ratio of the Pythia 8.308 default distribution to the CMS distribution, with a green shaded region indicating the ratio is greater than 1 and a yellow shaded region indicating the ratio is less than 1. The x-axis is multiplicity (0 to 60) and the y-axis is the ratio to CMS (0.5 to 2).

Multiplicity	CMS $dN/d\lambda_0^0$	Pythia 8.308 $dN/d\lambda_0^0$	Ratio to CMS
0	~1	~1	~1.0
5	~1	~18	~18
10	~1	~100	~100
15	~1	~80	~80
20	~1	~30	~30
25	~1	~10	~10
30	~1	~5	~5
35	~1	~2	~2
40	~1	~1	~1
45	~1	~1	~1
50	~1	~1	~1
55	~1	~1	~1
60	~1	~1	~1

■ CMS

—▲ Pythia 8.308 default

~~CMS_2021_I1920187~~

Ratio to CMS

multiplicity