

Selection	Ttbar	W+bb	W+cc	W+udsg	DY+bb
one tight μ + veto loose μ	43.60%	55.11%	58.69%	52.29%	35.44%
Jet identification ($p_T > 80$ GeV)	40.60%	52.08%	55.57%	50.03%	34.61%
Jet $p_T > 200$ GeV	9.04%	8.62%	8.61%	6.66%	5.66%
$\Delta R(\mu, j) > 1$	7.00%	6.51%	6.72%	5.58%	3.22%
Jet CSV $>$ CSVL	2.17%	4.07%	2.26%	0.58%	1.69%
$110 < m_{\text{pruned}_{\text{jet}}} < 135$ GeV	0.16%	0.05%	0.03%	0.003%	0.04%
$E_T^{\text{miss}} > 40$ GeV	0.14%	0.05%	0.02%	0.003%	0.02%
W $p_T > 200$ GeV	0.08%	0.04%	0.02%	0.003%	0.01%
$\Delta R(\mu, \text{jet}) > \pi/2$	0.08%	0.04%	0.02%	0.003%	0.01%
$ \Delta\Phi(\text{jet}, E_T^{\text{miss}}) > 2$	0.08%	0.04%	0.02%	0.003%	0.01%
$ \Delta\Phi(\text{jet}, W) > 2$	0.08%	0.04%	0.02%	0.003%	0.01%

DY+cc	DY+udsg	WW	WZ	ZZ	signal
35.65%	37.03%	23.05%	21.47%	16.41%	89.38%
34.86%	36.09%	12.33%	11.97%	10.36%	89.15%
6.12%	5.04%	1.02%	0.92%	0.59%	86.42%
3.55%	2.97%	0.85%	0.75%	0.30%	79.28%
0.95%	0.31%	0.12%	0.15%	0.06%	59.03%
0.01%	0.004%	0.003%	0.004%	0.001%	26.15%
0.01%	0.002%	0.002%	0.004%	0.001%	25.70%
0.004%	0.001%	0.002%	0.004%	0.0004%	25.68%
0.004%	0.001%	0.002%	0.004%	0.0004%	25.68%
0.004%	0.001%	0.002%	0.003%	0.0002%	25.51%
0.004%	0.001%	0.002%	0.003%	0.0002%	25.51%