

Channel	Dileptonic $t\bar{t} + p_T^{\text{miss}}$			$\ell + \text{jets}$ $t\bar{t} + p_T^{\text{miss}}$	All-hadronic $t\bar{t} + p_T^{\text{miss}}$		$b\bar{b} + p_T^{\text{miss}}$	
Signal Region	ee	$e\mu$	$\mu\mu$	$e, \mu$	0,1 RTT	2 RTT	1 b tag	2 b tags
$t\bar{t}$	$1133 \pm 29$	$4228 \pm 73$	$2412 \pm 51$	$24.6 \pm 2.2$	$203 \pm 18$	$152 \pm 13$	$284 \pm 28$	$145 \pm 11$
W + jets	—	—	—	$6.4 \pm 1.6$	$23.1 \pm 4.5$	$11.9 \pm 1.3$	$829 \pm 59$	$38.5 \pm 5.5$
Z + jets	$14 \pm 12$	$2.5 \pm 4.7$	$32 \pm 15$	$0.10 \pm 0.04$	$44 \pm 11$	$13.0 \pm 1.3$	$1613 \pm 64$	$110.7 \pm 6.7$
Single t	$57 \pm 12$	$182 \pm 36$	$104 \pm 22$	$7.0 \pm 2.0$	$19.1 \pm 2.0$	$7.3 \pm 1.4$	$105 \pm 16$	$23.6 \pm 4.0$
Diboson	$2.0 \pm 0.4$	$4.0 \pm 0.6$	$3.1 \pm 0.5$	$1.7 \pm 0.4$	$3.3 \pm 0.3$	$1.0 \pm 0.3$	$38.7 \pm 6.6$	$9.2 \pm 1.6$
Multijets	—	—	—	—	$0.10 \pm 0.08$	$2.9 \pm 2.2$	$52 \pm 22$	$0.5 \pm 0.2$
Misid. lepton	$2.5 \pm 7.7$	$24 \pm 11$	$29.0 \pm 8.7$	—	—	—	—	—
Background	$1208 \pm 32$	$4439 \pm 71$	$2580 \pm 52$	$39.8 \pm 3.4$	$293 \pm 21$	$188 \pm 12$	$2922 \pm 77$	$327 \pm 12$
Data	1203	4436	2585	45	305	181	2919	337

$m_a = 50 \text{ GeV}$

$t\bar{t} + \chi\bar{\chi}$	$1.19 \pm 0.37$	$3.48 \pm 0.73$	$1.62 \pm 0.36$	$5.9 \pm 1.0$	$7.5 \pm 1.5$	$8.4 \pm 1.8$	$1.21 \pm 0.38$	$1.34 \pm 0.34$
$b\bar{b} + \chi\bar{\chi}$	$0 \pm 0$	$0 \pm 0$	$0 \pm 0$	$0 \pm 0$	$0.01 \pm 0.05$	$0 \pm 0$	$3.44 \pm 0.94$	$0.55 \pm 0.22$

$m_\phi = 100 \text{ GeV}$

$t\bar{t} + \chi\bar{\chi}$	$1.27 \pm 0.49$	$6.3 \pm 1.1$	$2.51 \pm 0.76$	$4.44 \pm 0.95$	$7.3 \pm 2.0$	$10.2 \pm 3.1$	$2.22 \pm 0.53$	$2.11 \pm 0.64$
$b\bar{b} + \chi\bar{\chi}$	$0 \pm 0$	$0 \pm 0$	$0 \pm 0$	$0 \pm 0$	$0.16 \pm 0.16$	$0.04 \pm 0.14$	$2.21 \pm 0.66$	$0.49 \pm 0.15$