TABLES

TABLE I. Number of observed and expected background events after the final selection and for the different SM contributions as a function of mass. Last three columns show the total acceptances and expected 95% C.L. upper limits on the number of signal events (N_{signal}) and on $\sigma \times \mathcal{BR}$, respectively.

m_φ (GeV/c^2)	Observed Events	Expected Background	Acceptance (%)	N_{signal} (95% C.L.)	$\sigma \times \mathcal{BR}$ (pb, 95% C.L.)
70	5	4.6 ± 1.4	0.16 ± 0.03	7.9	53.3
80	4	4.6 ± 1.4	0.22 ± 0.04	6.6	31.7
90	3	3.8 ± 1.3	0.23 ± 0.04	5.8	27.1
100	3	3.8 ± 1.3	0.25 ± 0.04	5.9	25.7
110	2	3.7 ± 1.1	0.25 ± 0.04	4.8	20.7
120	2	3.5 ± 1.1	0.28 ± 0.05	4.9	19.2
130	1	2.6 ± 0.9	0.28 ± 0.05	4.1	15.8
140	1	1.7 ± 0.8	0.29 ± 0.05	4.3	16.2
150	0	1.5 ± 0.8	0.30 ± 0.05	3.2	11.5
200	0	1.2 ± 0.7	0.41 ± 0.07	3.2	8.5
250	0	1.0 ± 0.7	0.47 ± 0.08	3.2	7.5
300	0	0.1 ± 0.4	0.59 ± 0.09	3.2	5.8

TABLE II. Expected QCD, fake triple tags, $t\bar{t}$, $Wb\bar{b} + Wc\bar{c}$, $Zb\bar{b} + Zc\bar{c}$, and total number of background events as a function of mass.

m_φ (GeV/c^2)	QCD	Fakes	$t\bar{t}$	$Wb\bar{b} + Wc\bar{c}$	$Zb\bar{b} + Zc\bar{c}$	Total
70	2.97 ± 0.70	0.5 ± 1.2	0.70 ± 0.18	0.09 ± 0.06	0.37 ± 0.02	4.6 ± 1.4
80	2.97 ± 0.70	0.5 ± 1.2	0.70 ± 0.18	0.09 ± 0.06	0.37 ± 0.02	4.6 ± 1.4
90	2.16 ± 0.55	0.5 ± 1.2	0.70 ± 0.18	0.09 ± 0.06	0.37 ± 0.02	3.8 ± 1.3
100	2.16 ± 0.55	0.5 ± 1.2	0.70 ± 0.18	0.09 ± 0.07	0.37 ± 0.02	3.8 ± 1.3
110	2.16 ± 0.55	0.4 ± 0.9	0.68 ± 0.18	0.09 ± 0.07	0.37 ± 0.02	3.7 ± 1.1
120	2.16 ± 0.55	0.3 ± 0.9	0.66 ± 0.17	0.07 ± 0.06	0.29 ± 0.02	3.5 ± 1.1
130	1.44 ± 0.45	0.3 ± 0.8	0.64 ± 0.17	0.05 ± 0.05	0.21 ± 0.02	2.6 ± 0.9
140	0.73 ± 0.40	0.2 ± 0.7	0.60 ± 0.16	0.04 ± 0.05	0.16 ± 0.02	1.7 ± 0.8
150	0.73 ± 0.40	0.1 ± 0.7	0.55 ± 0.15	0.03 ± 0.05	0.12 ± 0.02	1.5 ± 0.8
200	0.73 ± 0.40	0.1 ± 0.6	0.32 ± 0.09	0.00 ± 0.00	0.00 ± 0.00	1.2 ± 0.7
250	0.73 ± 0.40	0.1 ± 0.6	0.17 ± 0.05	0.00 ± 0.00	0.00 ± 0.00	1.0 ± 0.7
300	0.01 ± 0.01	0.1 ± 0.4	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.1 ± 0.4