

CMS Simulation Supplementary

 $\tau_h \tau_h$

Predicted event class

ggH 0 Jet $p_T^H[0,10]$	89	21	4	0	0	2	0	0	0	0	0	0	0	0	12	17	17	
ggH 0 Jet $p_T^H[10,200]$	4	58	13	0	0	2	0	0	0	0	0	0	0	0	8	14	10	
ggH 1 Jet $p_T^H[0,60]$	1	13	67	5	0	18	1	0	2	0	0	1	0	1	2	3	5	4
ggH 1 Jet $p_T^H[60,120]$	0	1	3	74	3	1	15	0	4	0	0	3	0	4	4	4	3	3
ggH 1 Jet $p_T^H[120,200]$	0	0	0	2	81	0	1	9	4	3	0	3	0	5	4	4	1	2
ggH ≥ 2 Jet $m_{jj}[0,350] p_T^H[0,60]$	1	2	10	1	0	73	3	0	2	0	0	8	0	1	2	2	2	3
ggH ≥ 2 Jet $m_{jj}[0,350] p_T^H[60,120]$	0	0	0	12	1	1	73	4	3	0	0	17	0	1	2	2	1	2
ggH ≥ 2 Jet $m_{jj}[0,350] p_T^H[120,200]$	0	0	0	0	8	0	2	76	5	3	0	25	0	1	3	3	1	3
ggH ≥ 2 Jet $m_{jj} > 350 p_T^H[0,200]$	0	0	0	1	1	0	1	3	25	1	0	1	1	4	14	1	0	1
ggH $p_T^H[200,300]$	0	0	0	0	2	0	0	2	1	68	4	13	10	0	0	4	0	3
ggH $p_T^H \geq 300$	0	0	0	0	0	0	0	0	0	5	84	9	13	0	0	3	0	3
qqH < 2 Jet or $m_{jj}[0,350]$	0	0	0	0	0	0	1	3	0	5	2	14	0	0	0	0	0	0
qqH ≥ 2 Jet $m_{jj} > 350 p_T^H \geq 200$	0	0	0	0	0	0	0	0	1	12	8	1	71	2	1	1	0	2
qqH ≥ 2 Jet $m_{jj} > 700 p_T^H[0,200]$	0	0	1	1	1	0	0	0	19	0	0	1	3	76	4	0	0	1
qqH ≥ 2 Jet $m_{jj}[350,700] p_T^H[0,200]$	0	0	1	2	2	2	2	1	31	0	0	2	1	4	63	1	0	1
Genuine τ	2	1	0	1	2	0	0	2	1	3	1	1	1	0	1	34	10	16
Jet $\rightarrow \tau_h$	2	2	1	0	0	0	0	0	0	0	0	0	0	0	1	8	43	5
Misc	1	0	0	0	0	1	0	0	1	0	1	1	1	0	1	10	3	24
	ggH 0 Jet $p_T^H[0,10]$	ggH 0 Jet $p_T^H[10,200]$	ggH 1 Jet $p_T^H[0,60]$	ggH 1 Jet $p_T^H[60,120]$	ggH 1 Jet $p_T^H[120,200]$	ggH ≥ 2 Jet $m_{jj}[0,350] p_T^H[0,60]$	ggH ≥ 2 Jet $m_{jj}[0,350] p_T^H[60,120]$	ggH ≥ 2 Jet $m_{jj}[0,350] p_T^H[120,200]$	ggH ≥ 2 Jet $m_{jj} > 350 p_T^H[0,200]$	ggH $p_T^H[200,300]$	ggH $p_T^H \geq 300$	qqH < 2 Jet or $m_{jj}[0,350]$	qqH ≥ 2 Jet $m_{jj} > 350 p_T^H \geq 200$	qqH ≥ 2 Jet $m_{jj} > 700 p_T^H[0,200]$	qqH ≥ 2 Jet $m_{jj}[350,700] p_T^H[0,200]$	Genuine τ	Jet $\rightarrow \tau_h$	Misc

Rel. fraction of true class in %



True event class