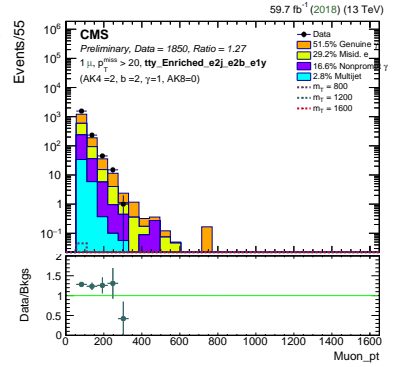
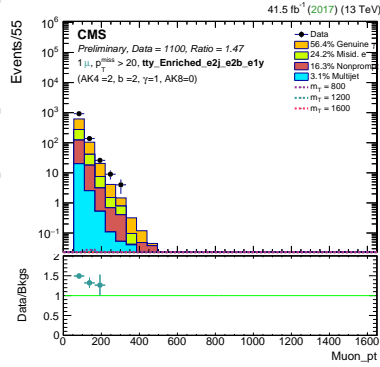
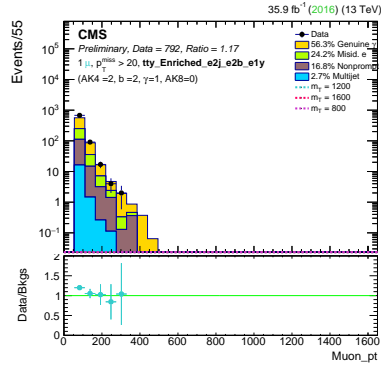
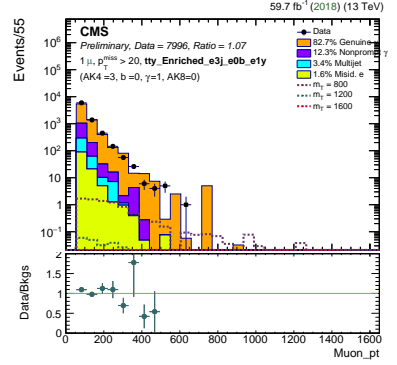
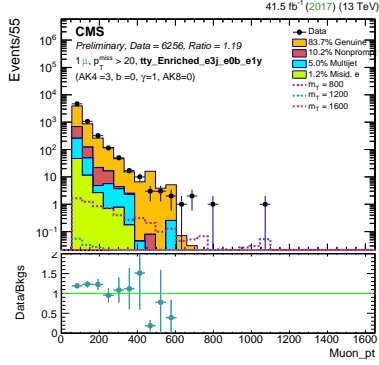
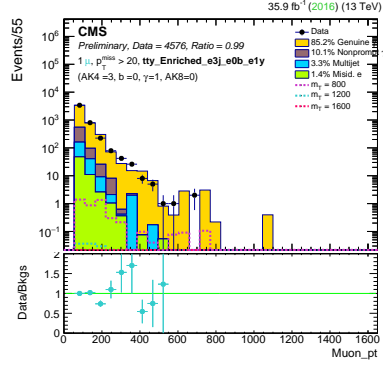


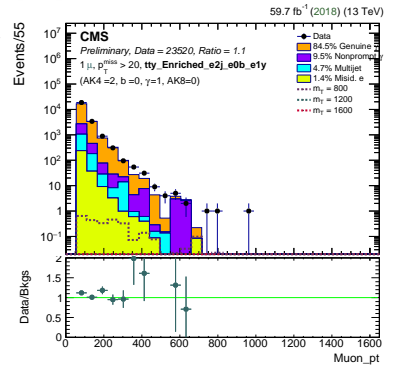
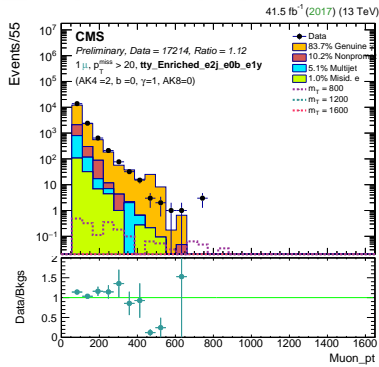
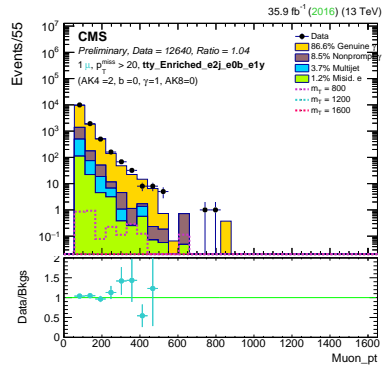
Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)
Data	2057.0	—	—	—	—	Data	2772.0	—	—	—	—	Data	3536.0	—	—	—	—
$W + \gamma$	959.0	99.7	0.0	0.0	0.3	$W + \gamma$	990.4	100.0	0.0	0.0	0.0	$W + \gamma$	1348.8	99.6	0.4	0.0	0.0
$t\bar{t}\gamma$	351.5	99.4	0.3	0.1	0.1	$t\bar{t}\gamma$	370.3	99.4	0.4	0.1	0.1	$t\bar{t}\gamma$	481.4	99.3	0.4	0.2	0.1
$t/\bar{t}\bar{t}$	186.0	26.1	48.1	15.3	10.5	$t/\bar{t}\bar{t}$	212.0	26.9	46.8	14.4	11.9	$t/\bar{t}\bar{t}$	310.5	20.8	50.2	18.1	10.8
$Z + \gamma$	177.5	99.3	0.4	0.0	0.2	$Z + \gamma$	207.1	99.4	0.0	0.0	0.6	$Z + \gamma$	229.7	99.3	0.3	0.2	0.1
$W + \text{jets}$	92.4	0.0	67.4	0.0	32.6	$W + \text{jets}$	107.6	0.0	73.6	0.0	26.4	$W + \text{jets}$	185.2	0.0	48.9	0.0	51.1
Others	69.7	83.5	11.4	3.1	1.9	Others	99.3	89.1	6.8	1.0	3.1	Others	170.3	43.5	23.8	0.2	32.5
QCD	41.0	97.5	2.4	0.0	0.1	$DY + \text{jets}$	93.3	33.5	29.8	0.0	36.8	Others	135.1	86.2	9.4	2.0	2.4
$DY + \text{jets}$	26.7	17.6	41.1	5.8	35.5	QCD	55.7	86.9	9.6	0.0	3.5	$DY + \text{jets}$	89.5	37.0	40.7	4.0	18.3
Bkgs	1903.7	85.8	9.1	1.7	3.4	Bkgs	2135.8	83.8	10.3	1.5	4.4	Bkgs	2950.5	79.2	11.7	2.2	6.9
$m_T = 800$	32.2	0.0	99.7	0.0	0.3	$m_T = 800$	41.7	0.1	99.8	0.0	0.1	$m_T = 800$	52.8	0.1	99.7	0.0	0.1
$m_T = 1200$	1.3	0.0	100.0	0.0	0.0	$m_T = 1200$	1.5	0.1	99.9	0.1	-0.1	$m_T = 1200$	2.1	0.1	99.8	0.1	0.0
$m_T = 1600$	0.1	0.6	99.4	0.0	0.0	$m_T = 1600$	0.1	-0.2	100.0	0.1	0.1	$m_T = 1600$	0.1	-0.0	99.8	0.1	0.1
Data/Bkgs	1.08	—	—	—	—	Data/Bkgs	1.3	—	—	—	—	Data/Bkgs	1.2	—	—	—	—



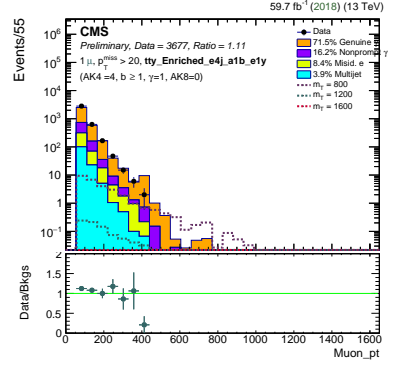
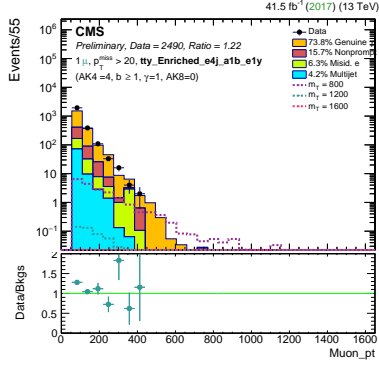
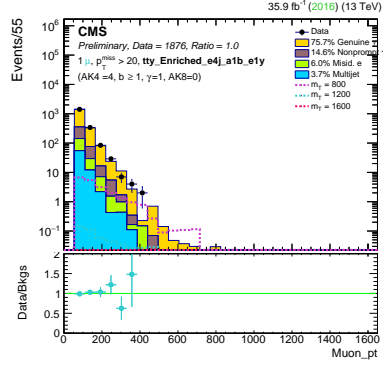
Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)
Data	792.0	—	—	—	—	Data	1100.0	—	—	—	—	Data	1850.0	—	—	—	—
$t/\bar{t}\bar{t}$	359.2	19.7	30.3	45.1	4.9	$t/\bar{t}\bar{t}$	413.1	21.9	29.2	43.3	5.6	$t/\bar{t}\bar{t}$	846.7	18.6	27.2	49.5	4.6
$t\bar{t}\gamma$	282.6	98.8	0.4	0.7	0.1	$t\bar{t}\gamma$	299.3	98.7	0.4	0.8	0.1	$t\bar{t}\gamma$	499.8	98.4	0.6	0.9	0.2
$Z + \gamma$	20.1	100.0	0.0	0.0	0.0	$Z + \gamma$	26.3	100.0	0.0	0.0	0.0	QCD	53.5	100.0	0.0	0.0	0.0
$W + \gamma$	6.2	100.0	0.0	0.0	0.0	$W + \gamma$	7.1	100.0	0.0	0.0	0.0	$Z + \gamma$	24.5	100.0	0.0	0.0	0.0
$DY + \text{jets}$	2.8	51.5	48.5	0.0	0.0	Others	2.4	86.7	2.2	8.8	2.4	$W + \gamma$	11.2	100.0	0.0	0.0	0.0
Others	2.3	79.3	15.0	4.7	1.1	QCD	0.9	100.0	0.0	0.0	0.0	$W + \text{jets}$	7.0	0.0	100.0	0.0	0.0
$W + \text{jets}$	2.1	0.0	100.0	0.0	0.0	$DY + \text{jets}$	0.0	100.0	0.0	0.0	0.0	Others	5.9	76.0	13.8	7.1	3.0
QCD	0.7	100.0	0.0	0.0	0.0	$W + \text{jets}$	0	0	0	0	0	$DY + \text{jets}$	4.8	100.0	0.0	0.0	0.0
Bkgs	675.9	56.3	16.8	24.2	2.7	Bkgs	749.1	56.4	16.3	24.2	3.1	Bkgs	1453.4	51.5	16.6	29.2	2.8
$m_T = 1200$	0.0	0.0	100.0	0.0	0.0	$m_T = 800$	0.1	0.0	100.0	0.0	0.0	$m_T = 800$	0.0	0.0	100.0	0.0	0.0
$m_T = 1600$	0.0	0.0	100.0	0.0	0.0	$m_T = 1200$	0.0	0.0	100.0	0.0	0.0	$m_T = 1200$	0.0	0.0	100.0	0.0	0.0
$m_T = 800$	0.0	0.0	100.0	0.0	0.0	$m_T = 1600$	0.0	0.0	100.0	0.0	0.0	$m_T = 1600$	0.0	0.0	100.0	0.0	0.0
Data/Bkgs	1.17	—	—	—	—	Data/Bkgs	1.47	—	—	—	—	Data/Bkgs	1.27	—	—	—	—



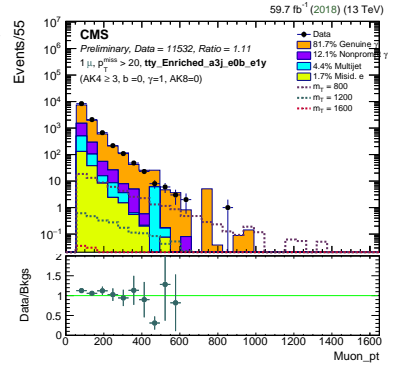
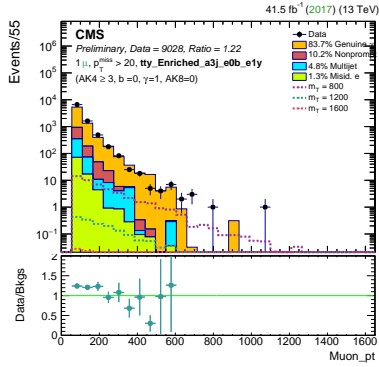
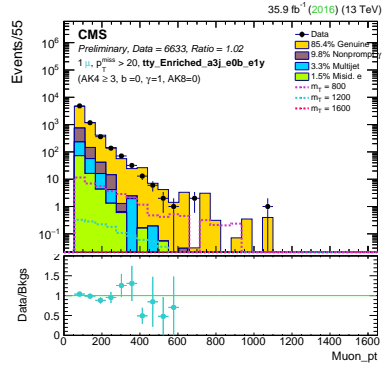
Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)
Data	4576.0	—	—	—	—	Data	6256.0	—	—	—	—	Data	7996.0	—	—	—	—
$W + \gamma$	2486.4	99.9	0.0	0.0	0.1	$W + \gamma$	2710.6	99.8	0.0	0.0	0.2	$W + \gamma$	3806.0	99.9	0.0	0.0	0.1
$Z + \gamma$	594.3	99.5	0.1	0.1	0.3	$Z + \gamma$	784.8	100.1	0.1	-0.1	-0.0	$Z + \gamma$	987.6	99.7	0.2	0.0	0.1
$t\bar{t}\gamma$	422.7	99.2	0.4	0.2	0.2	$t\bar{t}\gamma$	442.1	99.3	0.4	0.2	0.1	$t\bar{t}\gamma$	603.7	99.2	0.5	0.3	0.1
QCD	358.9	62.7	37.1	0.0	0.2	$W + jets$	395.5	0.0	57.6	0.0	42.4	QCD	545.4	65.3	34.4	0.0	0.4
$t/\bar{t}\bar{t}$	298.7	30.2	42.9	17.6	9.3	$t/\bar{t}\bar{t}$	330.8	26.7	45.5	17.6	10.3	$t/\bar{t}\bar{t}$	498.1	23.9	46.7	21.1	8.3
$W + jets$	231.3	0.0	64.1	0.6	35.3	QCD	223.4	67.7	27.9	0.0	4.4	$W + jets$	495.8	0.0	70.5	0.0	29.5
$DY + jets$	116.7	34.1	34.4	3.1	28.4	$DY + jets$	189.8	40.2	39.5	0.0	20.2	$DY + jets$	281.0	36.6	43.1	1.1	19.2
Others	111.3	79.9	13.5	3.3	3.3	Others	178.0	84.4	9.5	2.7	3.4	Others	264.6	84.7	9.2	3.1	3.0
Bkgs	4620.3	85.2	10.1	1.4	3.3	Bkgs	5254.9	83.7	10.2	1.2	5.0	Bkgs	7482.3	82.7	12.3	1.6	3.4
$m_T = 800$	4.5	0.0	97.8	2.2	0.0	$m_T = 800$	6.2	0.0	99.7	0.0	0.3	$m_T = 800$	8.3	0.3	99.3	0.4	0.0
$m_T = 1200$	0.2	0.0	98.1	0.0	1.9	$m_T = 1200$	0.2	0.5	99.5	0.0	0.0	$m_T = 1200$	0.3	0.0	100.0	0.0	0.0
$m_T = 1600$	0.0	0.0	100.0	0.0	0.0	$m_T = 1600$	0.0	0.8	99.2	0.0	0.0	$m_T = 1600$	0.0	-0.6	99.5	1.1	0.0
Data/Bkgs	0.99	—	—	—	—	Data/Bkgs	1.19	—	—	—	—	Data/Bkgs	1.07	—	—	—	—



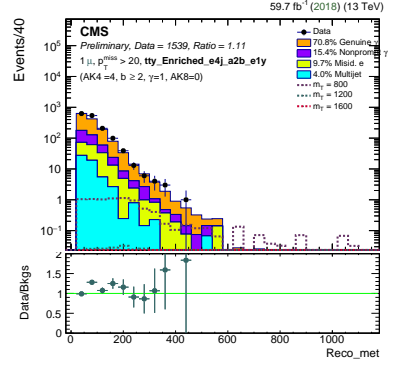
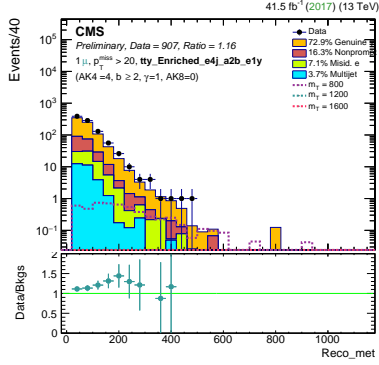
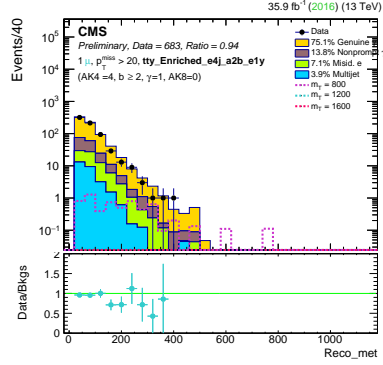
Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)
Data	12640.0	—	—	—	—	Data	17214.0	—	—	—	—	Data	23520.0	—	—	—	—
$W + \gamma$	6729.1	99.9	0.0	0.0	0.1	$W + \gamma$	8101.4	99.6	0.2	0.0	0.2	$W + \gamma$	11401.8	99.9	0.0	0.0	0.1
$Z + \gamma$	2463.1	99.7	0.1	0.0	0.1	$Z + \gamma$	3144.2	99.8	0.2	0.0	0.1	$Z + \gamma$	4357.5	99.8	0.2	0.0	0.0
$W + jets$	851.8	0.0	62.7	0.2	37.1	$W + jets$	1341.9	0.0	55.5	0.2	44.3	$W + jets$	1846.7	0.0	63.6	0.0	36.4
QCD	544.3	79.6	17.8	0.0	2.6	QCD	795.0	54.3	41.5	0.0	4.1	QCD	889.0	29.7	38.2	25.1	7.0
$t/\bar{t}\bar{t}$	512.1	32.9	38.2	22.3	6.6	$DY + jets$	573.5	44.8	36.4	3.0	15.9	$t/\bar{t}\bar{t}$	889.0	29.7	38.2	25.1	7.0
$t\bar{t}\gamma$	487.2	99.1	0.5	0.3	0.1	$t/\bar{t}\bar{t}$	559.1	33.6	38.0	21.0	7.4	$DY + jets$	792.7	42.2	39.9	3.6	14.3
$DY + jets$	349.9	30.4	46.4	2.6	20.7	$t\bar{t}\gamma$	515.9	99.1	0.5	0.3	0.1	$t\bar{t}\gamma$	718.7	98.9	0.6	0.4	0.1
Others	214.9	71.4	17.2	7.1	4.4	Others	300.5	78.4	14.0	4.4	3.2	Others	455.4	73.2	17.2	6.1	3.5
Bkgs	12152.5	86.6	8.5	1.2	3.7	Bkgs	15331.7	83.7	10.2	1.0	5.1	Bkgs	21319.3	84.5	9.5	1.4	4.7
$m_T = 800$	2.7	0.0	100.0	0.0	0.0	$m_T = 800$	1.8	0.6	99.4	0.0	0.0	$m_T = 800$	2.7	0.8	99.2	0.0	0.0
$m_T = 1200$	0.0	0.0	100.0	0.0	0.0	$m_T = 1200$	0.1	0.0	100.0	0.0	0.0	$m_T = 1200$	0.1	0.0	100.0	0.0	0.0
$m_T = 1600$	0.0	0.0	99.4	0.0	0.6	$m_T = 1600$	0.0	0.0	97.5	2.5	0.0	$m_T = 1600$	0.0	0.0	100.0	0.0	0.0
Data/Bkgs	1.04	—	—	—	—	Data/Bkgs	1.12	—	—	—	—	Data/Bkgs	1.1	—	—	—	—



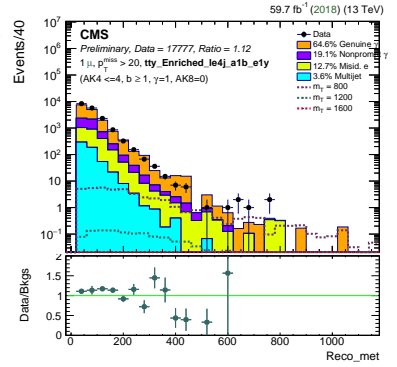
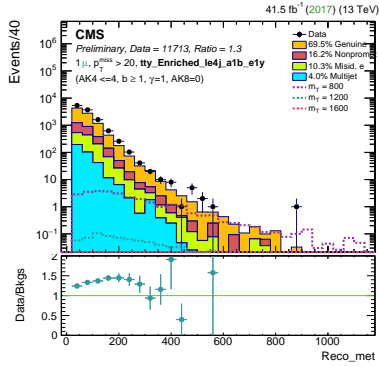
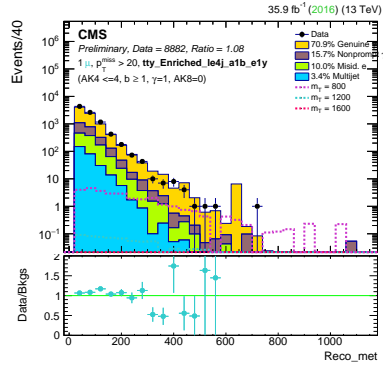
Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)
Data	1876.0	—	—	—	—	Data	2490.0	—	—	—	—	Data	3677.0	—	—	—	—
$t\bar{t}\gamma$	1136.9	99.5	0.3	0.1	0.1	$t\bar{t}\gamma$	1199.8	99.4	0.4	0.2	0.1	$t\bar{t}\gamma$	1883.7	99.3	0.4	0.2	0.1
$t/t\bar{t}$	556.8	23.8	44.9	19.6	11.7	$t/t\bar{t}$	655.0	24.6	45.6	18.7	11.1	$t/t\bar{t}$	1129.9	20.1	45.1	24.1	10.7
$W + \gamma$	92.2	100.0	0.0	0.0	0.0	$W + \gamma$	81.6	100.0	0.0	0.0	0.0	$W + \gamma$	187.4	100.0	0.0	0.0	0.0
QCD	30.7	72.4	27.6	0.0	0.0	$Z + \gamma$	32.6	99.0	1.0	0.0	0.0	$Z + \gamma$	46.1	99.4	0.6	0.0	0.0
$Z + \gamma$	25.5	98.6	0.1	0.0	1.3	QCD	31.8	62.9	15.9	0.0	21.2	Others	40.1	78.0	13.4	6.0	2.6
Others	18.3	77.2	12.8	6.1	3.9	Others	23.5	84.4	7.9	5.0	2.7	$DY + jets$	18.3	71.2	28.8	0.0	0.0
$W + jets$	9.0	0.0	68.6	0.0	31.4	$W + jets$	13.2	0.0	68.8	0.0	31.2	$W + jets$	13.0	0.0	51.8	0.0	48.2
$DY + jets$	6.1	49.3	50.7	0.0	0.0	$DY + jets$	10.9	46.4	27.4	26.2	0.0	QCD	8.6	55.2	44.8	0.0	0.0
Bkgs	1875.4	75.7	14.6	6.0	3.7	Bkgs	2048.5	73.8	15.7	6.3	4.2	Bkgs	3327.0	71.5	16.2	8.4	3.9
$m_T = 800$	21.1	0.0	99.6	0.4	0.0	$m_T = 800$	20.0	0.1	99.6	0.2	0.1	$m_T = 800$	28.9	0.0	99.8	0.2	0.0
$m_T = 1200$	0.5	0.0	100.0	0.0	0.0	$m_T = 1200$	0.5	0.0	99.4	0.4	0.2	$m_T = 1200$	0.9	-0.0	100.0	0.0	0.0
$m_T = 1600$	0.0	0.0	100.0	0.0	0.0	$m_T = 1600$	0.0	0.1	99.7	0.2	0.0	$m_T = 1600$	0.1	-0.5	100.5	0.0	0.0
Data/Bkgs	1.0	—	—	—	—	Data/Bkgs	1.22	—	—	—	—	Data/Bkgs	1.11	—	—	—	—



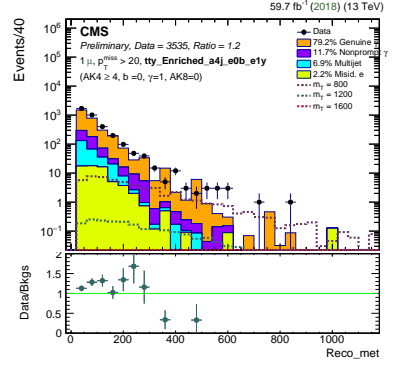
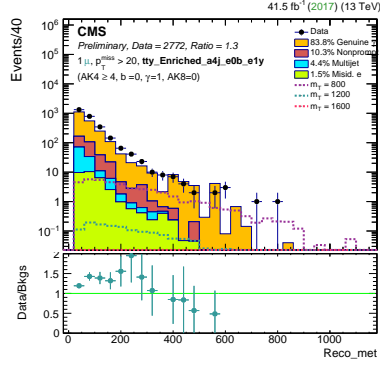
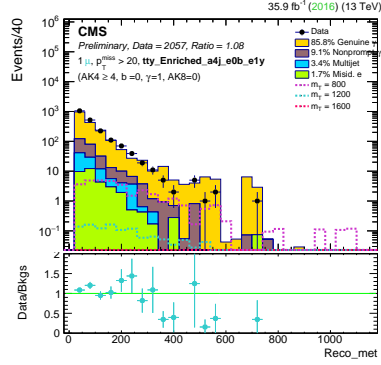
Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)
Data	6633.0	—	—	—	—	Data	9028.0	—	—	—	—	Data	11532.0	—	—	—	—
$W + \gamma$	3445.4	99.8	0.0	0.0	0.2	$W + \gamma$	3701.0	99.9	0.0	0.0	0.1	$W + \gamma$	5154.8	99.8	0.1	0.0	0.1
$t\bar{t}\gamma$	774.2	99.3	0.3	0.2	0.2	$Z + \gamma$	991.9	99.9	0.0	-0.1	0.1	$Z + \gamma$	1217.2	99.7	0.2	0.1	0.1
$Z + \gamma$	771.8	99.4	0.2	0.0	0.3	$t\bar{t}\gamma$	812.4	99.3	0.4	0.2	0.1	$t\bar{t}\gamma$	1085.1	99.2	0.4	0.2	0.1
$t/t\bar{t}$	484.7	28.6	44.9	16.7	9.8	$t/t\bar{t}$	542.9	26.8	46.0	16.3	10.9	$t/t\bar{t}$	808.6	22.7	48.1	19.9	9.3
QCD	399.8	66.3	33.5	0.0	0.2	$W + jets$	503.1	0.0	61.0	0.0	39.0	QCD	715.7	60.1	31.8	0.1	8.0
$W + jets$	323.7	0.0	65.0	0.4	34.5	$DY + jets$	283.0	38.0	36.3	0.0	25.7	$W + jets$	681.1	0.0	64.6	0.0	35.4
Others	181.0	81.3	12.7	3.2	2.8	QCD	279.1	71.5	24.3	0.0	4.2	Others	399.8	85.2	9.3	2.7	2.8
$DY + jets$	143.3	31.0	35.7	3.6	29.7	Others	277.2	86.1	8.6	2.1	3.3	$DY + jets$	370.5	36.7	42.5	1.8	19.0
Bkgs	6524.1	85.4	9.8	1.5	3.3	Bkgs	7390.7	83.7	10.2	1.3	4.8	Bkgs	10432.8	81.7	12.1	1.7	4.4
$m_T = 800$	36.7	0.0	99.5	0.3	0.3	$m_T = 800$	47.8	0.1	99.8	0.0	0.1	$m_T = 800$	61.1	0.2	99.7	0.1	0.1
$m_T = 1200$	1.4	0.0	99.8	0.0	0.2	$m_T = 1200$	1.7	0.1	99.9	0.1	-0.0	$m_T = 1200$	2.3	0.1	99.8	0.1	0.0
$m_T = 1600$	0.1	0.5	99.5	0.0	0.0	$m_T = 1600$	0.1	-0.1	99.9	0.1	0.1	$m_T = 1600$	0.2	-0.1	99.8	0.2	0.1
Data/Bkgs	1.02	—	—	—	—	Data/Bkgs	1.22	—	—	—	—	Data/Bkgs	1.11	—	—	—	—



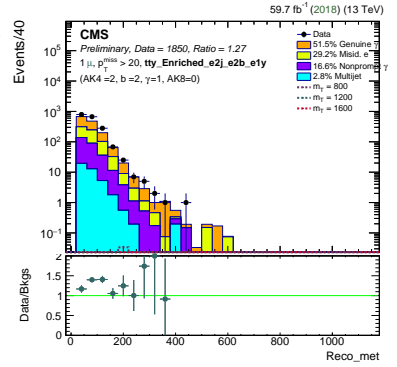
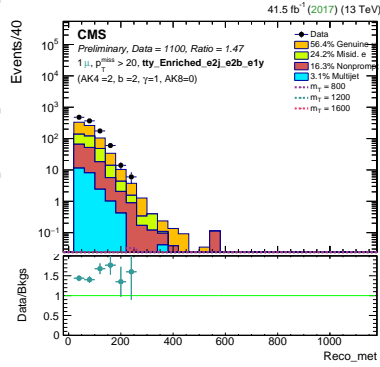
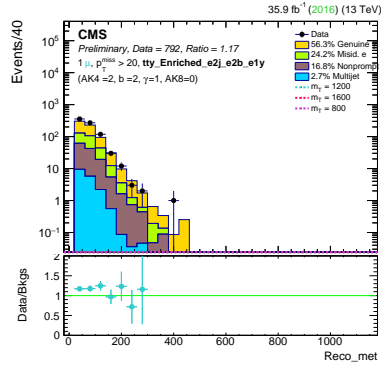
Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)
Data	683.0	—	—	—	—	Data	907.0	—	—	—	—	Data	1539.0	—	—	—	—
$t\bar{t}\gamma$	483.2	99.5	0.3	0.1	0.1	$t\bar{t}\gamma$	508.6	99.4	0.3	0.2	0.1	$t\bar{t}\gamma$	868.7	99.3	0.3	0.2	0.1
$t/\bar{t}$	219.4	20.1	44.4	23.0	12.5	$t/\bar{t}$	252.7	20.2	47.0	21.4	11.3	$t/\bar{t}$	479.5	17.3	43.8	27.5	11.4
$W + \gamma$	9.1	100.0	0.0	0.0	0.0	$W + \gamma$	7.2	81.0	9.8	7.2	2.0	$W + \gamma$	20.8	100.0	0.0	0.0	0.0
Others	4.8	71.2	14.0	14.5	0.3	QCD	6.2	19.4	80.6	0.0	0.0	Others	12.6	78.8	11.6	6.2	3.3
QCD	4.7	100.0	0.0	0.0	0.0	$W + \gamma$	4.6	100.0	0.0	0.0	0.0	$Z + \gamma$	7.3	100.0	0.0	0.0	0.0
$DY + jets$	1.5	100.0	0.0	0.0	0.0	$Z + \gamma$	3.3	100.0	0.0	0.0	0.0	$DY + jets$	1.3	100.0	0.0	0.0	0.0
$Z + \gamma$	1.4	76.1	0.0	0.0	23.9	$W + jets$	1.4	0.0	100.0	0.0	0.0	$W + jets$	0	0	0	0	0
$W + jets$	0.8	0.0	100.0	0.0	0.0	$DY + jets$	0	0	0	0	0	QCD	0	0	0	0	0
Bkgs	724.9	75.1	13.8	7.1	3.9	Bkgs	784.0	72.9	16.3	7.1	3.7	Bkgs	1390.2	70.8	15.4	9.7	4.0
$m_T = 800$	6.3	0.0	98.6	1.4	0.0	$m_T = 800$	5.5	0.3	99.1	0.6	0.0	$m_T = 800$	8.4	0.0	100.0	0.0	0.0
$m_T = 1200$	0.1	0.0	100.0	0.0	0.0	$m_T = 1200$	0.1	0.0	98.8	1.2	0.0	$m_T = 1200$	0.3	0.0	100.0	0.0	0.0
$m_T = 1600$	0.0	0.0	100.0	0.0	0.0	$m_T = 1600$	0.0	0.6	99.4	0.0	0.0	$m_T = 1600$	0.0	-1.2	101.2	0.0	0.0
Data/Bkgs	0.94	—	—	—	—	Data/Bkgs	1.16	—	—	—	—	Data/Bkgs	1.11	—	—	—	—



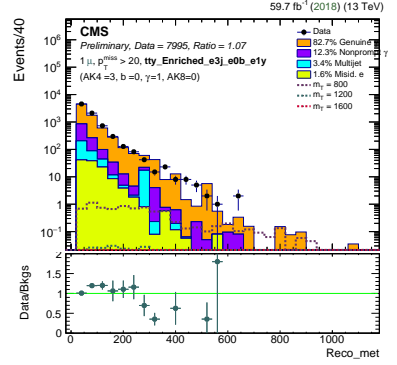
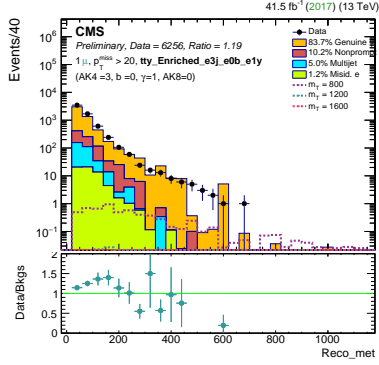
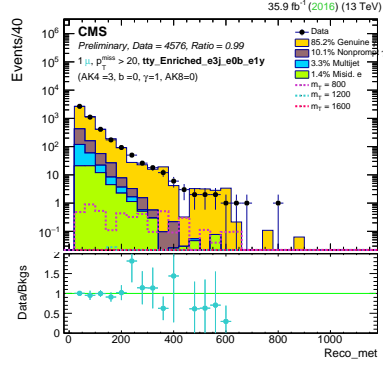
Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)
Data	8882.0	—	—	—	—	Data	11713.0	—	—	—	—	Data	17777.0	—	—	—	—
$t\bar{t}\gamma$	3783.8	99.2	0.4	0.3	0.1	$t\bar{t}\gamma$	4030.7	99.2	0.4	0.3	0.1	$t\bar{t}\gamma$	6311.3	99.0	0.5	0.4	0.1
$t/\bar{t}$	2949.6	24.8	39.7	27.5	8.1	$t/\bar{t}$	3352.3	25.4	39.4	26.9	8.4	$t/\bar{t}$	6110.1	22.3	37.8	32.3	7.6
$W + \gamma$	726.4	100.0	0.0	0.0	0.0	$W + \gamma$	715.0	100.0	0.0	0.0	0.0	$W + \gamma$	1597.1	99.6	0.4	0.0	0.0
$Z + \gamma$	372.5	99.7	0.0	0.1	0.2	$Z + \gamma$	418.6	99.5	0.2	0.1	0.2	QCD	781.1	32.2	64.4	0.0	3.3
QCD	210.1	94.6	4.7	0.0	0.7	QCD	213.1	72.7	12.4	0.0	15.0	$Z + \gamma$	622.2	99.7	0.2	0.1	0.0
$W + jets$	101.6	0.0	68.2	0.0	31.8	$DY + jets$	95.3	50.4	23.0	7.1	19.4	$W + jets$	187.3	0.0	71.1	0.0	28.9
Others	65.2	76.6	13.6	6.5	3.3	$W + jets$	86.1	0.0	70.8	3.0	26.1	Others	149.1	77.9	12.3	6.7	3.1
$DY + jets$	27.1	22.0	66.1	0.0	11.8	Others	86.0	80.0	11.6	5.0	3.4	$DY + jets$	114.3	58.0	30.1	0.5	11.4
Bkgs	8236.3	70.9	15.7	10.0	3.4	Bkgs	8997.1	69.5	16.2	10.3	4.0	Bkgs	15872.5	64.6	19.1	12.7	3.6
$m_T = 800$	29.5	0.0	99.7	0.3	0.0	$m_T = 800$	29.0	-0.0	99.8	0.1	0.1	$m_T = 800$	42.1	0.0	99.7	0.3	0.0
$m_T = 1200$	0.7	0.0	100.0	0.0	0.0	$m_T = 1200$	0.8	0.0	99.6	0.3	0.1	$m_T = 1200$	1.2	0.1	100.0	-0.1	0.0
$m_T = 1600$	0.1	0.0	100.0	0.0	0.0	$m_T = 1600$	0.0	0.2	99.7	0.1	0.0	$m_T = 1600$	0.1	-0.3	100.2	0.1	0.0
Data/Bkgs	1.08	—	—	—	—	Data/Bkgs	1.3	—	—	—	—	Data/Bkgs	1.12	—	—	—	—



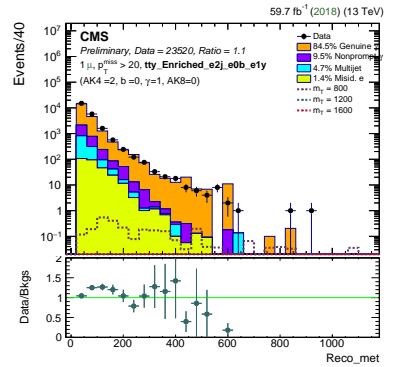
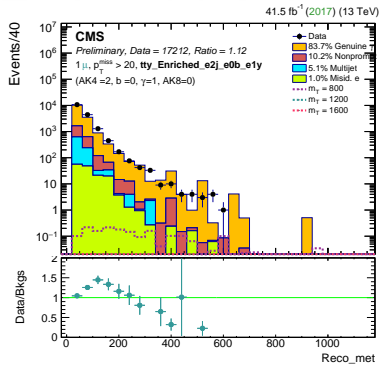
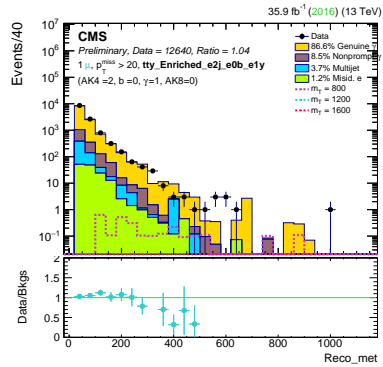
Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)
Data	2057.0	—	—	—	—	Data	2772.0	—	—	—	—	Data	3535.0	—	—	—	—
$W + \gamma$	959.0	99.7	0.0	0.0	0.3	$W + \gamma$	990.4	100.0	0.0	0.0	0.0	$W + \gamma$	1348.8	99.6	0.4	0.0	0.0
$t\bar{t}\gamma$	351.5	99.4	0.3	0.1	0.1	$t\bar{t}\gamma$	370.3	99.4	0.4	0.1	0.1	$t\bar{t}\gamma$	481.4	99.3	0.4	0.2	0.1
$t/\bar{t}f$	186.0	26.1	48.1	15.3	10.5	$t/\bar{t}f$	212.0	26.9	46.8	14.4	11.9	$t/\bar{t}f$	310.5	20.8	50.2	18.1	10.8
$Z + \gamma$	177.5	99.3	0.4	0.0	0.2	$Z + \gamma$	207.1	99.4	0.0	0.0	0.6	$Z + \gamma$	229.7	99.3	0.3	0.2	0.1
$W + jets$	92.4	0.0	67.4	0.0	32.6	$W + jets$	107.6	0.0	73.6	0.0	26.4	$W + jets$	185.2	0.0	48.9	0.0	51.1
Others	69.7	83.5	11.4	3.1	1.9	Others	99.3	89.1	6.8	1.0	3.1	Others	170.3	43.5	23.8	0.2	32.5
QCD	41.0	97.5	2.4	0.0	0.1	$DY + jets$	93.3	33.5	29.8	0.0	36.8	Others	135.1	86.2	9.4	2.0	2.4
$DY + jets$	26.7	17.6	41.1	5.8	35.5	QCD	55.7	86.9	9.6	0.0	3.5	$DY + jets$	89.5	37.0	40.7	4.0	18.3
Bkgs	1903.7	85.8	9.1	1.7	3.4	Bkgs	2135.8	83.8	10.3	1.5	4.4	Bkgs	2950.5	79.2	11.7	2.2	6.9
$m_T = 800$	32.2	0.0	99.7	0.0	0.3	$m_T = 800$	41.5	0.2	99.8	0.0	0.1	$m_T = 800$	52.6	0.1	99.7	0.0	0.1
$m_T = 1200$	1.3	0.0	100.0	0.0	0.0	$m_T = 1200$	1.5	0.1	99.9	0.1	-0.1	$m_T = 1200$	2.1	0.1	99.8	0.1	0.0
$m_T = 1600$	0.1	0.6	99.4	0.0	0.0	$m_T = 1600$	0.1	-0.2	100.0	0.1	0.1	$m_T = 1600$	0.1	-0.0	99.8	0.1	0.1
Data/Bkgs	1.08	—	—	—	—	Data/Bkgs	1.3	—	—	—	—	Data/Bkgs	1.2	—	—	—	—



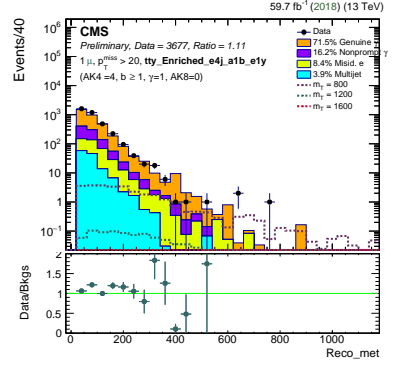
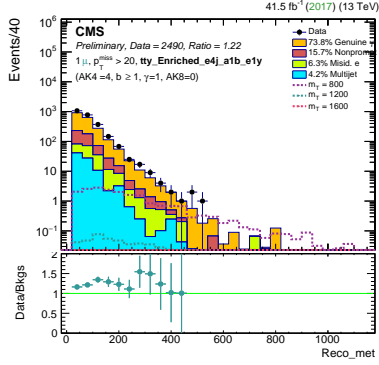
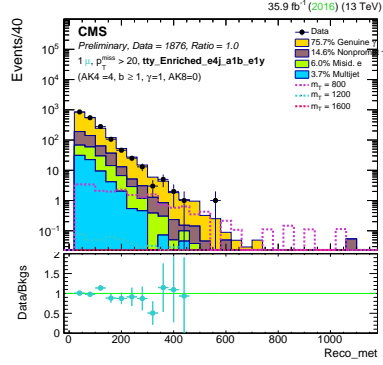
Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)
Data	792.0	—	—	—	—	Data	1100.0	—	—	—	—	Data	1850.0	—	—	—	—
$t/\bar{t}f$	359.2	19.7	30.3	45.1	4.9	$t/\bar{t}f$	413.1	21.9	29.2	43.3	5.6	$t/\bar{t}f$	846.7	18.6	27.2	49.5	4.6
$t\bar{t}\gamma$	282.6	98.8	0.4	0.7	0.1	$t\bar{t}\gamma$	299.3	98.7	0.4	0.8	0.1	$t\bar{t}\gamma$	499.8	98.4	0.6	0.9	0.2
$Z + \gamma$	20.1	100.0	0.0	0.0	0.0	$Z + \gamma$	26.3	100.0	0.0	0.0	0.0	QCD	53.5	100.0	0.0	0.0	0.0
$W + \gamma$	6.2	100.0	0.0	0.0	0.0	$W + \gamma$	7.1	100.0	0.0	0.0	0.0	$Z + \gamma$	24.5	100.0	0.0	0.0	0.0
$DY + jets$	2.8	51.5	48.5	0.0	0.0	Others	2.4	86.7	2.2	8.8	2.4	$W + \gamma$	11.2	100.0	0.0	0.0	0.0
Others	2.3	79.3	15.0	4.7	1.1	QCD	0.9	100.0	0.0	0.0	0.0	$W + jets$	7.0	0.0	100.0	0.0	0.0
$W + jets$	2.1	0.0	100.0	0.0	0.0	$DY + jets$	0.0	100.0	0.0	0.0	0.0	Others	5.9	76.0	13.8	7.1	3.0
QCD	0.7	100.0	0.0	0.0	0.0	$W + jets$	0	0	0	0	0	$DY + jets$	4.8	100.0	0.0	0.0	0.0
Bkgs	675.9	56.3	16.8	24.2	2.7	Bkgs	749.1	56.4	16.3	24.2	3.1	Bkgs	1453.4	51.5	16.6	29.2	2.8
$m_T = 1200$	0.0	0.0	100.0	0.0	0.0	$m_T = 800$	0.1	0.0	100.0	0.0	0.0	$m_T = 800$	0.0	0.0	100.0	0.0	0.0
$m_T = 1600$	0.0	0.0	100.0	0.0	0.0	$m_T = 1200$	0.0	0.0	100.0	0.0	0.0	$m_T = 1200$	0.0	0.0	100.0	0.0	0.0
$m_T = 800$	0.0	0.0	100.0	0.0	0.0	$m_T = 1600$	0.0	0.0	100.0	0.0	0.0	$m_T = 1600$	0.0	0.0	100.0	0.0	0.0
Data/Bkgs	1.17	—	—	—	—	Data/Bkgs	1.47	—	—	—	—	Data/Bkgs	1.27	—	—	—	—



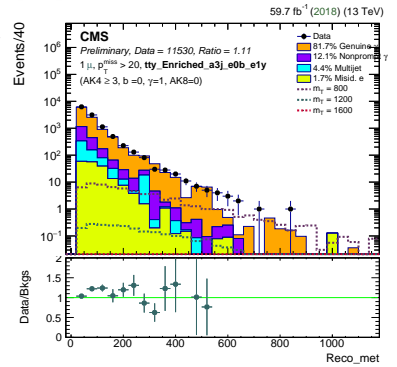
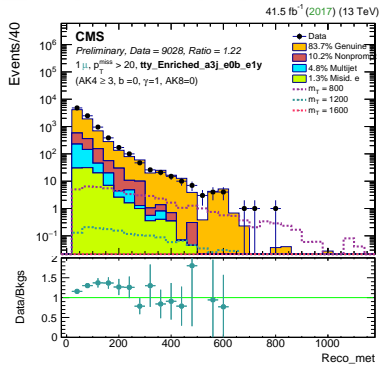
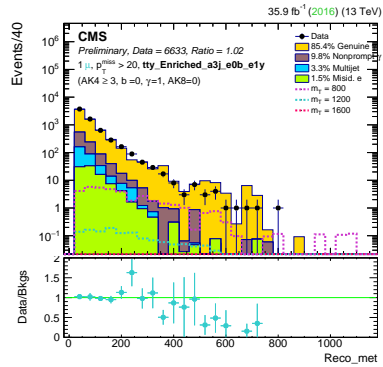
Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)
Data	4576.0	—	—	—	—	Data	6256.0	—	—	—	—	Data	7995.0	—	—	—	—
$W + \gamma$	2486.4	99.9	0.0	0.0	0.1	$W + \gamma$	2710.6	99.8	0.0	0.0	0.2	$W + \gamma$	3806.0	99.9	0.0	0.0	0.1
$Z + \gamma$	594.3	99.5	0.1	0.1	0.3	$Z + \gamma$	784.8	100.1	0.1	-0.1	-0.0	$Z + \gamma$	987.6	99.7	0.2	0.0	0.1
$t\bar{t}\gamma$	422.7	99.2	0.4	0.2	0.2	$t\bar{t}\gamma$	442.1	99.3	0.4	0.2	0.1	$t\bar{t}\gamma$	603.7	99.2	0.5	0.3	0.1
QCD	358.9	62.7	37.1	0.0	0.2	$W + jets$	395.5	0.0	57.6	0.0	42.4	QCD	545.4	65.3	34.4	0.0	0.4
$t/\bar{t}$	298.7	30.2	42.9	17.6	9.3	$t/\bar{t}$	330.8	26.7	45.5	17.6	10.3	$t/\bar{t}$	498.1	23.9	46.7	21.1	8.3
$W + jets$	231.3	0.0	64.1	0.6	35.3	QCD	223.4	67.7	27.9	0.0	4.4	$W + jets$	495.8	0.0	70.5	0.0	29.5
$DY + jets$	116.7	34.1	34.4	3.1	28.4	$DY + jets$	189.8	40.2	39.5	0.0	20.2	$DY + jets$	281.0	36.6	43.1	1.1	19.2
Others	111.3	79.9	13.5	3.3	3.3	Others	178.0	84.4	9.5	2.7	3.4	Others	264.6	84.7	9.2	3.1	3.0
Bkgs	4620.3	85.2	10.1	1.4	3.3	Bkgs	5254.9	83.7	10.2	1.2	5.0	Bkgs	7482.4	82.7	12.3	1.6	3.4
$m_T = 800$	4.5	0.0	97.8	2.2	0.0	$m_T = 800$	6.2	0.0	99.7	0.0	0.3	$m_T = 800$	8.2	0.3	99.3	0.4	0.0
$m_T = 1200$	0.2	0.0	98.0	0.0	2.0	$m_T = 1200$	0.2	0.5	99.5	0.0	0.0	$m_T = 1200$	0.3	0.0	100.0	0.0	0.0
$m_T = 1600$	0.0	0.0	100.0	0.0	0.0	$m_T = 1600$	0.0	0.8	99.2	0.0	0.0	$m_T = 1600$	0.0	0.0	98.9	1.1	0.0
Data/Bkgs	0.99	—	—	—	—	Data/Bkgs	1.19	—	—	—	—	Data/Bkgs	1.07	—	—	—	—



Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)
Data	12640.0	—	—	—	—	Data	17212.0	—	—	—	—	Data	23520.0	—	—	—	—
$W + \gamma$	6729.1	99.9	0.0	0.0	0.1	$W + \gamma$	8101.4	99.6	0.2	0.0	0.2	$W + \gamma$	11401.8	99.9	0.0	0.0	0.1
$Z + \gamma$	2463.1	99.7	0.1	0.0	0.1	$Z + \gamma$	3144.2	99.8	0.2	0.0	0.1	$Z + \gamma$	4357.5	99.8	0.2	0.0	0.0
$W + jets$	851.8	0.0	62.7	0.2	37.1	$W + jets$	1341.9	0.0	55.5	0.2	44.3	$W + jets$	1846.7	0.0	63.6	0.0	36.4
QCD	544.3	79.6	17.8	0.0	2.6	QCD	795.0	54.3	41.5	0.0	4.1	QCD	889.0	29.7	38.2	25.1	7.0
$t/\bar{t}$	512.1	32.9	38.2	22.3	6.6	$DY + jets$	573.5	44.8	36.4	3.0	15.9	$t/\bar{t}$	889.0	29.7	38.2	25.1	7.0
$t\bar{t}\gamma$	487.2	99.1	0.5	0.3	0.1	$t/\bar{t}$	559.1	33.6	38.0	21.0	7.4	$DY + jets$	792.7	42.2	39.9	3.6	14.3
$DY + jets$	349.9	30.4	46.4	2.6	20.7	$t\bar{t}\gamma$	515.9	99.1	0.5	0.3	0.1	$t\bar{t}\gamma$	718.7	98.9	0.6	0.4	0.1
Others	214.9	71.4	17.2	7.1	4.4	Others	300.5	78.4	14.0	4.4	3.2	Others	455.4	73.2	17.2	6.1	3.5
Bkgs	12152.6	86.6	8.5	1.2	3.7	Bkgs	15331.7	83.7	10.2	1.0	5.1	Bkgs	21319.3	84.5	9.5	1.4	4.7
$m_T = 800$	2.6	0.0	100.0	0.0	0.0	$m_T = 800$	1.8	0.7	99.3	0.0	0.0	$m_T = 800$	2.6	0.9	99.1	0.0	0.0
$m_T = 1200$	0.0	0.0	100.0	0.0	0.0	$m_T = 1200$	0.1	0.0	100.0	0.0	0.0	$m_T = 1200$	0.1	0.0	100.0	0.0	0.0
$m_T = 1600$	0.0	0.0	99.4	0.0	0.6	$m_T = 1600$	0.0	0.0	97.4	2.6	0.0	$m_T = 1600$	0.0	0.0	100.0	0.0	0.0
Data/Bkgs	1.04	—	—	—	—	Data/Bkgs	1.12	—	—	—	—	Data/Bkgs	1.1	—	—	—	—

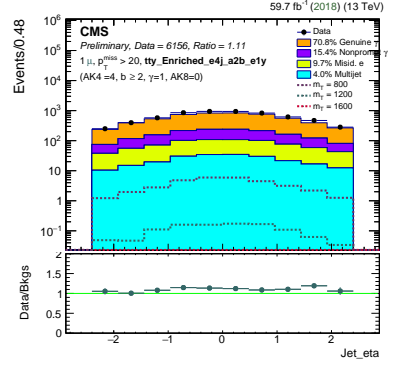
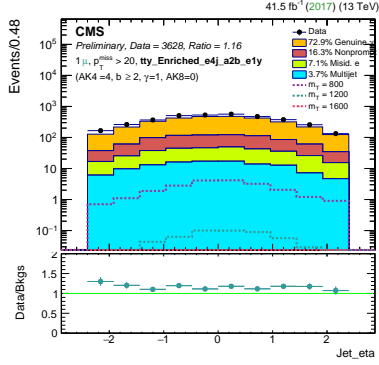
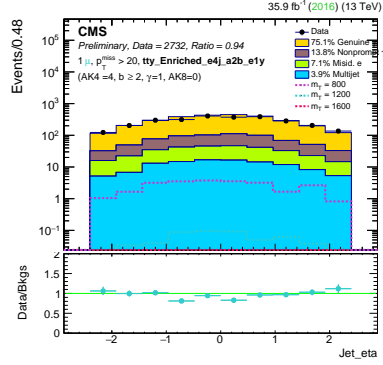


Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)
Data	1876.0	—	—	—	—	Data	2490.0	—	—	—	—	Data	3677.0	—	—	—	—
$t\bar{t}\gamma$	1137.0	99.5	0.3	0.1	0.1	$t\bar{t}\gamma$	1199.9	99.4	0.4	0.2	0.1	$t\bar{t}\gamma$	1883.6	99.3	0.4	0.2	0.1
$t/t\bar{t}$	556.8	23.8	44.9	19.6	11.7	$t/t\bar{t}$	655.0	24.6	45.6	18.7	11.1	$t/t\bar{t}$	1129.9	20.1	45.1	24.1	10.7
$W + \gamma$	92.2	100.0	0.0	0.0	0.0	$W + \gamma$	81.6	100.0	0.0	0.0	0.0	$W + \gamma$	187.4	100.0	0.0	0.0	0.0
QCD	30.7	72.4	27.6	0.0	0.0	$Z + \gamma$	32.6	99.0	1.0	0.0	0.0	$Z + \gamma$	46.1	99.4	0.6	0.0	0.0
$Z + \gamma$	25.5	98.6	0.1	0.0	1.3	QCD	31.8	62.9	15.9	0.0	21.2	Others	40.1	78.0	13.4	6.0	2.6
Others	18.3	77.2	12.8	6.1	3.9	Others	23.5	84.4	7.9	5.0	2.7	$DY + jets$	18.3	71.2	28.8	0.0	0.0
$W + jets$	9.0	0.0	68.6	0.0	31.4	$W + jets$	13.2	0.0	68.8	0.0	31.2	$W + jets$	13.0	0.0	51.8	0.0	48.2
$DY + jets$	6.1	49.3	50.7	0.0	0.0	$DY + jets$	10.9	46.4	27.4	26.2	0.0	QCD	8.6	55.2	44.8	0.0	0.0
Bkgs	1875.5	75.7	14.6	6.0	3.7	Bkgs	2048.6	73.8	15.7	6.3	4.2	Bkgs	3326.9	71.5	16.2	8.4	3.9
$m_T = 800$	21.1	0.0	99.6	0.4	0.0	$m_T = 800$	20.0	0.1	99.6	0.2	0.1	$m_T = 800$	28.8	0.0	99.8	0.2	0.0
$m_T = 1200$	0.5	0.0	100.0	0.0	0.0	$m_T = 1200$	0.5	0.0	99.4	0.4	0.2	$m_T = 1200$	0.9	-0.0	100.0	0.0	0.0
$m_T = 1600$	0.0	0.0	100.0	0.0	0.0	$m_T = 1600$	0.0	0.1	99.7	0.2	0.0	$m_T = 1600$	0.1	-0.5	100.5	0.0	0.0
Data/Bkgs	1.0	—	—	—	—	Data/Bkgs	1.22	—	—	—	—	Data/Bkgs	1.11	—	—	—	—

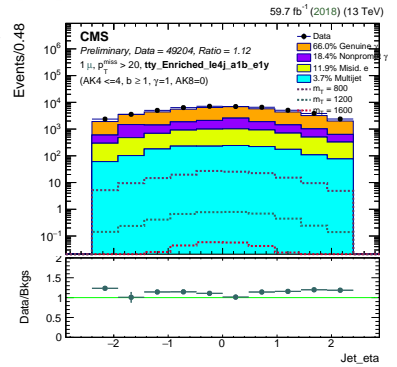
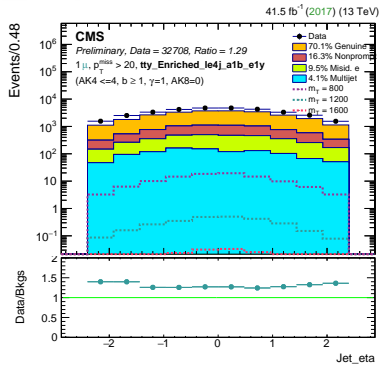
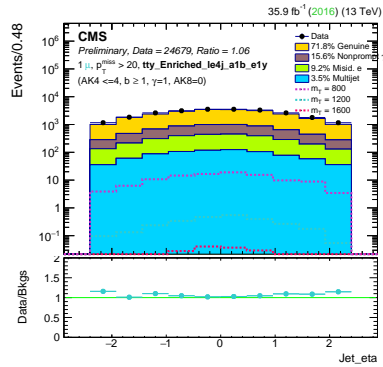


Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)
Data	6633.0	—	—	—	—	Data	9028.0	—	—	—	—	Data	11530.0	—	—	—	—
$W + \gamma$	3445.4	99.8	0.0	0.0	0.2	$W + \gamma$	3701.0	99.9	0.0	0.0	0.1	$W + \gamma$	5154.8	99.8	0.1	0.0	0.1
$t\bar{t}\gamma$	774.3	99.3	0.3	0.2	0.2	$Z + \gamma$	991.9	99.9	0.0	-0.1	0.1	$Z + \gamma$	1217.2	99.7	0.2	0.1	0.1
$Z + \gamma$	771.8	99.4	0.2	0.0	0.3	$t\bar{t}\gamma$	812.4	99.3	0.4	0.2	0.1	$t\bar{t}\gamma$	1085.1	99.2	0.4	0.2	0.1
$t/t\bar{t}$	484.7	28.6	44.9	16.7	9.8	$t/t\bar{t}$	542.9	26.8	46.0	16.3	10.9	$t/t\bar{t}$	808.6	22.7	48.1	19.9	9.3
QCD	399.8	66.3	33.5	0.0	0.2	$W + jets$	503.1	0.0	61.0	0.0	39.0	QCD	715.7	60.1	31.8	0.1	8.0
$W + jets$	323.7	0.0	65.0	0.4	34.5	$DY + jets$	283.0	38.0	36.3	0.0	25.7	$W + jets$	681.1	0.0	64.6	0.0	35.4
Others	181.0	81.3	12.7	3.2	2.8	QCD	279.1	71.5	24.3	0.0	4.2	Others	399.8	85.2	9.3	2.7	2.8
$DY + jets$	143.3	31.0	35.7	3.6	29.7	Others	277.2	86.1	8.6	2.1	3.3	$DY + jets$	370.5	36.7	42.5	1.8	19.0
Bkgs	6524.1	85.4	9.8	1.5	3.3	Bkgs	7390.7	83.7	10.2	1.3	4.8	Bkgs	10432.8	81.7	12.1	1.7	4.4
$m_T = 800$	36.7	0.0	99.5	0.3	0.3	$m_T = 800$	47.7	0.1	99.8	0.0	0.1	$m_T = 800$	60.8	0.2	99.7	0.1	0.1
$m_T = 1200$	1.4	0.0	99.8	0.0	0.2	$m_T = 1200$	1.7	0.1	99.9	0.1	-0.0	$m_T = 1200$	2.3	0.1	99.8	0.1	0.0
$m_T = 1600$	0.1	0.6	99.4	0.0	0.0	$m_T = 1600$	0.1	-0.1	99.9	0.1	0.1	$m_T = 1600$	0.2	-0.0	99.7	0.2	0.1
Data/Bkgs	1.02	—	—	—	—	Data/Bkgs	1.22	—	—	—	—	Data/Bkgs	1.11	—	—	—	—

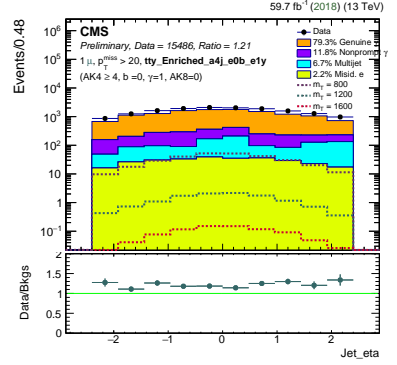
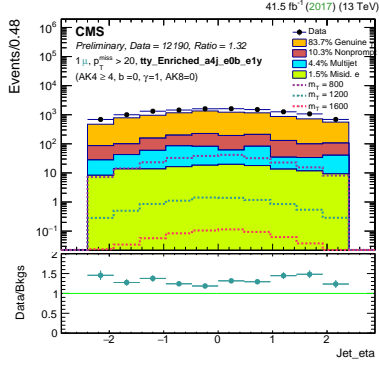
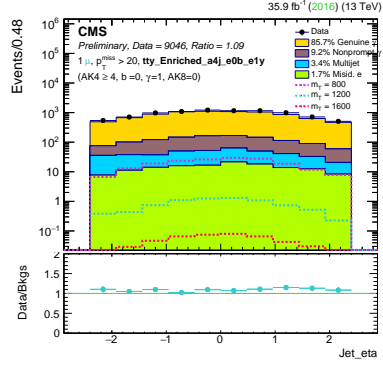




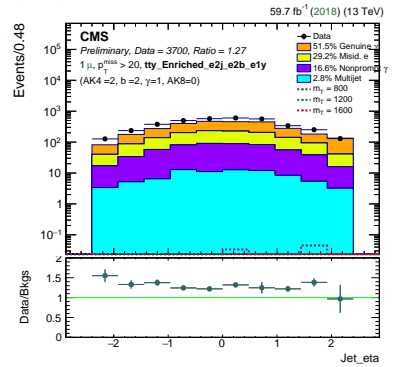
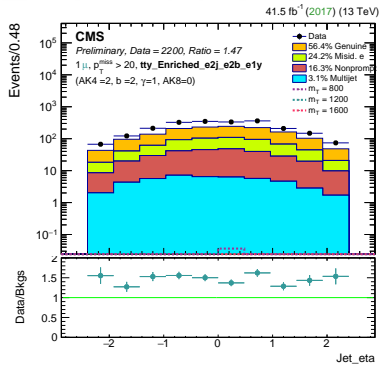
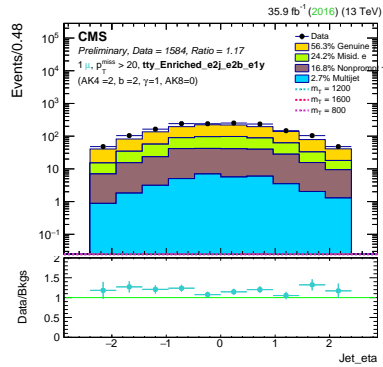
Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)
Data	2732.0	—	—	—	—	Data	3628.0	—	—	—	—	Data	6156.0	—	—	—	—
$t\bar{t}\gamma$	1932.8	99.5	0.3	0.1	0.1	$t\bar{t}\gamma$	2034.4	99.4	0.3	0.2	0.1	$t\bar{t}\gamma$	3474.7	99.3	0.3	0.2	0.1
$t/t\bar{t}$	877.5	20.1	44.4	23.0	12.5	$t/t\bar{t}$	1010.8	20.2	47.0	21.4	11.3	$t/t\bar{t}$	1917.9	17.3	43.8	27.5	11.4
$W + \gamma$	36.5	100.0	0.0	0.0	0.0	Others	28.6	81.0	9.8	7.2	2.0	$W + \gamma$	83.3	100.0	0.0	0.0	0.0
Others	19.2	71.2	14.0	14.5	0.3	QCD	24.7	19.4	80.6	0.0	0.0	Others	50.4	78.8	11.6	6.2	3.3
QCD	18.8	100.0	0.0	0.0	0.0	$W + \gamma$	18.6	100.0	0.0	0.0	0.0	$Z + \gamma$	29.0	100.0	0.0	0.0	0.0
$DY + jets$	6.1	100.0	0.0	0.0	0.0	$Z + \gamma$	13.0	100.0	0.0	0.0	0.0	$DY + jets$	5.4	100.0	0.0	0.0	0.0
$Z + \gamma$	5.6	76.1	0.0	0.0	23.9	$W + jets$	5.6	0.0	100.0	0.0	0.0	$W + jets$	0	0	0	0	0
$W + jets$	3.2	0.0	100.0	0.0	0.0	$DY + jets$	0	0	0	0	0	QCD	0	0	0	0	0
Bkgs	2899.8	75.1	13.8	7.1	3.9	Bkgs	3135.8	72.9	16.3	7.1	3.7	Bkgs	5560.7	70.8	15.4	9.7	4.0
$m_T = 800$	25.0	0.0	98.6	1.4	0.0	$m_T = 800$	22.1	0.3	99.1	0.6	0.0	$m_T = 800$	33.7	0.0	100.0	0.0	0.0
$m_T = 1200$	0.5	0.0	100.0	0.0	0.0	$m_T = 1200$	0.5	0.0	98.8	1.2	0.0	$m_T = 1200$	1.1	0.0	100.0	0.0	0.0
$m_T = 1600$	0.0	0.0	100.0	0.0	0.0	$m_T = 1600$	0.0	0.6	99.4	0.0	0.0	$m_T = 1600$	0.1	-1.2	101.2	0.0	0.0
Data/Bkgs	0.94	—	—	—	—	Data/Bkgs	1.16	—	—	—	—	Data/Bkgs	1.11	—	—	—	—



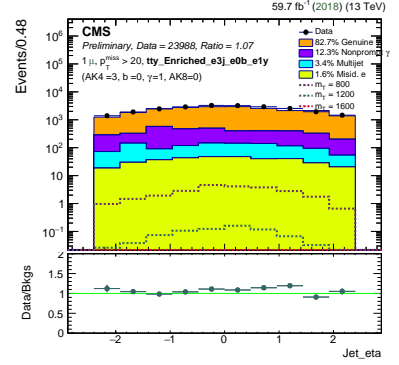
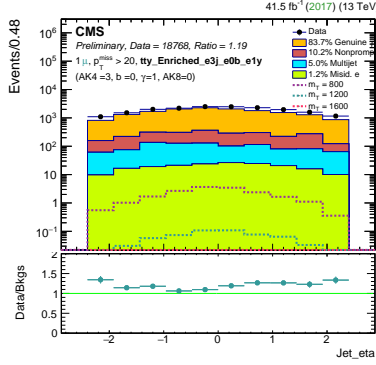
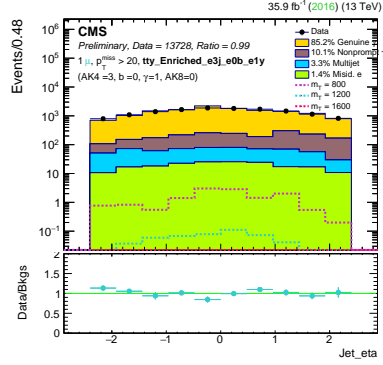
Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)
Data	24679.0	—	—	—	—	Data	32708.0	—	—	—	—	Data	49204.0	—	—	—	—
$t\bar{t}\gamma$	11360.7	99.3	0.4	0.2	0.1	$t\bar{t}\gamma$	12089.8	99.2	0.4	0.3	0.1	$t\bar{t}\gamma$	18934.6	99.1	0.4	0.4	0.1
$t/t\bar{t}$	8094.5	24.6	40.8	26.0	8.7	$t/t\bar{t}$	9223.1	25.0	40.8	25.3	8.9	$t/t\bar{t}$	16671.2	21.9	39.2	30.7	8.1
$W + \gamma$	1913.2	100.0	0.0	0.0	0.0	$W + \gamma$	1814.8	100.0	0.0	0.0	0.0	$W + \gamma$	4060.9	99.7	0.3	0.0	0.0
$Z + \gamma$	892.1	99.7	0.0	0.1	0.3	$Z + \gamma$	996.8	99.5	0.2	0.1	0.1	QCD	1693.4	34.9	60.8	0.0	4.3
QCD	519.3	92.2	7.2	0.0	0.5	QCD	576.0	67.7	14.6	0.0	17.7	$Z + \gamma$	1484.2	99.7	0.2	0.1	0.0
$W + jets$	247.7	0.0	68.7	0.0	31.3	Others	250.0	80.8	10.8	5.0	3.4	Others	436.1	77.9	12.4	6.6	3.0
Others	189.5	77.0	13.1	6.6	3.3	$DY + jets$	233.9	52.8	22.2	9.1	15.9	$W + jets$	435.9	0.0	70.5	0.0	29.5
$DY + jets$	73.0	24.6	64.3	0.0	11.1	$W + jets$	222.7	0.0	71.1	3.5	25.4	$DY + jets$	292.6	59.4	30.1	0.4	10.1
Bkgs	23290.0	71.8	15.6	9.2	3.5	Bkgs	25407.0	70.1	16.3	9.5	4.1	Bkgs	44008.8	66.0	18.4	11.9	3.7
$m_T = 800$	108.5	0.0	99.7	0.3	0.0	$m_T = 800$	105.9	0.0	99.8	0.1	0.1	$m_T = 800$	153.7	0.0	99.8	0.2	0.0
$m_T = 1200$	2.7	0.0	100.0	0.0	0.0	$m_T = 1200$	2.8	0.0	99.6	0.3	0.1	$m_T = 1200$	4.6	0.0	100.0	-0.1	0.0
$m_T = 1600$	0.2	0.0	100.0	0.0	0.0	$m_T = 1600$	0.2	0.2	99.7	0.1	0.0	$m_T = 1600$	0.3	-0.3	100.2	0.1	0.0
Data/Bkgs	1.06	—	—	—	—	Data/Bkgs	1.29	—	—	—	—	Data/Bkgs	1.12	—	—	—	—



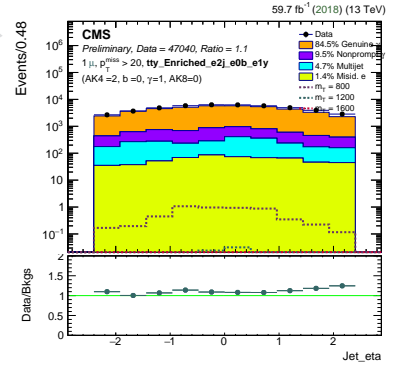
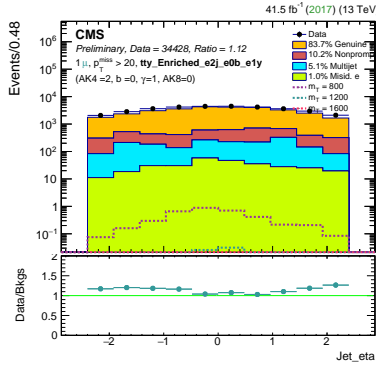
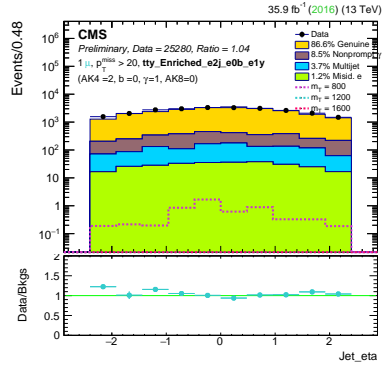
Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)
Data	9046.0	—	—	—	—	Data	12190.0	—	—	—	—	Data	15486.0	—	—	—	—
$W + \gamma$	4160.1	99.7	0.0	0.0	0.3	$W + \gamma$	4249.9	100.0	0.0	0.0	0.0	$W + \gamma$	5781.0	99.6	0.4	0.0	0.0
$t\bar{t}\gamma$	1571.7	99.5	0.3	0.1	0.1	$t\bar{t}\gamma$	1661.3	99.4	0.4	0.1	0.1	$t\bar{t}\gamma$	2159.6	99.3	0.4	0.2	0.1
$t/\bar{t}\bar{t}$	824.7	25.9	48.8	14.9	10.4	$t/\bar{t}\bar{t}$	952.6	26.6	47.2	14.3	12.0	$t/\bar{t}\bar{t}$	1380.4	20.7	50.3	18.0	11.0
$Z + \gamma$	753.3	99.3	0.4	0.0	0.3	$Z + \gamma$	883.3	99.4	0.0	0.0	0.6	$Z + \gamma$	978.9	99.3	0.4	0.2	0.1
$W + jets$	403.1	0.0	67.0	0.0	33.0	$W + jets$	457.6	0.0	73.8	0.0	26.2	$W + jets$	786.5	0.0	48.9	0.0	51.1
Others	307.6	84.0	11.0	3.0	2.0	Others	436.2	89.4	6.5	1.0	3.1	Others	696.6	44.2	23.6	0.2	32.0
QCD	173.7	97.1	2.8	0.0	0.1	$DY + jets$	387.3	34.0	29.9	0.0	36.1	Others	596.4	86.5	9.3	1.9	2.3
$DY + jets$	114.4	17.8	42.4	5.4	34.5	QCD	236.3	86.0	9.1	0.0	4.9	$DY + jets$	387.4	35.0	43.4	4.7	16.9
Bkgs	8308.6	85.7	9.2	1.7	3.4	Bkgs	9264.5	83.7	10.3	1.5	4.4	Bkgs	12766.8	79.3	11.8	2.2	6.7
$m_T = 800$	183.6	0.0	99.8	0.0	0.2	$m_T = 800$	236.0	0.2	99.8	0.0	0.1	$m_T = 800$	304.7	0.2	99.7	0.0	0.1
$m_T = 1200$	7.8	0.0	100.0	0.0	0.0	$m_T = 1200$	8.4	0.0	99.9	0.1	-0.0	$m_T = 1200$	12.2	0.1	99.8	0.1	0.0
$m_T = 1600$	0.5	0.5	99.5	0.0	0.0	$m_T = 1600$	0.6	-0.2	100.0	0.1	0.1	$m_T = 1600$	0.8	-0.1	99.9	0.1	0.1
Data/Bkgs	1.09	—	—	—	—	Data/Bkgs	1.32	—	—	—	—	Data/Bkgs	1.21	—	—	—	—



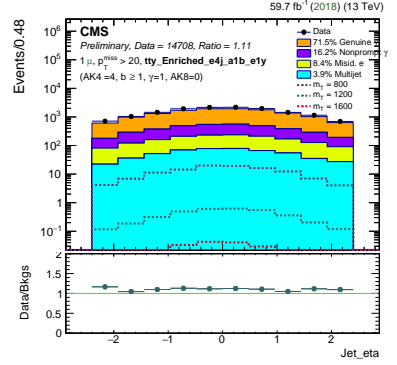
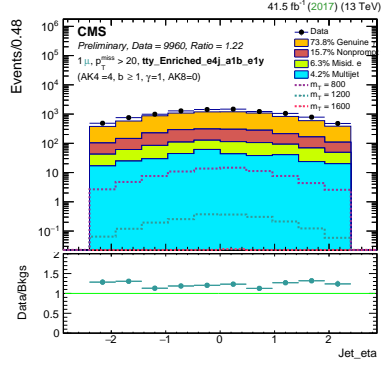
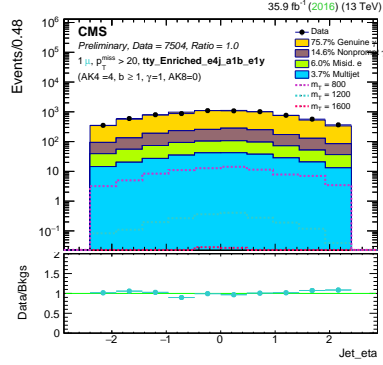
Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)
Data	1584.0	—	—	—	—	Data	2200.0	—	—	—	—	Data	3700.0	—	—	—	—
$t/\bar{t}\bar{t}$	718.3	19.7	30.3	45.1	4.9	$t/\bar{t}\bar{t}$	826.2	21.9	29.2	43.3	5.6	$t/\bar{t}\bar{t}$	1693.5	18.6	27.2	49.5	4.6
$t\bar{t}\gamma$	565.3	98.8	0.4	0.7	0.1	$t\bar{t}\gamma$	598.6	98.7	0.4	0.8	0.1	$t\bar{t}\gamma$	999.6	98.4	0.6	0.9	0.2
$Z + \gamma$	40.2	100.0	0.0	0.0	0.0	$Z + \gamma$	52.6	100.0	0.0	0.0	0.0	QCD	107.0	100.0	0.0	0.0	0.0
$W + \gamma$	12.4	100.0	0.0	0.0	0.0	$W + \gamma$	14.2	100.0	0.0	0.0	0.0	$Z + \gamma$	49.0	100.0	0.0	0.0	0.0
$DY + jets$	5.6	51.5	48.5	0.0	0.0	Others	4.7	86.7	2.2	8.8	2.4	$W + \gamma$	22.3	100.0	0.0	0.0	0.0
Others	4.6	79.3	15.0	4.7	1.1	QCD	1.8	100.0	0.0	0.0	0.0	$W + jets$	14.1	0.0	100.0	0.0	0.0
$W + jets$	4.3	0.0	100.0	0.0	0.0	$DY + jets$	0.0	100.0	0.0	0.0	0.0	Others	11.8	76.0	13.8	7.1	3.0
QCD	1.3	100.0	0.0	0.0	0.0	$W + jets$	0	0	0	0	0	$DY + jets$	9.5	100.0	0.0	0.0	0.0
Bkgs	1351.9	56.3	16.8	24.2	2.7	Bkgs	1498.2	56.4	16.3	24.2	3.1	Bkgs	2906.8	51.5	16.6	29.2	2.8
$m_T = 1200$	0.0	0.0	100.0	0.0	0.0	$m_T = 800$	0.1	0.0	100.0	0.0	0.0	$m_T = 800$	0.1	0.0	100.0	0.0	0.0
$m_T = 1600$	0.0	0.0	100.0	0.0	0.0	$m_T = 1200$	0.0	0.0	100.0	0.0	0.0	$m_T = 1200$	0.0	0.0	100.0	0.0	0.0
$m_T = 800$	0.0	0.0	100.0	0.0	0.0	$m_T = 1600$	0.0	0.0	100.0	0.0	0.0	$m_T = 1600$	0.0	0.0	100.0	0.0	0.0
Data/Bkgs	1.17	—	—	—	—	Data/Bkgs	1.47	—	—	—	—	Data/Bkgs	1.27	—	—	—	—



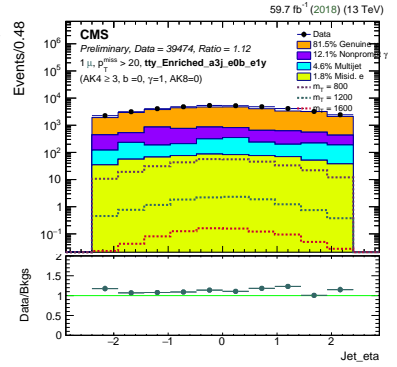
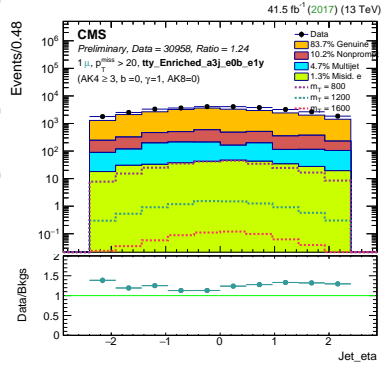
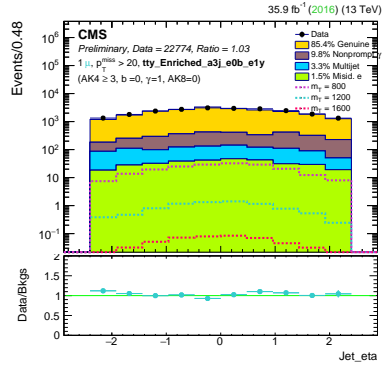
Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)
Data	13728.0	—	—	—	—	Data	18768.0	—	—	—	—	Data	23988.0	—	—	—	—
$W + \gamma$	7459.3	99.9	0.0	0.0	0.1	$W + \gamma$	8131.7	99.8	0.0	0.0	0.2	$W + \gamma$	11418.1	99.9	0.0	0.0	0.1
$Z + \gamma$	1782.8	99.5	0.1	0.1	0.3	$Z + \gamma$	2354.4	100.1	0.1	-0.1	-0.0	$Z + \gamma$	2962.8	99.7	0.2	0.0	0.1
$t\bar{t}\gamma$	1268.1	99.2	0.4	0.2	0.2	$t\bar{t}\gamma$	1326.3	99.3	0.4	0.2	0.1	$t\bar{t}\gamma$	1811.1	99.2	0.5	0.3	0.1
QCD	1076.6	62.7	37.1	0.0	0.2	$W + jets$	1186.4	0.0	57.6	0.0	42.4	QCD	1636.2	65.3	34.4	0.0	0.4
$t/\bar{t}\bar{t}$	896.2	30.2	42.9	17.6	9.3	$t/\bar{t}\bar{t}$	992.5	26.7	45.5	17.6	10.3	$t/\bar{t}\bar{t}$	1494.4	23.9	46.7	21.1	8.3
$W + jets$	694.0	0.0	64.1	0.6	35.3	QCD	670.1	67.7	27.9	0.0	4.4	$W + jets$	1487.5	0.0	70.5	0.0	29.5
$DY + jets$	350.0	34.1	34.4	3.1	28.4	$DY + jets$	569.3	40.2	39.5	0.0	20.2	$DY + jets$	843.1	36.6	43.1	1.1	19.2
Others	333.9	79.9	13.5	3.3	3.3	Others	533.9	84.4	9.5	2.7	3.4	Others	793.8	84.7	9.2	3.1	3.0
Bkgs	13861.0	85.2	10.1	1.4	3.3	Bkgs	15764.8	83.7	10.2	1.2	5.0	Bkgs	22447.1	82.7	12.3	1.6	3.4
$m_T = 800$	13.6	0.0	97.8	2.2	0.0	$m_T = 800$	18.5	0.0	99.7	0.0	0.3	$m_T = 800$	24.9	0.3	99.3	0.4	0.0
$m_T = 1200$	0.5	0.0	98.1	0.0	1.9	$m_T = 1200$	0.6	0.5	99.5	0.0	0.0	$m_T = 1200$	0.8	0.0	100.0	0.0	0.0
$m_T = 1600$	0.0	0.0	100.0	0.0	0.0	$m_T = 1600$	0.0	0.8	99.2	0.0	0.0	$m_T = 1600$	0.0	-0.6	99.5	1.1	0.0
Data/Bkgs	0.99	—	—	—	—	Data/Bkgs	1.19	—	—	—	—	Data/Bkgs	1.07	—	—	—	—



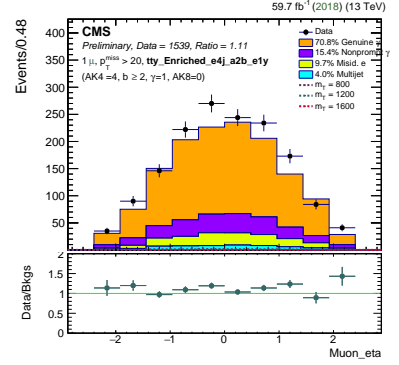
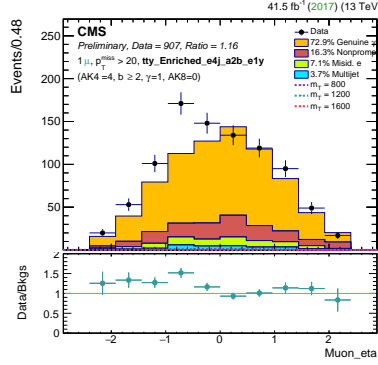
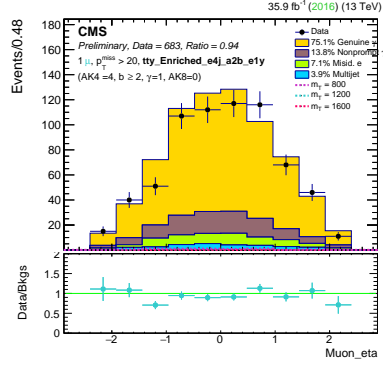
Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)
Data	25280.0	—	—	—	—	Data	34428.0	—	—	—	—	Data	47040.0	—	—	—	—
$W + \gamma$	13458.2	99.9	0.0	0.0	0.1	$W + \gamma$	16202.8	99.6	0.2	0.0	0.2	$W + \gamma$	22803.5	99.9	0.0	0.0	0.1
$Z + \gamma$	4926.2	99.7	0.1	0.0	0.1	$Z + \gamma$	6288.3	99.8	0.2	0.0	0.1	$Z + \gamma$	8715.0	99.8	0.2	0.0	0.0
$W + jets$	1703.7	0.0	62.7	0.2	37.1	$W + jets$	2683.9	0.0	55.5	0.2	44.3	$W + jets$	3693.4	0.0	63.6	0.0	36.4
QCD	1088.7	79.6	17.8	0.0	2.6	QCD	1590.0	54.3	41.5	0.0	4.1	QCD	1778.0	29.7	38.2	25.1	7.0
$t/\bar{t}\bar{t}$	1024.3	32.9	38.2	22.3	6.6	$DY + jets$	1147.1	44.8	36.4	3.0	15.9	$t/\bar{t}\bar{t}$	1715.1	72.7	11.3	0.8	15.2
$t\bar{t}\gamma$	974.5	99.1	0.5	0.3	0.1	$t/\bar{t}\bar{t}$	1118.3	33.6	38.0	21.0	7.4	$DY + jets$	1585.4	42.2	39.9	3.6	14.3
$DY + jets$	699.8	30.4	46.4	2.6	20.7	$t\bar{t}\gamma$	1031.8	99.1	0.5	0.3	0.1	$t\bar{t}\gamma$	1437.4	98.9	0.6	0.4	0.1
Others	429.9	71.4	17.2	7.1	4.4	Others	601.1	78.4	14.0	4.4	3.2	Others	910.8	73.2	17.2	6.1	3.5
Bkgs	24305.1	86.6	8.5	1.2	3.7	Bkgs	30663.3	83.7	10.2	1.0	5.1	Bkgs	42638.6	84.5	9.5	1.4	4.7
$m_T = 800$	5.5	0.0	100.0	0.0	0.0	$m_T = 800$	3.7	0.6	99.4	0.0	0.0	$m_T = 800$	5.3	0.8	99.2	0.0	0.0
$m_T = 1200$	0.1	0.0	100.0	0.0	0.0	$m_T = 1200$	0.1	0.0	100.0	0.0	0.0	$m_T = 1200$	0.1	0.0	100.0	0.0	0.0
$m_T = 1600$	0.0	0.0	99.4	0.0	0.6	$m_T = 1600$	0.0	0.0	97.4	2.6	0.0	$m_T = 1600$	0.0	0.0	100.0	0.0	0.0
Data/Bkgs	1.04	—	—	—	—	Data/Bkgs	1.12	—	—	—	—	Data/Bkgs	1.1	—	—	—	—



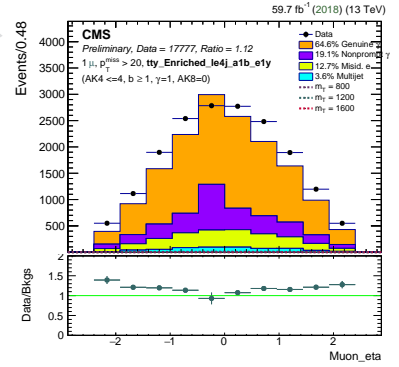
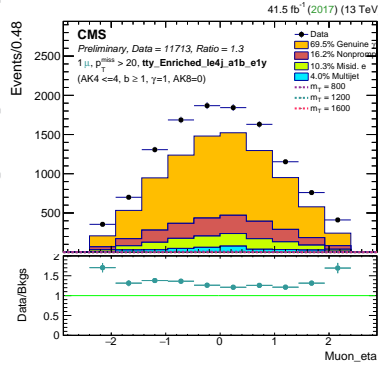
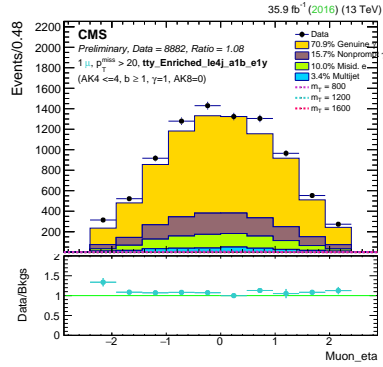
Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)
Data	7504.0	—	—	—	—	Data	9960.0	—	—	—	—	Data	14708.0	—	—	—	—
$t\bar{t}\gamma$	4547.5	99.5	0.3	0.1	0.1	$t\bar{t}\gamma$	4799.3	99.4	0.4	0.2	0.1	$t\bar{t}\gamma$	7534.5	99.3	0.4	0.2	0.1
$t/t\bar{t}$	2227.1	23.8	44.9	19.6	11.7	$t/t\bar{t}$	2620.0	24.6	45.6	18.7	11.1	$t/t\bar{t}$	4519.5	20.1	45.1	24.1	10.7
$W + \gamma$	368.8	100.0	0.0	0.0	0.0	$W + \gamma$	326.5	100.0	0.0	0.0	0.0	$W + \gamma$	749.6	100.0	0.0	0.0	0.0
QCD	123.0	72.4	27.6	0.0	0.0	$Z + \gamma$	130.5	99.0	1.0	0.0	0.0	$Z + \gamma$	184.3	99.4	0.6	0.0	0.0
$Z + \gamma$	102.0	98.6	0.1	0.0	1.3	QCD	127.2	62.9	15.9	0.0	21.2	Others	160.5	78.0	13.4	6.0	2.6
Others	73.1	77.2	12.8	6.1	3.9	Others	93.9	84.4	7.9	5.0	2.7	$DY + jets$	73.1	71.2	28.8	0.0	0.0
$W + jets$	35.8	0.0	68.6	0.0	31.4	$W + jets$	52.8	0.0	68.8	0.0	31.2	$W + jets$	52.0	0.0	51.8	0.0	48.2
$DY + jets$	24.3	49.3	50.7	0.0	0.0	$DY + jets$	43.7	46.4	27.4	26.2	0.0	QCD	34.4	55.2	44.8	0.0	0.0
Bkgs	7501.6	75.7	14.6	6.0	3.7	Bkgs	8194.1	73.8	15.7	6.3	4.2	Bkgs	13307.9	71.5	16.2	8.4	3.9
$m_T = 800$	84.3	0.0	99.6	0.4	0.0	$m_T = 800$	80.2	0.1	99.6	0.2	0.1	$m_T = 800$	115.4	0.0	99.8	0.2	0.0
$m_T = 1200$	2.0	0.0	100.0	0.0	0.0	$m_T = 1200$	2.1	0.0	99.4	0.4	0.2	$m_T = 1200$	3.6	-0.0	100.0	0.0	0.0
$m_T = 1600$	0.1	0.0	100.0	0.0	0.0	$m_T = 1600$	0.1	0.1	99.7	0.2	0.0	$m_T = 1600$	0.2	-0.5	100.5	0.0	0.0
Data/Bkgs	1.0	—	—	—	—	Data/Bkgs	1.22	—	—	—	—	Data/Bkgs	1.11	—	—	—	—



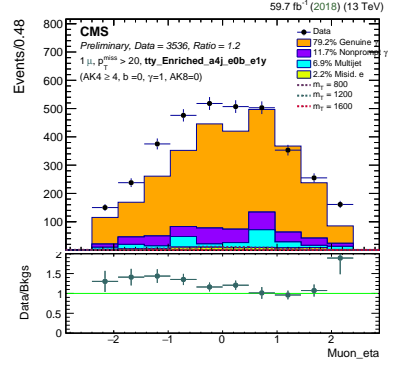
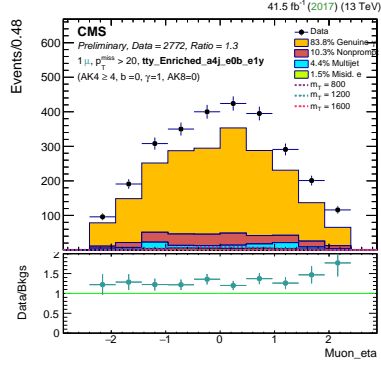
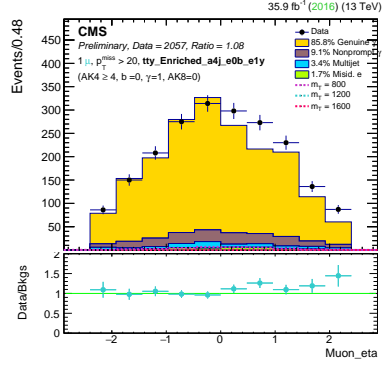
Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)
Data	22774.0	—	—	—	—	Data	30958.0	—	—	—	—	Data	39474.0	—	—	—	—
$W + \gamma$	11619.4	99.8	0.0	0.0	0.2	$W + \gamma$	12381.7	99.9	0.0	0.0	0.1	$W + \gamma$	17199.1	99.8	0.1	0.0	0.1
$t\bar{t}\gamma$	2839.8	99.4	0.3	0.2	0.1	$Z + \gamma$	3237.7	99.9	0.0	-0.1	0.2	$t\bar{t}\gamma$	3970.8	99.3	0.4	0.2	0.1
$Z + \gamma$	2536.1	99.4	0.2	0.0	0.3	$t\bar{t}\gamma$	2987.5	99.4	0.4	0.1	0.1	$Z + \gamma$	3941.7	99.6	0.2	0.1	0.1
$t/t\bar{t}$	1720.9	28.1	45.7	16.3	9.8	$t/t\bar{t}$	1945.1	26.6	46.3	16.0	11.1	$t/t\bar{t}$	2874.8	22.4	48.4	19.6	9.6
QCD	1250.4	67.5	32.3	0.0	0.2	$W + jets$	1644.0	0.0	62.1	0.0	37.9	QCD	2332.9	59.0	31.1	0.1	9.8
$W + jets$	1097.1	0.0	65.1	0.4	34.5	Others	970.1	86.6	8.2	2.0	3.3	$W + jets$	2274.1	0.0	63.0	0.0	37.0
Others	641.5	81.9	12.3	3.2	2.7	$DY + jets$	956.7	37.7	35.7	0.0	26.6	Others	1390.2	85.5	9.3	2.6	2.7
$DY + jets$	464.4	30.1	36.4	3.7	29.9	QCD	906.5	72.5	23.0	0.0	4.5	$DY + jets$	1230.4	36.1	43.2	2.2	18.5
Bkgs	22169.6	85.4	9.8	1.5	3.3	Bkgs	25029.2	83.7	10.2	1.3	4.7	Bkgs	35213.9	81.5	12.1	1.8	4.6
$m_T = 800$	197.2	0.0	99.6	0.2	0.2	$m_T = 800$	254.5	0.2	99.8	0.0	0.1	$m_T = 800$	329.6	0.2	99.6	0.0	0.1
$m_T = 1200$	8.3	0.0	99.9	0.0	0.1	$m_T = 1200$	9.0	0.1	99.9	0.1	-0.0	$m_T = 1200$	13.0	0.1	99.8	0.1	0.0
$m_T = 1600$	0.5	0.4	99.6	0.0	0.0	$m_T = 1600$	0.7	-0.1	99.9	0.1	0.1	$m_T = 1600$	0.9	-0.1	99.9	0.1	0.1
Data/Bkgs	1.03	—	—	—	—	Data/Bkgs	1.24	—	—	—	—	Data/Bkgs	1.12	—	—	—	—



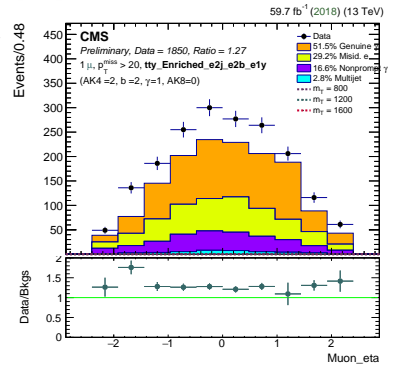
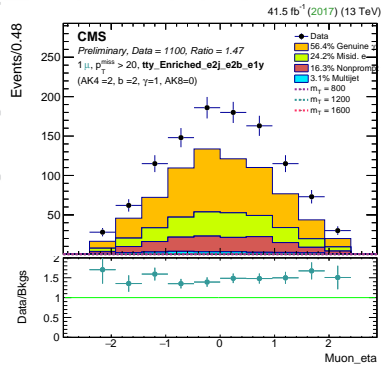
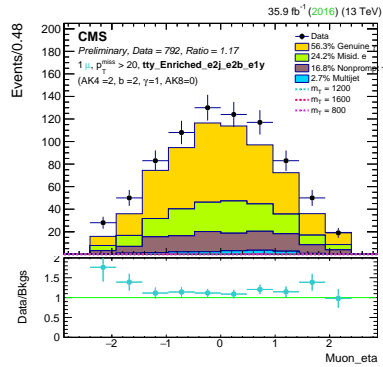
Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)
Data	683.0	—	—	—	—	Data	907.0	—	—	—	—	Data	1539.0	—	—	—	—
$t\bar{t}\gamma$	483.2	99.5	0.3	0.1	0.1	$t\bar{t}\gamma$	508.6	99.4	0.3	0.2	0.1	$t\bar{t}\gamma$	868.7	99.3	0.3	0.2	0.1
$t/\bar{t}\bar{t}$	219.4	20.1	44.4	23.0	12.5	$t/\bar{t}\bar{t}$	252.7	20.2	47.0	21.4	11.3	$t/\bar{t}\bar{t}$	479.5	17.3	43.8	27.5	11.4
$W + \gamma$	9.1	100.0	0.0	0.0	0.0	Others	7.2	81.0	9.8	7.2	2.0	$W + \gamma$	20.8	100.0	0.0	0.0	0.0
Others	4.8	71.2	14.0	14.5	0.3	QCD	6.2	19.4	80.6	0.0	0.0	Others	12.6	78.8	11.6	6.2	3.3
QCD	4.7	100.0	0.0	0.0	0.0	$W + \gamma$	4.6	100.0	0.0	0.0	0.0	$Z + \gamma$	7.3	100.0	0.0	0.0	0.0
$DY + jets$	1.5	100.0	0.0	0.0	0.0	$Z + \gamma$	3.3	100.0	0.0	0.0	0.0	$DY + jets$	1.3	100.0	0.0	0.0	0.0
$Z + \gamma$	1.4	76.1	0.0	0.0	23.9	$W + jets$	1.4	0.0	100.0	0.0	0.0	$W + jets$	0	0	0	0	0
$W + jets$	0.8	0.0	100.0	0.0	0.0	$DY + jets$	0	0	0	0	0	QCD	0	0	0	0	0
Bkgs	724.9	75.1	13.8	7.1	3.9	Bkgs	784.0	72.9	16.3	7.1	3.7	Bkgs	1390.2	70.8	15.4	9.7	4.0
$m_T = 800$	6.3	0.0	98.6	1.4	0.0	$m_T = 800$	5.5	0.3	99.1	0.6	0.0	$m_T = 800$	8.4	0.0	100.0	0.0	0.0
$m_T = 1200$	0.1	0.0	100.0	0.0	0.0	$m_T = 1200$	0.1	0.0	98.8	1.2	0.0	$m_T = 1200$	0.3	0.0	100.0	0.0	0.0
$m_T = 1600$	0.0	0.0	100.0	0.0	0.0	$m_T = 1600$	0.0	0.6	99.4	0.0	0.0	$m_T = 1600$	0.0	-1.2	101.2	0.0	0.0
Data/Bkgs	0.94	—	—	—	—	Data/Bkgs	1.16	—	—	—	—	Data/Bkgs	1.11	—	—	—	—



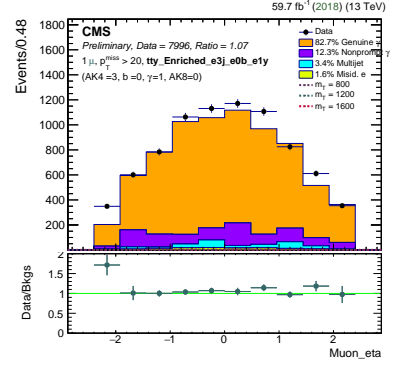
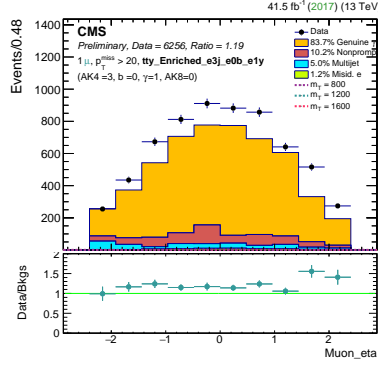
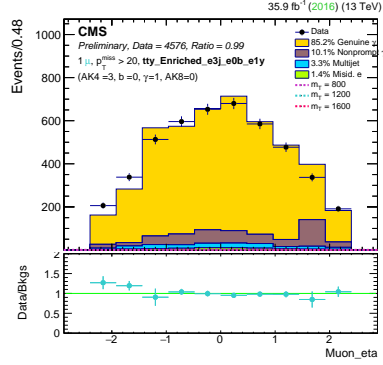
Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)
Data	8882.0	—	—	—	—	Data	11713.0	—	—	—	—	Data	17777.0	—	—	—	—
$t\bar{t}\gamma$	3783.6	99.2	0.4	0.3	0.1	$t\bar{t}\gamma$	4030.9	99.2	0.4	0.3	0.1	$t\bar{t}\gamma$	6312.2	99.0	0.5	0.4	0.1
$t/\bar{t}\bar{t}$	2949.6	24.8	39.7	27.5	8.1	$t/\bar{t}\bar{t}$	3352.3	25.4	39.4	26.9	8.4	$t/\bar{t}\bar{t}$	6110.0	22.3	37.8	32.3	7.6
$W + \gamma$	726.4	100.0	0.0	0.0	0.0	$W + \gamma$	715.0	100.0	0.0	0.0	0.0	$W + \gamma$	1597.1	99.6	0.4	0.0	0.0
$Z + \gamma$	372.5	99.7	0.0	0.1	0.2	$Z + \gamma$	418.6	99.5	0.2	0.1	0.2	QCD	781.1	32.2	64.4	0.0	3.3
QCD	210.1	94.6	4.7	0.0	0.7	QCD	213.1	72.7	12.4	0.0	15.0	$Z + \gamma$	622.2	99.7	0.2	0.1	0.0
$W + jets$	101.6	0.0	68.2	0.0	31.8	$DY + jets$	95.3	50.4	23.0	7.1	19.4	$W + jets$	187.3	0.0	71.1	0.0	28.9
Others	65.2	76.6	13.6	6.5	3.3	$W + jets$	86.1	0.0	70.8	3.0	26.1	Others	149.1	77.9	12.3	6.7	3.1
$DY + jets$	27.1	22.0	66.1	0.0	11.8	Others	86.0	80.0	11.6	5.0	3.4	$DY + jets$	114.3	58.0	30.1	0.5	11.4
Bkgs	8236.1	70.9	15.7	10.0	3.4	Bkgs	8997.3	69.5	16.2	10.3	4.0	Bkgs	15873.4	64.6	19.1	12.7	3.6
$m_T = 800$	29.5	0.0	99.7	0.3	0.0	$m_T = 800$	29.1	-0.0	99.8	0.1	0.1	$m_T = 800$	42.2	0.0	99.7	0.3	0.0
$m_T = 1200$	0.7	0.0	100.0	0.0	0.0	$m_T = 1200$	0.8	0.0	99.6	0.3	0.1	$m_T = 1200$	1.2	0.1	100.0	-0.1	0.0
$m_T = 1600$	0.1	0.0	100.0	0.0	0.0	$m_T = 1600$	0.0	0.2	99.7	0.1	0.0	$m_T = 1600$	0.1	-0.3	100.2	0.1	0.0
Data/Bkgs	1.08	—	—	—	—	Data/Bkgs	1.3	—	—	—	—	Data/Bkgs	1.12	—	—	—	—



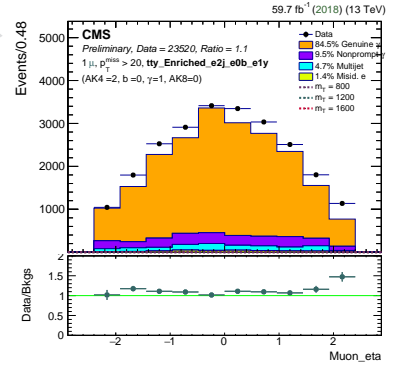
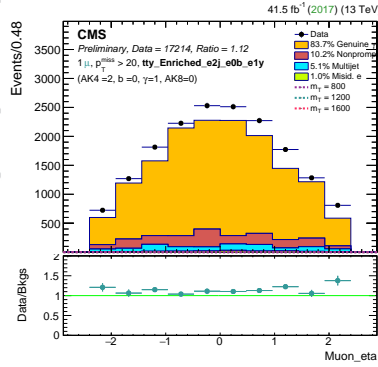
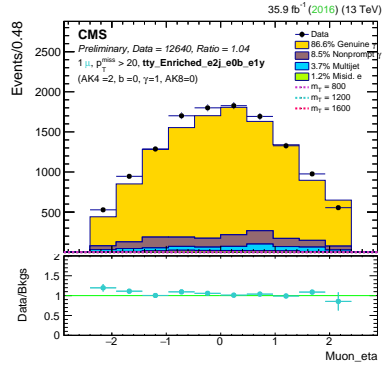
Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)
Data	2057.0	—	—	—	—	Data	2772.0	—	—	—	—	Data	3536.0	—	—	—	—
$W + \gamma$	959.0	99.7	0.0	0.0	0.3	$W + \gamma$	990.4	100.0	0.0	0.0	0.0	$W + \gamma$	1348.8	99.6	0.4	0.0	0.0
$t\bar{t}\gamma$	351.5	99.4	0.3	0.1	0.1	$t\bar{t}\gamma$	370.3	99.4	0.4	0.1	0.1	$t\bar{t}\gamma$	481.4	99.3	0.4	0.2	0.1
$t/t\bar{t}$	186.0	26.1	48.1	15.3	10.5	$t/t\bar{t}$	212.0	26.9	46.8	14.4	11.9	$t/t\bar{t}$	310.5	20.8	50.2	18.1	10.8
$Z + \gamma$	177.5	99.3	0.4	0.0	0.2	$Z + \gamma$	207.1	99.4	0.0	0.0	0.6	$Z + \gamma$	229.7	99.3	0.3	0.2	0.1
$W + jets$	92.4	0.0	67.4	0.0	32.6	$W + jets$	107.6	0.0	73.6	0.0	26.4	$W + jets$	185.2	0.0	48.9	0.0	51.1
Others	69.7	83.5	11.4	3.1	1.9	Others	99.3	89.1	6.8	1.0	3.1	QCD	170.3	43.5	23.8	0.2	32.5
QCD	41.0	97.5	2.4	0.0	0.1	$DY + jets$	93.3	33.5	29.8	0.0	36.8	Others	135.1	86.2	9.4	2.0	2.4
$DY + jets$	26.7	17.6	41.1	5.8	35.5	QCD	55.7	86.9	9.6	0.0	3.5	$DY + jets$	89.5	37.0	40.7	4.0	18.3
Bkgs	1903.7	85.8	9.1	1.7	3.4	Bkgs	2135.8	83.8	10.3	1.5	4.4	Bkgs	2950.5	79.2	11.7	2.2	6.9
$m_T = 800$	32.2	0.0	99.7	0.0	0.3	$m_T = 800$	41.7	0.1	99.8	0.0	0.1	$m_T = 800$	52.8	0.1	99.7	0.0	0.1
$m_T = 1200$	1.3	0.0	100.0	0.0	0.0	$m_T = 1200$	1.5	0.1	99.9	0.1	-0.1	$m_T = 1200$	2.1	0.1	99.8	0.1	0.0
$m_T = 1600$	0.1	0.6	99.4	0.0	0.0	$m_T = 1600$	0.1	-0.2	100.0	0.1	0.1	$m_T = 1600$	0.1	-0.0	99.8	0.1	0.1
Data/Bkgs	1.08	—	—	—	—	Data/Bkgs	1.3	—	—	—	—	Data/Bkgs	1.2	—	—	—	—



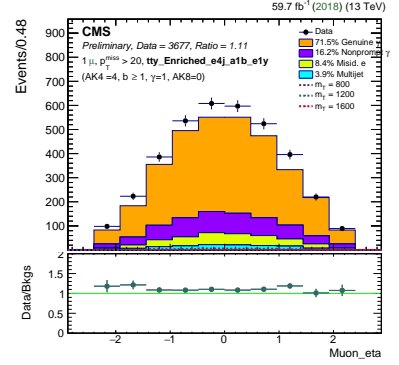
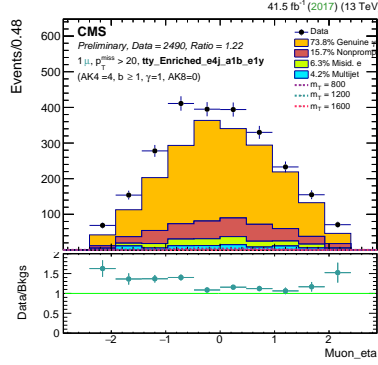
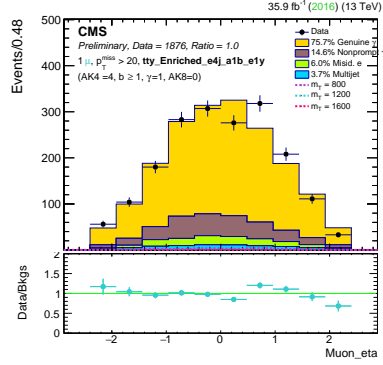
Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)
Data	792.0	—	—	—	—	Data	1100.0	—	—	—	—	Data	1850.0	—	—	—	—
$t/t\bar{t}$	359.2	19.7	30.3	45.1	4.9	$t/t\bar{t}$	413.1	21.9	29.2	43.3	5.6	$t/t\bar{t}$	846.7	18.6	27.2	49.5	4.6
$t\bar{t}\gamma$	282.6	98.8	0.4	0.7	0.1	$t\bar{t}\gamma$	299.3	98.7	0.4	0.8	0.1	$t\bar{t}\gamma$	499.8	98.4	0.6	0.9	0.2
$Z + \gamma$	20.1	100.0	0.0	0.0	0.0	$Z + \gamma$	26.3	100.0	0.0	0.0	0.0	QCD	53.5	100.0	0.0	0.0	0.0
$W + \gamma$	6.2	100.0	0.0	0.0	0.0	$W + \gamma$	7.1	100.0	0.0	0.0	0.0	$Z + \gamma$	24.5	100.0	0.0	0.0	0.0
$DY + jets$	2.8	51.5	48.5	0.0	0.0	Others	2.4	86.7	2.2	8.8	2.4	$W + \gamma$	11.2	100.0	0.0	0.0	0.0
Others	2.3	79.3	15.0	4.7	1.1	QCD	0.9	100.0	0.0	0.0	0.0	$W + jets$	7.0	0.0	100.0	0.0	0.0
$W + jets$	2.1	0.0	100.0	0.0	0.0	$DY + jets$	0.0	100.0	0.0	0.0	0.0	Others	5.9	76.0	13.8	7.1	3.0
QCD	0.7	100.0	0.0	0.0	0.0	$W + jets$	0	0	0	0	0	$DY + jets$	4.8	100.0	0.0	0.0	0.0
Bkgs	675.9	56.3	16.8	24.2	2.7	Bkgs	749.1	56.4	16.3	24.2	3.1	Bkgs	1453.4	51.5	16.6	29.2	2.8
$m_T = 1200$	0.0	0.0	100.0	0.0	0.0	$m_T = 800$	0.1	0.0	100.0	0.0	0.0	$m_T = 800$	0.0	0.0	100.0	0.0	0.0
$m_T = 1600$	0.0	0.0	100.0	0.0	0.0	$m_T = 1200$	0.0	0.0	100.0	0.0	0.0	$m_T = 1200$	0.0	0.0	100.0	0.0	0.0
$m_T = 800$	0.0	0.0	100.0	0.0	0.0	$m_T = 1600$	0.0	0.0	100.0	0.0	0.0	$m_T = 1600$	0.0	0.0	100.0	0.0	0.0
Data/Bkgs	1.17	—	—	—	—	Data/Bkgs	1.47	—	—	—	—	Data/Bkgs	1.27	—	—	—	—



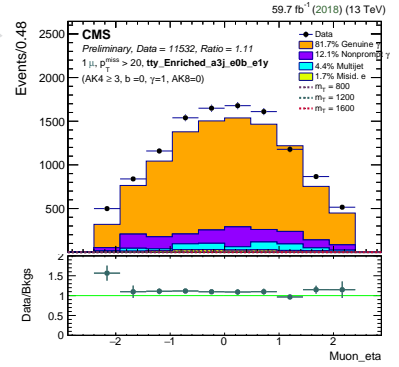
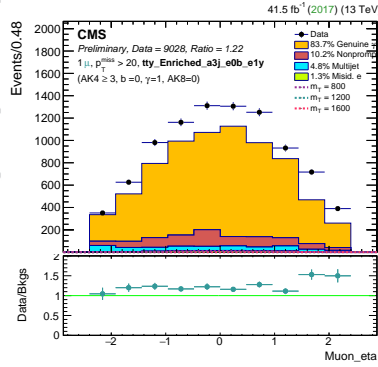
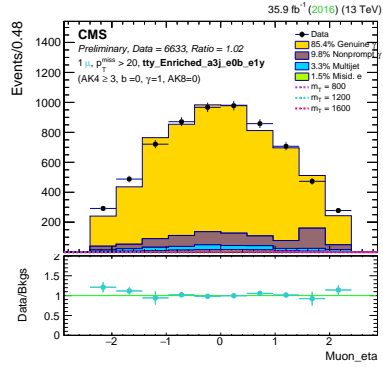
Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)
Data	4576.0	—	—	—	—	Data	6256.0	—	—	—	—	Data	7996.0	—	—	—	—
$W + \gamma$	2486.4	99.9	0.0	0.0	0.1	$W + \gamma$	2710.6	99.8	0.0	0.0	0.2	$W + \gamma$	3806.0	99.9	0.0	0.0	0.1
$Z + \gamma$	594.3	99.5	0.1	0.1	0.3	$Z + \gamma$	784.8	100.1	0.1	-0.1	-0.0	$Z + \gamma$	987.6	99.7	0.2	0.0	0.1
$t\bar{t}\gamma$	422.7	99.2	0.4	0.2	0.2	$t\bar{t}\gamma$	442.1	99.3	0.4	0.2	0.1	$t\bar{t}\gamma$	603.7	99.2	0.5	0.3	0.1
QCD	358.9	62.7	37.1	0.0	0.2	$W + jets$	395.5	0.0	57.6	0.0	42.4	QCD	545.4	65.3	34.4	0.0	0.4
$t/\bar{t}\bar{t}$	298.7	30.2	42.9	17.6	9.3	$t/\bar{t}\bar{t}$	330.8	26.7	45.5	17.6	10.3	$t/\bar{t}\bar{t}$	498.1	23.9	46.7	21.1	8.3
$W + jets$	231.3	0.0	64.1	0.6	35.3	QCD	223.4	67.7	27.9	0.0	4.4	$W + jets$	495.8	0.0	70.5	0.0	29.5
$DY + jets$	116.7	34.1	34.4	3.1	28.4	$DY + jets$	189.8	40.2	39.5	0.0	20.2	$DY + jets$	281.0	36.6	43.1	1.1	19.2
Others	111.3	79.9	13.5	3.3	3.3	Others	178.0	84.4	9.5	2.7	3.4	Others	264.6	84.7	9.2	3.1	3.0
Bkgs	4620.3	85.2	10.1	1.4	3.3	Bkgs	5254.9	83.7	10.2	1.2	5.0	Bkgs	7482.4	82.7	12.3	1.6	3.4
$m_T = 800$	4.5	0.0	97.8	2.2	0.0	$m_T = 800$	6.2	0.0	99.7	0.0	0.3	$m_T = 800$	8.3	0.3	99.3	0.4	0.0
$m_T = 1200$	0.2	0.0	98.1	0.0	1.9	$m_T = 1200$	0.2	0.5	99.5	0.0	0.0	$m_T = 1200$	0.3	0.0	100.0	0.0	0.0
$m_T = 1600$	0.0	0.0	100.0	0.0	0.0	$m_T = 1600$	0.0	0.8	99.2	0.0	0.0	$m_T = 1600$	0.0	-0.6	99.5	1.1	0.0
Data/Bkgs	0.99	—	—	—	—	Data/Bkgs	1.19	—	—	—	—	Data/Bkgs	1.07	—	—	—	—



Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)
Data	12640.0	—	—	—	—	Data	17214.0	—	—	—	—	Data	23520.0	—	—	—	—
$W + \gamma$	6729.1	99.9	0.0	0.0	0.1	$W + \gamma$	8101.4	99.6	0.2	0.0	0.2	$W + \gamma$	11401.8	99.9	0.0	0.0	0.1
$Z + \gamma$	2463.1	99.7	0.1	0.0	0.1	$Z + \gamma$	3144.2	99.8	0.2	0.0	0.1	$Z + \gamma$	4357.5	99.8	0.2	0.0	0.0
$W + jets$	851.8	0.0	62.7	0.2	37.1	$W + jets$	1341.9	0.0	55.5	0.2	44.3	$W + jets$	1846.7	0.0	63.6	0.0	36.4
QCD	544.3	79.6	17.8	0.0	2.6	QCD	795.0	54.3	41.5	0.0	4.1	QCD	889.0	29.7	38.2	25.1	7.0
$t/\bar{t}\bar{t}$	512.1	32.9	38.2	22.3	6.6	$DY + jets$	573.5	44.8	36.4	3.0	15.9	$t/\bar{t}\bar{t}$	889.0	29.7	38.2	25.1	7.0
$t\bar{t}\gamma$	487.2	99.1	0.5	0.3	0.1	$t/\bar{t}\bar{t}$	559.1	33.6	38.0	21.0	7.4	$DY + jets$	792.7	42.2	39.9	3.6	14.3
$DY + jets$	349.9	30.4	46.4	2.6	20.7	$t\bar{t}\gamma$	515.9	99.1	0.5	0.3	0.1	$t\bar{t}\gamma$	718.7	98.9	0.6	0.4	0.1
Others	214.9	71.4	17.2	7.1	4.4	Others	300.5	78.4	14.0	4.4	3.2	Others	455.4	73.2	17.2	6.1	3.5
Bkgs	12152.6	86.6	8.5	1.2	3.7	Bkgs	15331.7	83.7	10.2	1.0	5.1	Bkgs	21319.3	84.5	9.5	1.4	4.7
$m_T = 800$	2.7	0.0	100.0	0.0	0.0	$m_T = 800$	1.8	0.6	99.4	0.0	0.0	$m_T = 800$	2.7	0.8	99.2	0.0	0.0
$m_T = 1200$	0.0	0.0	100.0	0.0	0.0	$m_T = 1200$	0.1	0.0	100.0	0.0	0.0	$m_T = 1200$	0.1	0.0	100.0	0.0	0.0
$m_T = 1600$	0.0	0.0	99.4	0.0	0.6	$m_T = 1600$	0.0	0.0	97.4	2.6	0.0	$m_T = 1600$	0.0	0.0	100.0	0.0	0.0
Data/Bkgs	1.04	—	—	—	—	Data/Bkgs	1.12	—	—	—	—	Data/Bkgs	1.1	—	—	—	—

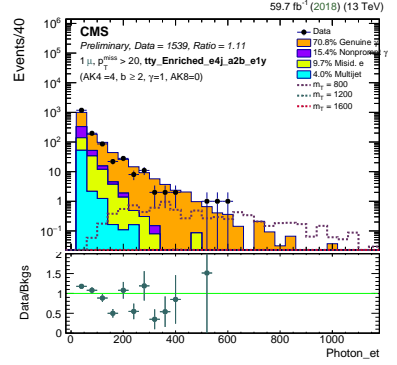
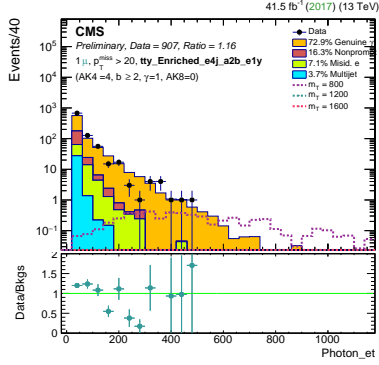
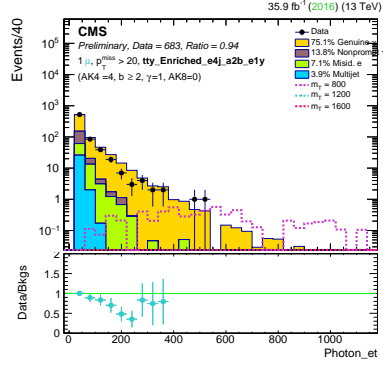


Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)
Data	1876.0	—	—	—	—	Data	2490.0	—	—	—	—	Data	3677.0	—	—	—	—
$t\bar{t}\gamma$	1137.0	99.5	0.3	0.1	0.1	$t\bar{t}\gamma$	1199.9	99.4	0.4	0.2	0.1	$t\bar{t}\gamma$	1883.6	99.3	0.4	0.2	0.1
$t/\bar{t}$	556.8	23.8	44.9	19.6	11.7	$t/\bar{t}$	655.0	24.6	45.6	18.7	11.1	$t/\bar{t}$	1129.9	20.1	45.1	24.1	10.7
$W + \gamma$	92.2	100.0	0.0	0.0	0.0	$W + \gamma$	81.6	100.0	0.0	0.0	0.0	$W + \gamma$	187.4	100.0	0.0	0.0	0.0
QCD	30.7	72.4	27.6	0.0	0.0	$Z + \gamma$	32.6	99.0	1.0	0.0	0.0	$Z + \gamma$	46.1	99.4	0.6	0.0	0.0
$Z + \gamma$	25.5	98.6	0.1	0.0	1.3	QCD	31.8	62.9	15.9	0.0	21.2	Others	40.1	78.0	13.4	6.0	2.6
Others	18.3	77.2	12.8	6.1	3.9	Others	23.5	84.4	7.9	5.0	2.7	$DY + jets$	18.3	71.2	28.8	0.0	0.0
$W + jets$	9.0	0.0	68.6	0.0	31.4	$W + jets$	13.2	0.0	68.8	0.0	31.2	$W + jets$	13.0	0.0	51.8	0.0	48.2
$DY + jets$	6.1	49.3	50.7	0.0	0.0	$DY + jets$	10.9	46.4	27.4	26.2	0.0	QCD	8.6	55.2	44.8	0.0	0.0
Bkgs	1875.5	75.7	14.6	6.0	3.7	Bkgs	2048.6	73.8	15.7	6.3	4.2	Bkgs	3327.0	71.5	16.2	8.4	3.9
$m_T = 800$	21.1	0.0	99.6	0.4	0.0	$m_T = 800$	20.0	0.1	99.6	0.2	0.1	$m_T = 800$	28.9	0.0	99.8	0.2	0.0
$m_T = 1200$	0.5	0.0	100.0	0.0	0.0	$m_T = 1200$	0.5	0.0	99.4	0.4	0.2	$m_T = 1200$	0.9	-0.0	100.0	0.0	0.0
$m_T = 1600$	0.0	0.0	100.0	0.0	0.0	$m_T = 1600$	0.0	0.1	99.7	0.2	0.0	$m_T = 1600$	0.1	-0.5	100.5	0.0	0.0
Data/Bkgs	1.0	—	—	—	—	Data/Bkgs	1.22	—	—	—	—	Data/Bkgs	1.11	—	—	—	—

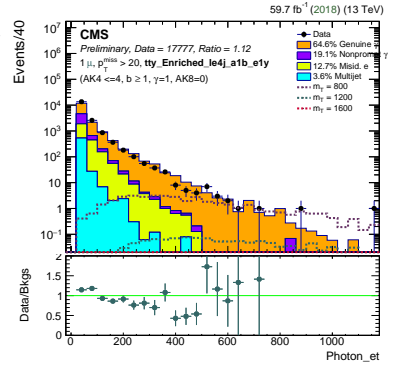
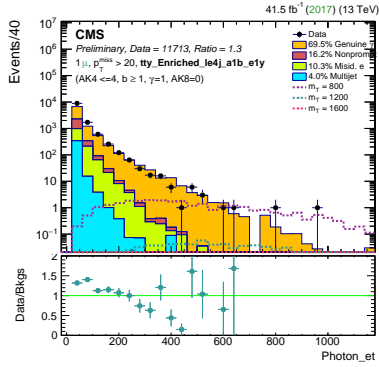
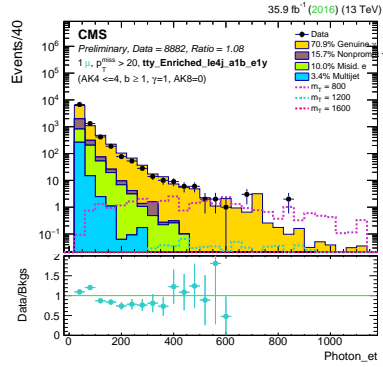


Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)
Data	6633.0	—	—	—	—	Data	9028.0	—	—	—	—	Data	11532.0	—	—	—	—
$W + \gamma$	3445.4	99.8	0.0	0.0	0.2	$W + \gamma$	3701.0	99.9	0.0	0.0	0.1	$W + \gamma$	5154.8	99.8	0.1	0.0	0.1
$t\bar{t}\gamma$	774.3	99.3	0.3	0.2	0.2	$Z + \gamma$	991.9	99.9	0.0	-0.1	0.1	$Z + \gamma$	1217.2	99.7	0.2	0.1	0.1
$Z + \gamma$	771.8	99.4	0.2	0.0	0.3	$t\bar{t}\gamma$	812.4	99.3	0.4	0.2	0.1	$t\bar{t}\gamma$	1085.1	99.2	0.4	0.2	0.1
$t/\bar{t}$	484.7	28.6	44.9	16.7	9.8	$t/\bar{t}$	542.9	26.8	46.0	16.3	10.9	$t/\bar{t}$	808.6	22.7	48.1	19.9	9.3
QCD	399.8	66.3	33.5	0.0	0.2	$W + jets$	503.1	0.0	61.0	0.0	39.0	QCD	715.7	60.1	31.8	0.1	8.0
$W + jets$	323.7	0.0	65.0	0.4	34.5	$DY + jets$	283.0	38.0	36.3	0.0	25.7	$W + jets$	681.1	0.0	64.6	0.0	35.4
Others	181.0	81.3	12.7	3.2	2.8	QCD	279.1	71.5	24.3	0.0	4.2	Others	399.8	85.2	9.3	2.7	2.8
$DY + jets$	143.3	31.0	35.7	3.6	29.7	Others	277.2	86.1	8.6	2.1	3.3	$DY + jets$	370.5	36.7	42.5	1.8	19.0
Bkgs	6524.1	85.4	9.8	1.5	3.3	Bkgs	7390.7	83.7	10.2	1.3	4.8	Bkgs	10432.8	81.7	12.1	1.7	4.4
$m_T = 800$	36.7	0.0	99.5	0.3	0.3	$m_T = 800$	47.8	0.1	99.8	0.0	0.1	$m_T = 800$	61.1	0.2	99.7	0.1	0.1
$m_T = 1200$	1.4	0.0	99.8	0.0	0.2	$m_T = 1200$	1.7	0.1	99.9	0.1	-0.0	$m_T = 1200$	2.3	0.1	99.8	0.1	0.0
$m_T = 1600$	0.1	0.5	99.5	0.0	0.0	$m_T = 1600$	0.1	-0.1	99.9	0.1	0.1	$m_T = 1600$	0.2	-0.1	99.8	0.2	0.1
Data/Bkgs	1.02	—	—	—	—	Data/Bkgs	1.22	—	—	—	—	Data/Bkgs	1.11	—	—	—	—

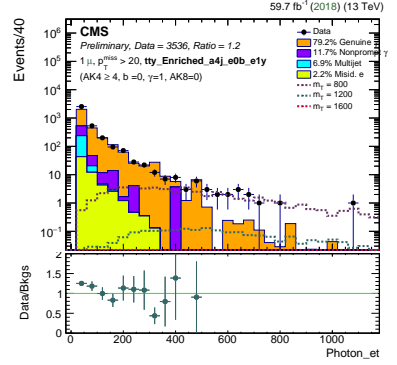
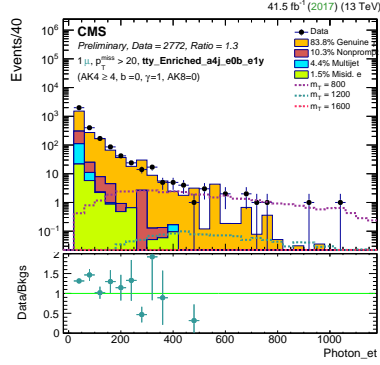
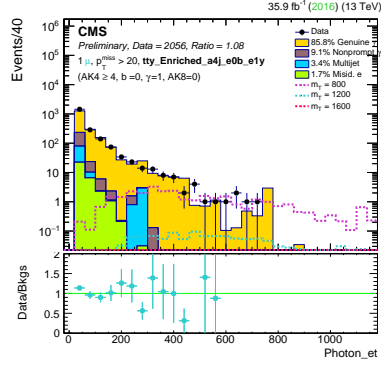




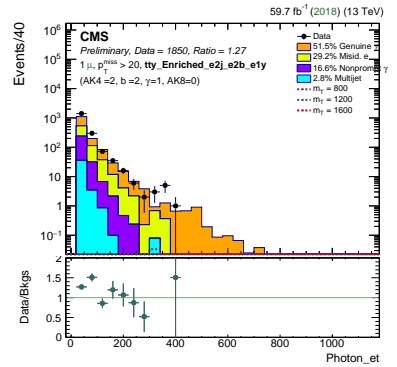
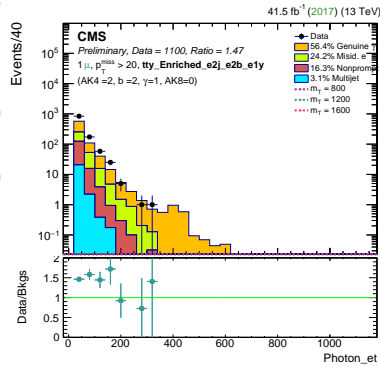
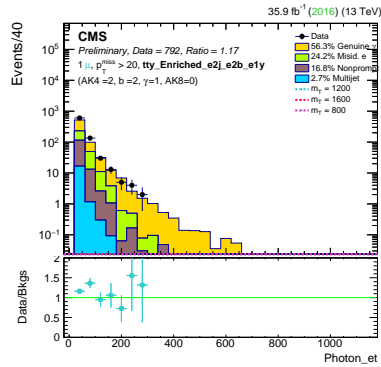
Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)
Data	683.0	—	—	—	—	Data	907.0	—	—	—	—	Data	1539.0	—	—	—	—
$t\bar{t}\gamma$	483.2	99.5	0.3	0.1	0.1	$t\bar{t}\gamma$	508.6	99.4	0.3	0.2	0.1	$t\bar{t}\gamma$	868.6	99.3	0.3	0.2	0.1
$t/t\bar{t}$	219.4	20.1	44.4	23.0	12.5	$t/t\bar{t}$	252.7	20.2	47.0	21.4	11.3	$t/t\bar{t}$	479.5	17.3	43.8	27.5	11.4
$W + \gamma$	9.1	100.0	0.0	0.0	0.0	Others	7.2	81.0	9.8	7.2	2.0	$W + \gamma$	20.8	100.0	0.0	0.0	0.0
Others	4.8	71.2	14.0	14.5	0.3	QCD	6.2	19.4	80.6	0.0	0.0	Others	12.6	78.8	11.6	6.2	3.3
QCD	4.7	100.0	0.0	0.0	0.0	$W + \gamma$	4.6	100.0	0.0	0.0	0.0	$Z + \gamma$	7.3	100.0	0.0	0.0	0.0
$DY + jets$	1.5	100.0	0.0	0.0	0.0	$Z + \gamma$	3.3	100.0	0.0	0.0	0.0	$DY + jets$	1.3	100.0	0.0	0.0	0.0
$Z + \gamma$	1.4	76.1	0.0	0.0	23.9	$W + jets$	1.4	0.0	100.0	0.0	0.0	$W + jets$	0	0	0	0	0
$W + jets$	0.8	0.0	100.0	0.0	0.0	$DY + jets$	0	0	0	0	0	QCD	0	0	0	0	0
Bkgs	724.9	75.1	13.8	7.1	3.9	Bkgs	784.0	72.9	16.3	7.1	3.7	Bkgs	1390.1	70.8	15.4	9.7	4.0
$m_T = 800$	6.1	0.0	98.5	1.5	0.0	$m_T = 800$	5.4	0.3	99.1	0.6	0.0	$m_T = 800$	8.1	0.0	100.0	0.0	0.0
$m_T = 1200$	0.1	0.0	100.0	0.0	0.0	$m_T = 1200$	0.1	0.0	98.7	1.3	0.0	$m_T = 1200$	0.2	0.0	100.0	0.0	0.0
$m_T = 1600$	0.0	0.0	100.0	0.0	0.0	$m_T = 1600$	0.0	0.6	99.4	0.0	0.0	$m_T = 1600$	0.0	-1.2	101.2	0.0	0.0
Data/Bkgs	0.94	—	—	—	—	Data/Bkgs	1.16	—	—	—	—	Data/Bkgs	1.11	—	—	—	—



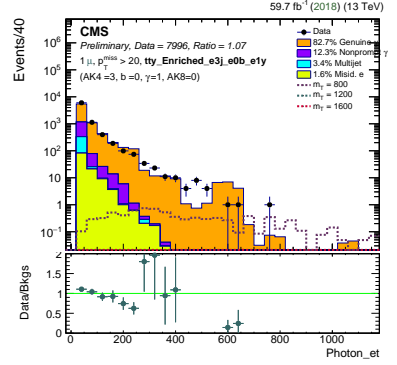
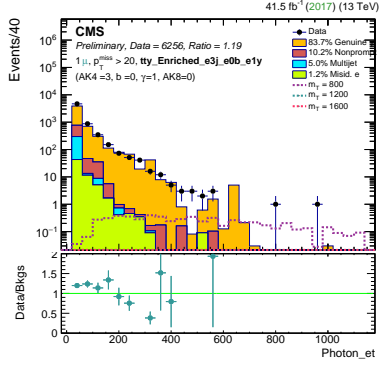
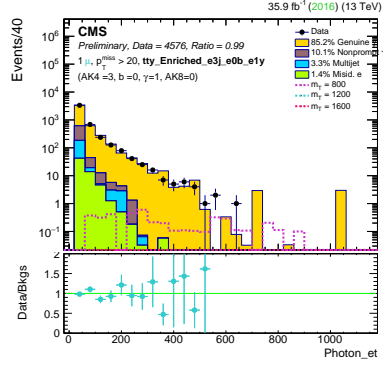
Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)
Data	8882.0	—	—	—	—	Data	11713.0	—	—	—	—	Data	17777.0	—	—	—	—
$t\bar{t}\gamma$	3784.1	99.2	0.4	0.3	0.1	$t\bar{t}\gamma$	4031.1	99.2	0.4	0.3	0.1	$t\bar{t}\gamma$	6312.0	99.0	0.5	0.4	0.1
$t/t\bar{t}$	2949.6	24.8	39.7	27.5	8.1	$t/t\bar{t}$	3352.3	25.4	39.4	26.9	8.4	$t/t\bar{t}$	6110.0	22.3	37.8	32.3	7.6
$W + \gamma$	726.4	100.0	0.0	0.0	0.0	$W + \gamma$	715.0	100.0	0.0	0.0	0.0	$W + \gamma$	1597.1	99.6	0.4	0.0	0.0
$Z + \gamma$	372.5	99.7	0.0	0.1	0.2	$Z + \gamma$	418.6	99.5	0.2	0.1	0.2	QCD	781.1	32.2	64.4	0.0	3.3
QCD	210.1	94.6	4.7	0.0	0.7	QCD	213.1	72.7	12.4	0.0	15.0	$Z + \gamma$	622.2	99.7	0.2	0.1	0.0
$W + jets$	101.6	0.0	68.2	0.0	31.8	$DY + jets$	95.3	50.4	23.0	7.1	19.4	$W + jets$	187.3	0.0	71.1	0.0	28.9
Others	65.2	76.6	13.6	6.5	3.3	$W + jets$	86.1	0.0	70.8	3.0	26.1	Others	149.1	77.9	12.3	6.7	3.1
$DY + jets$	27.1	22.0	66.1	0.0	11.8	Others	86.0	80.0	11.6	5.0	3.4	$DY + jets$	114.3	58.0	30.1	0.5	11.4
Bkgs	8236.6	70.9	15.7	10.0	3.4	Bkgs	8997.5	69.5	16.2	10.3	4.0	Bkgs	15873.1	64.6	19.1	12.7	3.6
$m_T = 800$	28.7	0.0	99.7	0.3	0.0	$m_T = 800$	27.8	-0.0	99.8	0.1	0.1	$m_T = 800$	40.7	0.0	99.7	0.3	0.0
$m_T = 1200$	0.6	0.0	100.0	0.0	0.0	$m_T = 1200$	0.7	0.0	99.6	0.3	0.1	$m_T = 1200$	1.1	0.1	100.0	-0.1	0.0
$m_T = 1600$	0.0	0.0	100.0	0.0	0.0	$m_T = 1600$	0.0	0.2	99.6	0.1	0.0	$m_T = 1600$	0.1	-0.3	100.2	0.1	0.0
Data/Bkgs	1.08	—	—	—	—	Data/Bkgs	1.3	—	—	—	—	Data/Bkgs	1.12	—	—	—	—



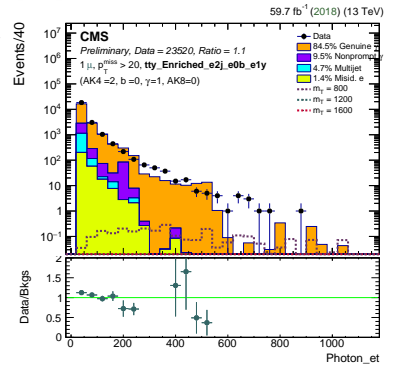
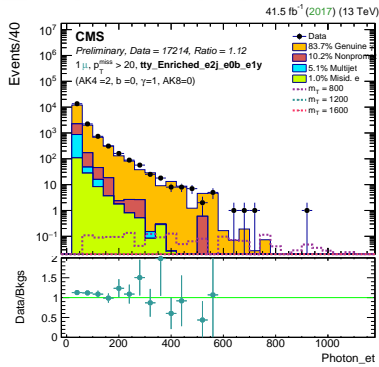
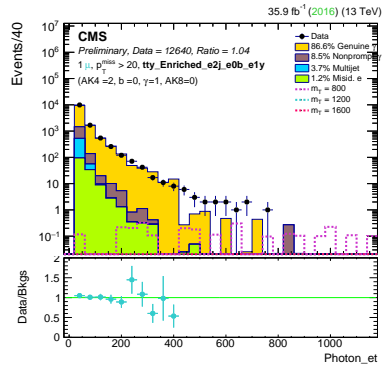
Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)
Data	2056.0	—	—	—	—	Data	2772.0	—	—	—	—	Data	3536.0	—	—	—	—
$W + \gamma$	959.0	99.7	0.0	0.0	0.3	$W + \gamma$	990.4	100.0	0.0	0.0	0.0	$W + \gamma$	1348.8	99.6	0.4	0.0	0.0
$t\bar{t}\gamma$	351.5	99.4	0.3	0.1	0.1	$t\bar{t}\gamma$	370.3	99.4	0.4	0.1	0.1	$t\bar{t}\gamma$	481.4	99.3	0.4	0.2	0.1
$t/\bar{t}\ell$	186.0	26.1	48.1	15.3	10.5	$t/\bar{t}\ell$	212.0	26.9	46.8	14.4	11.9	$t/\bar{t}\ell$	310.5	20.8	50.2	18.1	10.8
$Z + \gamma$	177.5	99.3	0.4	0.0	0.2	$Z + \gamma$	207.1	99.4	0.0	0.0	0.6	$Z + \gamma$	229.7	99.3	0.3	0.2	0.1
$W + \text{jets}$	92.4	0.0	67.4	0.0	32.6	$W + \text{jets}$	107.6	0.0	73.6	0.0	26.4	$W + \text{jets}$	185.2	0.0	48.9	0.0	51.1
Others	69.7	83.5	11.4	3.1	1.9	Others	99.3	89.1	6.8	1.0	3.1	Others	170.3	43.5	23.8	0.2	32.5
QCD	41.0	97.5	2.4	0.0	0.1	$DY + \text{jets}$	93.3	33.5	29.8	0.0	36.8	Others	135.1	86.2	9.4	2.0	2.4
$DY + \text{jets}$	26.7	17.6	41.1	5.8	35.5	QCD	55.7	86.9	9.6	0.0	3.5	$DY + \text{jets}$	89.5	37.0	40.7	4.0	18.3
Bkgs	1903.7	85.8	9.1	1.7	3.4	Bkgs	2135.8	83.8	10.3	1.5	4.4	Bkgs	2950.5	79.2	11.7	2.2	6.9
$m_T = 800$	30.6	0.0	99.7	0.0	0.3	$m_T = 800$	39.3	0.2	99.8	0.0	0.1	$m_T = 800$	50.2	0.1	99.7	0.0	0.2
$m_T = 1200$	1.2	0.0	100.0	0.0	0.0	$m_T = 1200$	1.3	0.1	99.9	0.1	-0.1	$m_T = 1200$	2.0	0.1	99.8	0.1	0.1
$m_T = 1600$	0.1	0.8	99.2	0.0	0.0	$m_T = 1600$	0.1	-0.2	100.0	0.1	0.1	$m_T = 1600$	0.1	-0.0	99.8	0.1	0.1
Data/Bkgs	1.08	—	—	—	—	Data/Bkgs	1.3	—	—	—	—	Data/Bkgs	1.2	—	—	—	—



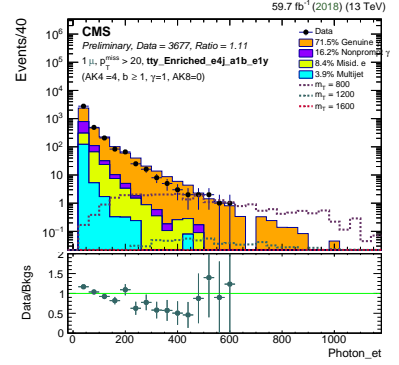
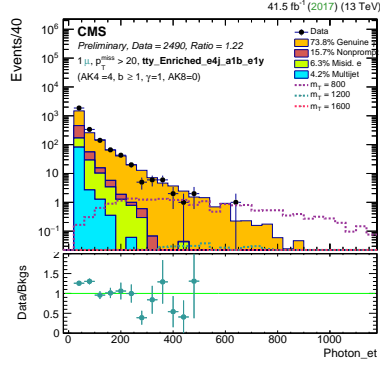
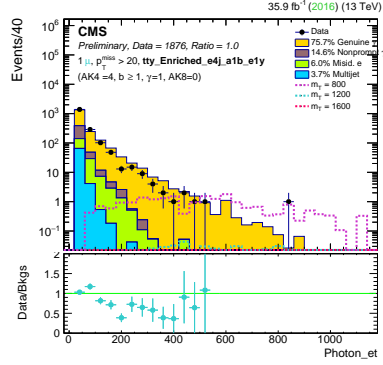
Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)
Data	792.0	—	—	—	—	Data	1100.0	—	—	—	—	Data	1850.0	—	—	—	—
$t/\bar{t}\ell$	359.2	19.7	30.3	45.1	4.9	$t/\bar{t}\ell$	413.1	21.9	29.2	43.3	5.6	$t/\bar{t}\ell$	846.7	18.6	27.2	49.5	4.6
$t\bar{t}\gamma$	282.6	98.8	0.4	0.7	0.1	$t\bar{t}\gamma$	299.3	98.7	0.4	0.8	0.1	$t\bar{t}\gamma$	499.8	98.4	0.6	0.9	0.2
$Z + \gamma$	20.1	100.0	0.0	0.0	0.0	$Z + \gamma$	26.3	100.0	0.0	0.0	0.0	QCD	53.5	100.0	0.0	0.0	0.0
$W + \gamma$	6.2	100.0	0.0	0.0	0.0	$W + \gamma$	7.1	100.0	0.0	0.0	0.0	$Z + \gamma$	24.5	100.0	0.0	0.0	0.0
$DY + \text{jets}$	2.8	51.5	48.5	0.0	0.0	Others	2.4	86.7	2.2	8.8	2.4	$W + \gamma$	11.2	100.0	0.0	0.0	0.0
Others	2.3	79.3	15.0	4.7	1.1	QCD	0.9	100.0	0.0	0.0	0.0	$W + \text{jets}$	7.0	0.0	100.0	0.0	0.0
$W + \text{jets}$	2.1	0.0	100.0	0.0	0.0	$DY + \text{jets}$	0.0	100.0	0.0	0.0	0.0	Others	5.9	76.0	13.8	7.1	3.0
QCD	0.7	100.0	0.0	0.0	0.0	$W + \text{jets}$	0	0	0	0	0	$DY + \text{jets}$	4.8	100.0	0.0	0.0	0.0
Bkgs	675.9	56.3	16.8	24.2	2.7	Bkgs	749.1	56.4	16.3	24.2	3.1	Bkgs	1453.4	51.5	16.6	29.2	2.8
$m_T = 1200$	0.0	0.0	100.0	0.0	0.0	$m_T = 800$	0.1	0.0	100.0	0.0	0.0	$m_T = 800$	0.0	0.0	100.0	0.0	0.0
$m_T = 1600$	0.0	0.0	100.0	0.0	0.0	$m_T = 1200$	0.0	0.0	100.0	0.0	0.0	$m_T = 1200$	0.0	0.0	100.0	0.0	0.0
$m_T = 800$	0.0	0.0	100.0	0.0	0.0	$m_T = 1600$	0.0	0.0	100.0	0.0	0.0	$m_T = 1600$	0.0	0.0	100.0	0.0	0.0
Data/Bkgs	1.17	—	—	—	—	Data/Bkgs	1.47	—	—	—	—	Data/Bkgs	1.27	—	—	—	—



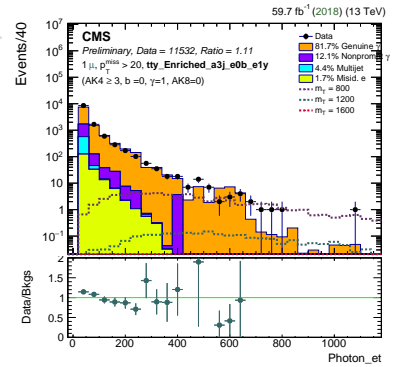
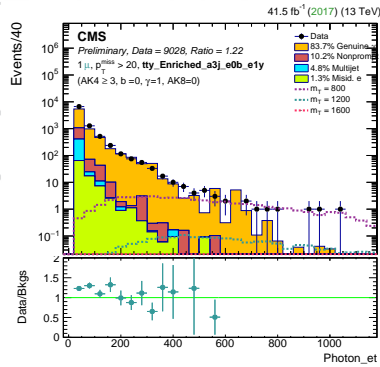
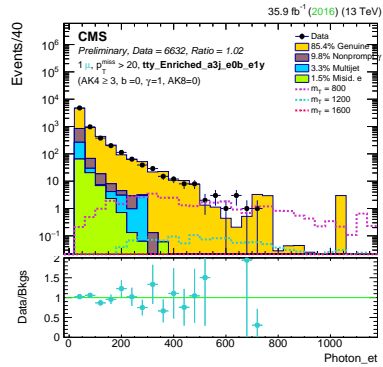
Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)
Data	4576.0	—	—	—	—	Data	6256.0	—	—	—	—	Data	7996.0	—	—	—	—
$W + \gamma$	2486.4	99.9	0.0	0.0	0.1	$W + \gamma$	2710.6	99.8	0.0	0.0	0.2	$W + \gamma$	3806.0	99.9	0.0	0.0	0.1
$Z + \gamma$	594.3	99.5	0.1	0.1	0.3	$Z + \gamma$	784.8	100.1	0.1	-0.1	-0.0	$Z + \gamma$	987.6	99.7	0.2	0.0	0.1
$t\bar{t}\gamma$	422.7	99.2	0.4	0.2	0.2	$t\bar{t}\gamma$	442.1	99.3	0.4	0.2	0.1	$t\bar{t}\gamma$	603.7	99.2	0.5	0.3	0.1
QCD	358.9	62.7	37.1	0.0	0.2	$W + jets$	395.5	0.0	57.6	0.0	42.4	QCD	545.4	65.3	34.4	0.0	0.4
$t/\bar{t}$	298.7	30.2	42.9	17.6	9.3	$t/\bar{t}$	330.8	26.7	45.5	17.6	10.3	$t/\bar{t}$	498.1	23.9	46.7	21.1	8.3
$W + jets$	231.3	0.0	64.1	0.6	35.3	QCD	223.4	67.7	27.9	0.0	4.4	$W + jets$	495.8	0.0	70.5	0.0	29.5
$DY + jets$	116.7	34.1	34.4	3.1	28.4	$DY + jets$	189.8	40.2	39.5	0.0	20.2	$DY + jets$	281.0	36.6	43.1	1.1	19.2
Others	111.3	79.9	13.5	3.3	3.3	Others	178.0	84.4	9.5	2.7	3.4	Others	264.6	84.7	9.2	3.1	3.0
Bkgs	4620.3	85.2	10.1	1.4	3.3	Bkgs	5254.9	83.7	10.2	1.2	5.0	Bkgs	7482.3	82.7	12.3	1.6	3.4
$m_T = 800$	4.2	0.0	97.6	2.4	0.0	$m_T = 800$	5.9	0.0	99.6	0.0	0.4	$m_T = 800$	7.9	0.3	99.3	0.4	0.0
$m_T = 1200$	0.2	0.0	97.9	0.0	2.1	$m_T = 1200$	0.2	0.5	99.5	0.0	0.0	$m_T = 1200$	0.2	0.0	100.0	0.0	0.0
$m_T = 1600$	0.0	0.0	100.0	0.0	0.0	$m_T = 1600$	0.0	0.7	99.3	0.0	0.0	$m_T = 1600$	0.0	-0.6	99.4	1.2	0.0
Data/Bkgs	0.99	—	—	—	—	Data/Bkgs	1.19	—	—	—	—	Data/Bkgs	1.07	—	—	—	—



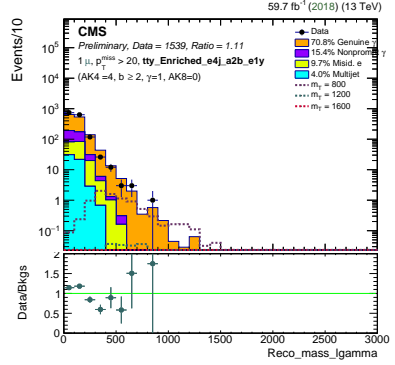
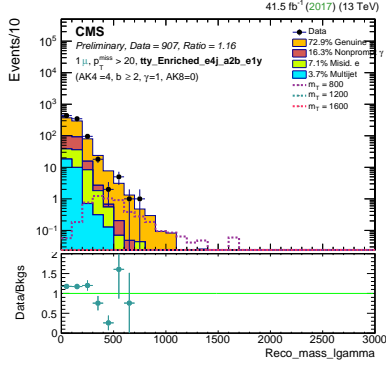
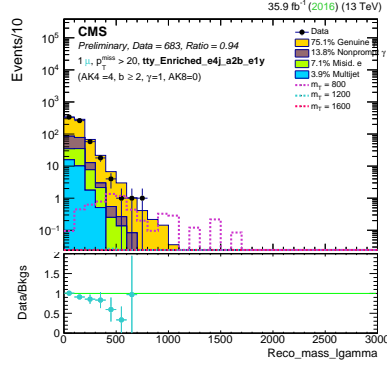
Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)
Data	12640.0	—	—	—	—	Data	17214.0	—	—	—	—	Data	23520.0	—	—	—	—
$W + \gamma$	6729.1	99.9	0.0	0.0	0.1	$W + \gamma$	8101.4	99.6	0.2	0.0	0.2	$W + \gamma$	11401.8	99.9	0.0	0.0	0.1
$Z + \gamma$	2463.1	99.7	0.1	0.0	0.1	$Z + \gamma$	3144.2	99.8	0.2	0.0	0.1	$Z + \gamma$	4357.4	99.8	0.2	0.0	0.0
$W + jets$	851.8	0.0	62.7	0.2	37.1	$W + jets$	1341.9	0.0	55.5	0.2	44.3	$W + jets$	1846.7	0.0	63.6	0.0	36.4
QCD	544.3	79.6	17.8	0.0	2.6	QCD	795.0	54.3	41.5	0.0	4.1	QCD	889.0	29.7	38.2	25.1	7.0
$t/\bar{t}$	512.1	32.9	38.2	22.3	6.6	$DY + jets$	573.5	44.8	36.4	3.0	15.9	$t/\bar{t}$	889.0	29.7	38.2	25.1	7.0
$t\bar{t}\gamma$	487.2	99.1	0.5	0.3	0.1	$t/\bar{t}$	559.1	33.6	38.0	21.0	7.4	$DY + jets$	792.7	42.2	39.9	3.6	14.3
$DY + jets$	349.9	30.4	46.4	2.6	20.7	$t\bar{t}\gamma$	515.9	99.1	0.5	0.3	0.1	$t\bar{t}\gamma$	718.7	98.9	0.6	0.4	0.1
Others	214.9	71.4	17.2	7.1	4.4	Others	300.5	78.4	14.0	4.4	3.2	Others	455.4	73.2	17.2	6.1	3.5
Bkgs	12152.6	86.6	8.5	1.2	3.7	Bkgs	15331.6	83.7	10.2	1.0	5.1	Bkgs	21319.2	84.5	9.5	1.4	4.7
$m_T = 800$	2.6	0.0	100.0	0.0	0.0	$m_T = 800$	1.7	0.7	99.3	0.0	0.0	$m_T = 800$	2.6	0.9	99.1	0.0	0.0
$m_T = 1200$	0.0	0.0	100.0	0.0	0.0	$m_T = 1200$	0.1	0.0	100.0	0.0	0.0	$m_T = 1200$	0.1	0.0	100.0	0.0	0.0
$m_T = 1600$	0.0	0.0	99.2	0.0	0.8	$m_T = 1600$	0.0	0.0	97.7	2.3	0.0	$m_T = 1600$	0.0	0.0	100.0	0.0	0.0
Data/Bkgs	1.04	—	—	—	—	Data/Bkgs	1.12	—	—	—	—	Data/Bkgs	1.1	—	—	—	—



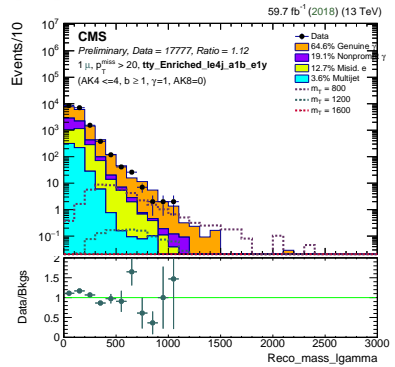
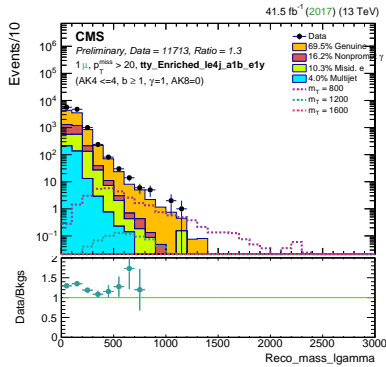
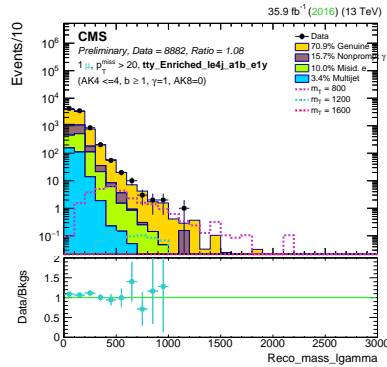
Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)
Data	1876.0	—	—	—	—	Data	2490.0	—	—	—	—	Data	3677.0	—	—	—	—
$t\bar{t}\gamma$	1137.0	99.5	0.3	0.1	0.1	$t\bar{t}\gamma$	1199.9	99.4	0.4	0.2	0.1	$t\bar{t}\gamma$	1883.6	99.3	0.4	0.2	0.1
$t/t\bar{t}$	556.8	23.8	44.9	19.6	11.7	$t/t\bar{t}$	655.0	24.6	45.6	18.7	11.1	$t/t\bar{t}$	1129.9	20.1	45.1	24.1	10.7
$W + \gamma$	92.2	100.0	0.0	0.0	0.0	$W + \gamma$	81.6	100.0	0.0	0.0	0.0	$W + \gamma$	187.4	100.0	0.0	0.0	0.0
QCD	30.7	72.4	27.6	0.0	0.0	$Z + \gamma$	32.6	99.0	1.0	0.0	0.0	$Z + \gamma$	46.1	99.4	0.6	0.0	0.0
$Z + \gamma$	25.5	98.6	0.1	0.0	1.3	QCD	31.8	62.9	15.9	0.0	21.2	Others	40.1	78.0	13.4	6.0	2.6
Others	18.3	77.2	12.8	6.1	3.9	Others	23.5	84.4	7.9	5.0	2.7	$DY + jets$	18.3	71.2	28.8	0.0	0.0
$W + jets$	9.0	0.0	68.6	0.0	31.4	$W + jets$	13.2	0.0	68.8	0.0	31.2	$W + jets$	13.0	0.0	51.8	0.0	48.2
$DY + jets$	6.1	49.3	50.7	0.0	0.0	$DY + jets$	10.9	46.4	27.4	26.2	0.0	QCD	8.6	55.2	44.8	0.0	0.0
Bkgs	1875.5	75.7	14.6	6.0	3.7	Bkgs	2048.6	73.8	15.7	6.3	4.2	Bkgs	3326.9	71.5	16.2	8.4	3.9
$m_T = 800$	20.5	0.0	99.6	0.4	0.0	$m_T = 800$	19.3	0.1	99.6	0.2	0.1	$m_T = 800$	27.7	0.0	99.8	0.2	0.0
$m_T = 1200$	0.4	0.0	100.0	0.0	0.0	$m_T = 1200$	0.5	0.0	99.4	0.4	0.2	$m_T = 1200$	0.8	-0.0	100.0	0.0	0.0
$m_T = 1600$	0.0	0.0	100.0	0.0	0.0	$m_T = 1600$	0.0	0.1	99.7	0.2	0.0	$m_T = 1600$	0.1	-0.5	100.5	0.0	0.0
Data/Bkgs	1.0	—	—	—	—	Data/Bkgs	1.22	—	—	—	—	Data/Bkgs	1.11	—	—	—	—



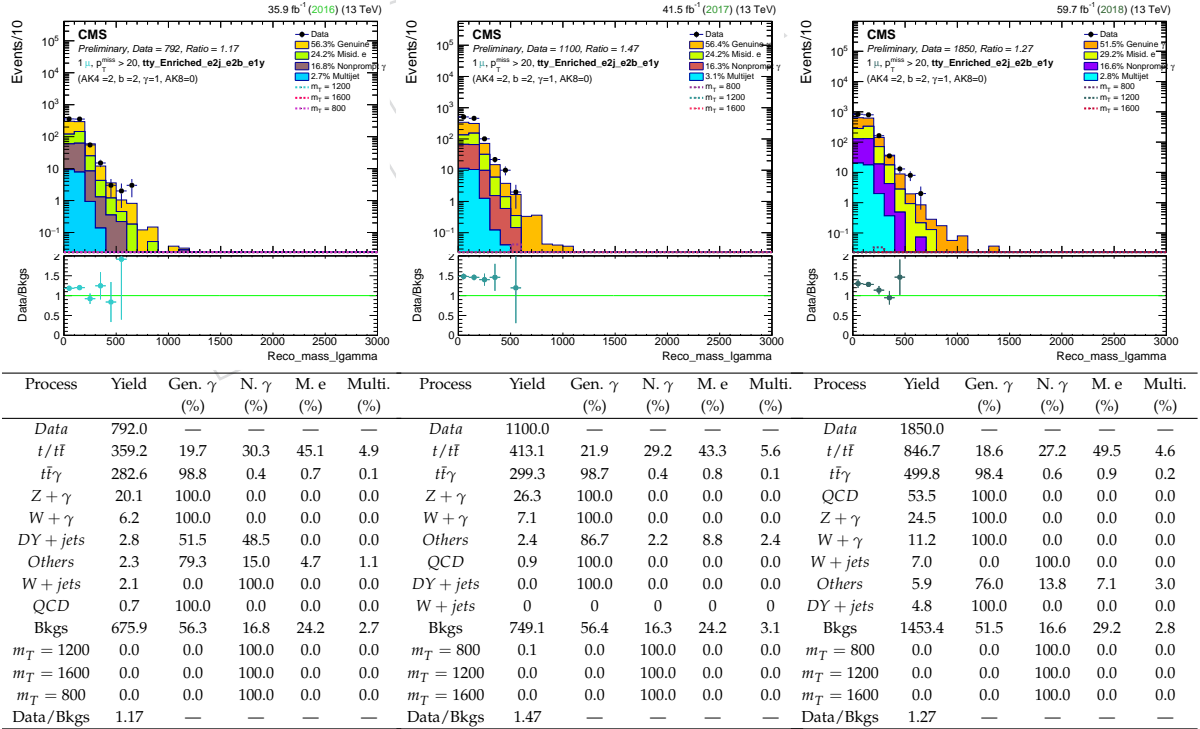
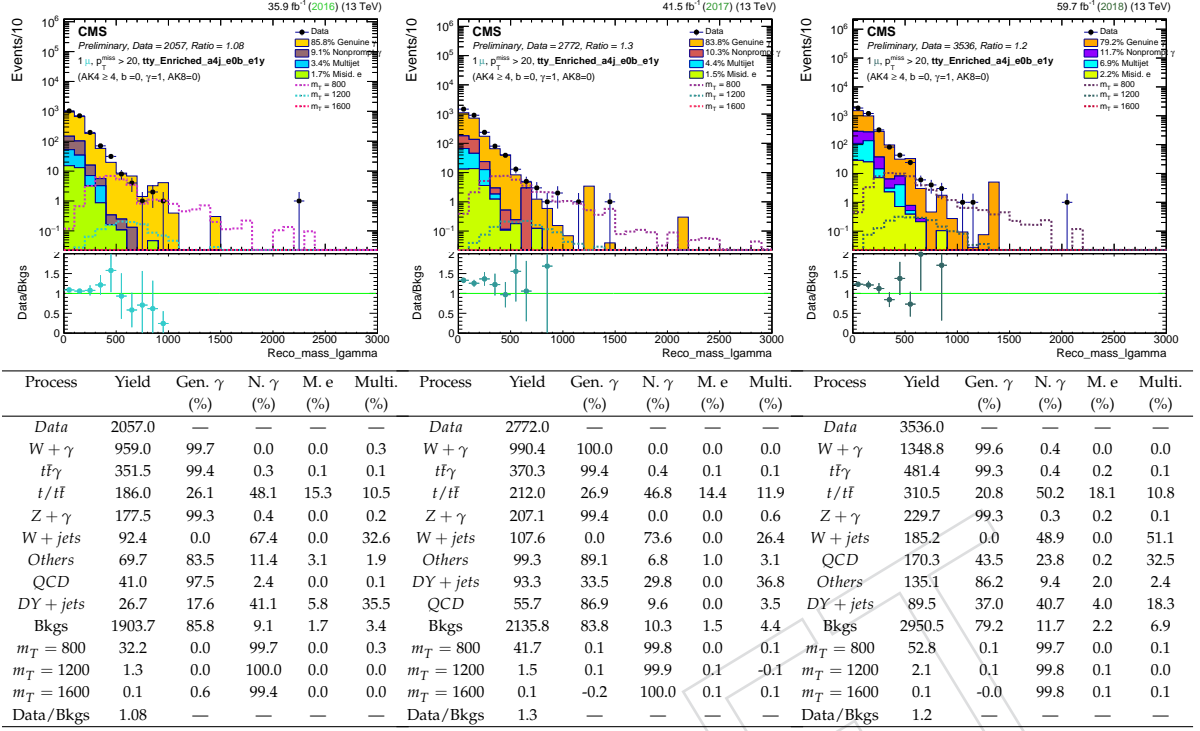
Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)
Data	6632.0	—	—	—	—	Data	9028.0	—	—	—	—	Data	11532.0	—	—	—	—
$W + \gamma$	3445.4	99.8	0.0	0.0	0.2	$W + \gamma$	3701.0	99.9	0.0	0.0	0.1	$W + \gamma$	5154.8	99.8	0.1	0.0	0.1
$t\bar{t}\gamma$	774.3	99.3	0.3	0.2	0.2	$Z + \gamma$	991.9	99.9	0.0	-0.1	0.1	$Z + \gamma$	1217.2	99.7	0.2	0.1	0.1
$Z + \gamma$	771.8	99.4	0.2	0.0	0.3	$t\bar{t}\gamma$	812.4	99.3	0.4	0.2	0.1	$t\bar{t}\gamma$	1085.1	99.2	0.4	0.2	0.1
$t/t\bar{t}$	484.7	28.6	44.9	16.7	9.8	$t/t\bar{t}$	542.9	26.8	46.0	16.3	10.9	$t/t\bar{t}$	808.6	22.7	48.1	19.9	9.3
QCD	399.8	66.3	33.5	0.0	0.2	$W + jets$	503.1	0.0	61.0	0.0	39.0	QCD	715.7	60.1	31.8	0.1	8.0
$W + jets$	323.7	0.0	65.0	0.4	34.5	$DY + jets$	283.0	38.0	36.3	0.0	25.7	$W + jets$	681.1	0.0	64.6	0.0	35.4
Others	181.0	81.3	12.7	3.2	2.8	QCD	279.1	71.5	24.3	0.0	4.2	Others	399.8	85.2	9.3	2.7	2.8
$DY + jets$	143.3	31.0	35.7	3.6	29.7	Others	277.2	86.1	8.6	2.1	3.3	$DY + jets$	370.5	36.7	42.5	1.8	19.0
Bkgs	6524.1	85.4	9.8	1.5	3.3	Bkgs	7390.7	83.7	10.2	1.3	4.8	Bkgs	10432.8	81.7	12.1	1.7	4.4
$m_T = 800$	34.8	0.0	99.4	0.3	0.3	$m_T = 800$	45.3	0.1	99.8	0.0	0.1	$m_T = 800$	58.1	0.2	99.7	0.1	0.1
$m_T = 1200$	1.3	0.0	99.8	0.0	0.2	$m_T = 1200$	1.5	0.1	99.8	0.1	-0.1	$m_T = 1200$	2.2	0.1	99.8	0.1	0.0
$m_T = 1600$	0.1	0.7	99.3	0.0	0.0	$m_T = 1600$	0.1	-0.1	99.9	0.1	0.1	$m_T = 1600$	0.1	-0.1	99.8	0.2	0.1
Data/Bkgs	1.02	—	—	—	—	Data/Bkgs	1.22	—	—	—	—	Data/Bkgs	1.11	—	—	—	—

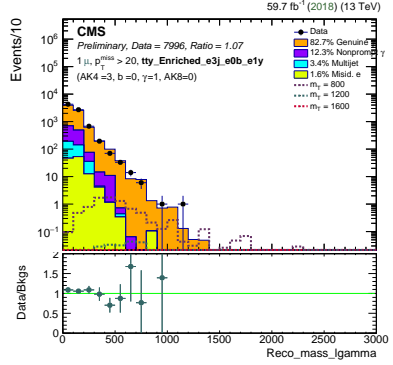
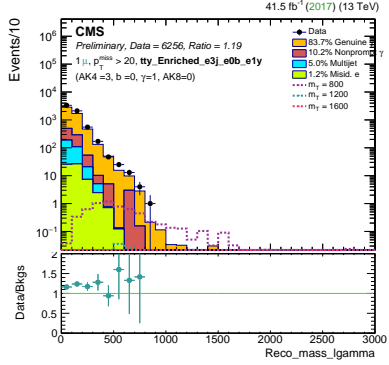
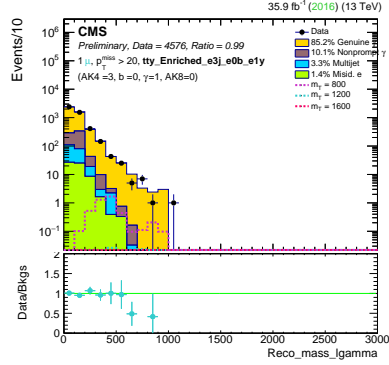


Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)
Data	683.0	—	—	—	—	Data	907.0	—	—	—	—	Data	1539.0	—	—	—	—
$t\bar{t}\gamma$	483.2	99.5	0.3	0.1	0.1	$t\bar{t}\gamma$	508.6	99.4	0.3	0.2	0.1	$t\bar{t}\gamma$	868.7	99.3	0.3	0.2	0.1
$t/\bar{t}$	219.4	20.1	44.4	23.0	12.5	$t/\bar{t}$	252.7	20.2	47.0	21.4	11.3	$t/\bar{t}$	479.5	17.3	43.8	27.5	11.4
$W + \gamma$	9.1	100.0	0.0	0.0	0.0	$W + \gamma$	7.2	81.0	9.8	7.2	2.0	$W + \gamma$	20.8	100.0	0.0	0.0	0.0
Others	4.8	71.2	14.0	14.5	0.3	QCD	6.2	19.4	80.6	0.0	0.0	Others	12.6	78.8	11.6	6.2	3.3
QCD	4.7	100.0	0.0	0.0	0.0	$W + \gamma$	4.6	100.0	0.0	0.0	0.0	$Z + \gamma$	7.3	100.0	0.0	0.0	0.0
$DY + jets$	1.5	100.0	0.0	0.0	0.0	$Z + \gamma$	3.3	100.0	0.0	0.0	0.0	$DY + jets$	1.3	100.0	0.0	0.0	0.0
$Z + \gamma$	1.4	76.1	0.0	0.0	23.9	$W + jets$	1.4	0.0	100.0	0.0	0.0	QCD	0	0	0	0	0
$W + jets$	0.8	0.0	100.0	0.0	0.0	$DY + jets$	0	0	0	0	0	$W + jets$	0	0	0	0	0
Bkgs	724.9	75.1	13.8	7.1	3.9	Bkgs	784.0	72.9	16.3	7.1	3.7	Bkgs	1390.2	70.8	15.4	9.7	4.0
$m_T = 800$	6.3	0.0	98.6	1.4	0.0	$m_T = 800$	5.5	0.3	99.1	0.6	0.0	$m_T = 800$	8.4	0.0	100.0	0.0	0.0
$m_T = 1200$	0.1	0.0	100.0	0.0	0.0	$m_T = 1200$	0.1	0.0	98.8	1.2	0.0	$m_T = 1200$	0.3	0.0	100.0	0.0	0.0
$m_T = 1600$	0.0	0.0	100.0	0.0	0.0	$m_T = 1600$	0.0	0.6	99.4	0.0	0.0	$m_T = 1600$	0.0	-1.2	101.2	0.0	0.0
Data/Bkgs	0.94	—	—	—	—	Data/Bkgs	1.16	—	—	—	—	Data/Bkgs	1.11	—	—	—	—

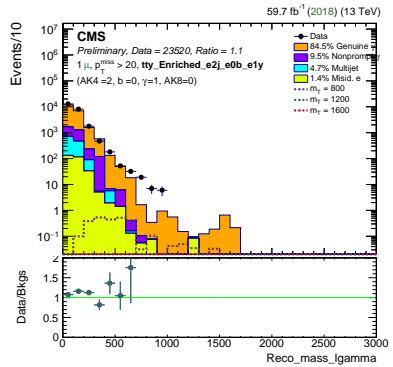
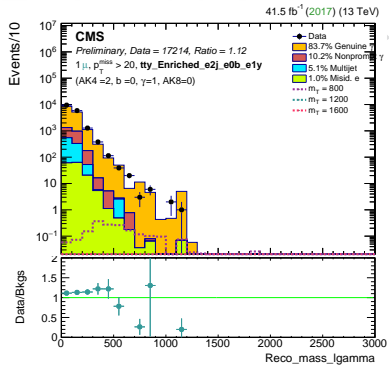
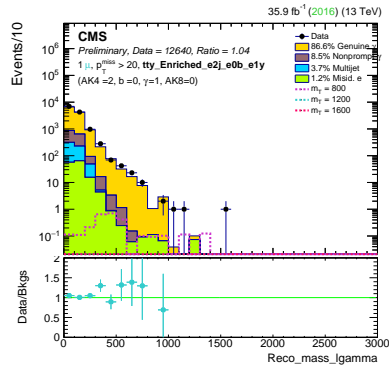


Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)
Data	8882.0	—	—	—	—	Data	11713.0	—	—	—	—	Data	17777.0	—	—	—	—
$t\bar{t}\gamma$	3784.1	99.2	0.4	0.3	0.1	$t\bar{t}\gamma$	4031.0	99.2	0.4	0.3	0.1	$t\bar{t}\gamma$	6311.6	99.0	0.5	0.4	0.1
$t/\bar{t}$	2949.6	24.8	39.7	27.5	8.1	$t/\bar{t}$	3352.3	25.4	39.4	26.9	8.4	$t/\bar{t}$	6110.1	22.3	37.8	32.3	7.6
$W + \gamma$	726.4	100.0	0.0	0.0	0.0	$W + \gamma$	715.0	100.0	0.0	0.0	0.0	$W + \gamma$	1597.1	99.6	0.4	0.0	0.0
$Z + \gamma$	372.5	99.7	0.0	0.1	0.2	$Z + \gamma$	418.6	99.5	0.2	0.1	0.2	QCD	781.1	32.2	64.4	0.0	3.3
QCD	210.1	94.6	4.7	0.0	0.7	QCD	213.1	72.7	12.4	0.0	15.0	$Z + \gamma$	622.2	99.7	0.2	0.1	0.0
$W + jets$	101.6	0.0	68.2	0.0	31.8	$DY + jets$	95.3	50.4	23.0	7.1	19.4	$W + jets$	187.3	0.0	71.1	0.0	28.9
Others	65.2	76.6	13.6	6.5	3.3	$W + jets$	86.1	0.0	70.8	3.0	26.1	Others	149.1	77.9	12.3	6.7	3.1
$DY + jets$	27.1	22.0	66.1	0.0	11.8	Others	86.0	80.0	11.6	5.0	3.4	$DY + jets$	114.3	58.0	30.1	0.5	11.4
Bkgs	8236.6	70.9	15.7	10.0	3.4	Bkgs	8997.5	69.5	16.2	10.3	4.0	Bkgs	15872.8	64.6	19.1	12.7	3.6
$m_T = 800$	29.5	0.0	99.7	0.3	0.0	$m_T = 800$	29.1	-0.0	99.8	0.1	0.1	$m_T = 800$	42.2	0.0	99.7	0.3	0.0
$m_T = 1200$	0.7	0.0	100.0	0.0	0.0	$m_T = 1200$	0.8	0.0	99.6	0.3	0.1	$m_T = 1200$	1.2	0.1	100.0	-0.1	0.0
$m_T = 1600$	0.1	0.0	100.0	0.0	0.0	$m_T = 1600$	0.0	0.2	99.7	0.1	0.0	$m_T = 1600$	0.1	-0.3	100.2	0.1	0.0
Data/Bkgs	1.08	—	—	—	—	Data/Bkgs	1.3	—	—	—	—	Data/Bkgs	1.12	—	—	—	—

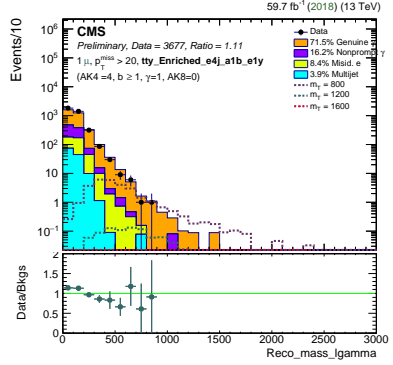
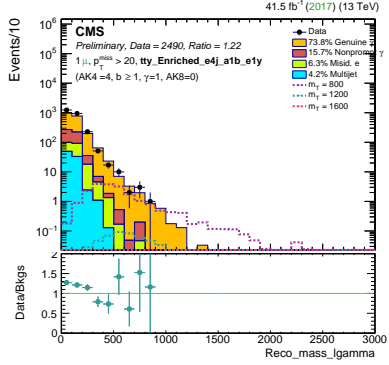
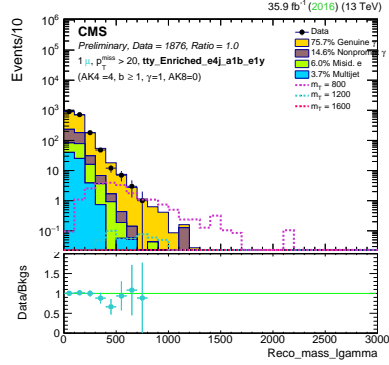




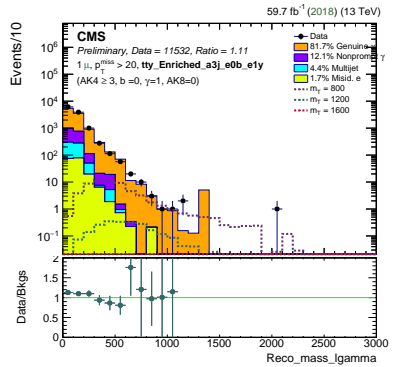
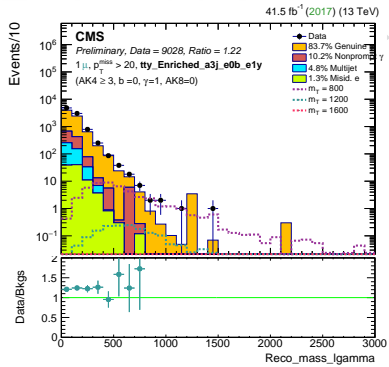
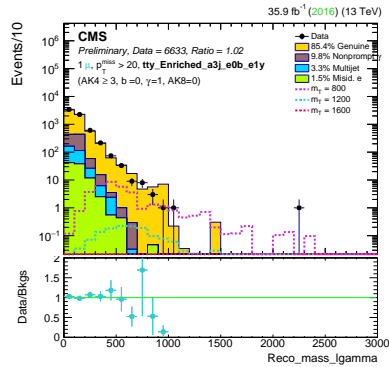
Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)
Data	4576.0	—	—	—	—	Data	6256.0	—	—	—	—	Data	7996.0	—	—	—	—
$W + \gamma$	2486.4	99.9	0.0	0.0	0.1	$W + \gamma$	2710.6	99.8	0.0	0.0	0.2	$W + \gamma$	3806.0	99.9	0.0	0.0	0.1
$Z + \gamma$	594.3	99.5	0.1	0.1	0.3	$Z + \gamma$	784.8	100.1	0.1	-0.1	-0.0	$Z + \gamma$	987.6	99.7	0.2	0.0	0.1
$t\bar{t}\gamma$	422.7	99.2	0.4	0.2	0.2	$t\bar{t}\gamma$	442.1	99.3	0.4	0.2	0.1	$t\bar{t}\gamma$	603.7	99.2	0.5	0.3	0.1
QCD	358.9	62.7	37.1	0.0	0.2	$W + jets$	395.5	0.0	57.6	0.0	42.4	QCD	545.4	65.3	34.4	0.0	0.4
$t/\bar{t}$	298.7	30.2	42.9	17.6	9.3	$t/\bar{t}$	330.8	26.7	45.5	17.6	10.3	$t/\bar{t}$	498.1	23.9	46.7	21.1	8.3
$W + jets$	231.3	0.0	64.1	0.6	35.3	QCD	223.4	67.7	27.9	0.0	4.4	$W + jets$	495.8	0.0	70.5	0.0	29.5
$DY + jets$	116.7	34.1	34.4	3.1	28.4	$DY + jets$	189.8	40.2	39.5	0.0	20.2	$DY + jets$	281.0	36.6	43.1	1.1	19.2
Others	111.3	79.9	13.5	3.3	3.3	Others	178.0	84.4	9.5	2.7	3.4	Others	264.6	84.7	9.2	3.1	3.0
Bkgs	4620.3	85.2	10.1	1.4	3.3	Bkgs	5254.9	83.7	10.2	1.2	5.0	Bkgs	7482.4	82.7	12.3	1.6	3.4
$m_T = 800$	4.5	0.0	97.8	2.2	0.0	$m_T = 800$	6.2	0.0	99.7	0.0	0.3	$m_T = 800$	8.3	0.3	99.3	0.4	0.0
$m_T = 1200$	0.2	0.0	98.1	0.0	1.9	$m_T = 1200$	0.2	0.5	99.5	0.0	0.0	$m_T = 1200$	0.3	0.0	100.0	0.0	0.0
$m_T = 1600$	0.0	0.0	100.0	0.0	0.0	$m_T = 1600$	0.0	0.8	99.2	0.0	0.0	$m_T = 1600$	0.0	-0.6	99.5	1.1	0.0
Data/Bkgs	0.99	—	—	—	—	Data/Bkgs	1.19	—	—	—	—	Data/Bkgs	1.07	—	—	—	—



Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)
Data	12640.0	—	—	—	—	Data	17214.0	—	—	—	—	Data	23520.0	—	—	—	—
$W + \gamma$	6729.1	99.9	0.0	0.0	0.1	$W + \gamma$	8101.4	99.6	0.2	0.0	0.2	$W + \gamma$	11401.8	99.9	0.0	0.0	0.1
$Z + \gamma$	2463.1	99.7	0.1	0.0	0.1	$Z + \gamma$	3144.2	99.8	0.2	0.0	0.1	$Z + \gamma$	4357.5	99.8	0.2	0.0	0.0
$W + jets$	851.8	0.0	62.7	0.2	37.1	$W + jets$	1341.9	0.0	55.5	0.2	44.3	$W + jets$	1846.7	0.0	63.6	0.0	36.4
QCD	544.3	79.6	17.8	0.0	2.6	QCD	795.0	54.3	41.5	0.0	4.1	QCD	889.0	29.7	38.2	25.1	7.0
$t/\bar{t}$	512.1	32.9	38.2	22.3	6.6	$DY + jets$	573.5	44.8	36.4	3.0	15.9	$t/\bar{t}$	889.0	29.7	38.2	25.1	7.0
$t\bar{t}\gamma$	487.2	99.1	0.5	0.3	0.1	$t/\bar{t}$	559.1	33.6	38.0	21.0	7.4	$DY + jets$	792.7	42.2	39.9	3.6	14.3
$DY + jets$	349.9	30.4	46.4	2.6	20.7	$t\bar{t}\gamma$	515.9	99.1	0.5	0.3	0.1	$t\bar{t}\gamma$	718.7	98.9	0.6	0.4	0.1
Others	214.9	71.4	17.2	7.1	4.4	Others	300.5	78.4	14.0	4.4	3.2	Others	455.4	73.2	17.2	6.1	3.5
Bkgs	12152.6	86.6	8.5	1.2	3.7	Bkgs	15331.7	83.7	10.2	1.0	5.1	Bkgs	21319.3	84.5	9.5	1.4	4.7
$m_T = 800$	2.7	0.0	100.0	0.0	0.0	$m_T = 800$	1.8	0.6	99.4	0.0	0.0	$m_T = 800$	2.7	0.8	99.2	0.0	0.0
$m_T = 1200$	0.0	0.0	100.0	0.0	0.0	$m_T = 1200$	0.1	0.0	100.0	0.0	0.0	$m_T = 1200$	0.1	0.0	100.0	0.0	0.0
$m_T = 1600$	0.0	0.0	99.4	0.0	0.6	$m_T = 1600$	0.0	0.0	97.5	2.5	0.0	$m_T = 1600$	0.0	0.0	100.0	0.0	0.0
Data/Bkgs	1.04	—	—	—	—	Data/Bkgs	1.12	—	—	—	—	Data/Bkgs	1.1	—	—	—	—



Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)
Data	1876.0	—	—	—	—	Data	2490.0	—	—	—	—	Data	3677.0	—	—	—	—
$t\bar{t}\gamma$	1137.0	99.5	0.3	0.1	0.1	$t\bar{t}\gamma$	1199.9	99.4	0.4	0.2	0.1	$t\bar{t}\gamma$	1883.6	99.3	0.4	0.2	0.1
$t/t\bar{t}$	556.8	23.8	44.9	19.6	11.7	$t/t\bar{t}$	655.0	24.6	45.6	18.7	11.1	$t/t\bar{t}$	1129.9	20.1	45.1	24.1	10.7
$W + \gamma$	92.2	100.0	0.0	0.0	0.0	$W + \gamma$	81.6	100.0	0.0	0.0	0.0	$W + \gamma$	187.4	100.0	0.0	0.0	0.0
QCD	30.7	72.4	27.6	0.0	0.0	$Z + \gamma$	32.6	99.0	1.0	0.0	0.0	$Z + \gamma$	46.1	99.4	0.6	0.0	0.0
$Z + \gamma$	25.5	98.6	0.1	0.0	1.3	QCD	31.8	62.9	15.9	0.0	21.2	Others	40.1	78.0	13.4	6.0	2.6
Others	18.3	77.2	12.8	6.1	3.9	Others	23.5	84.4	7.9	5.0	2.7	$DY + jets$	18.3	71.2	28.8	0.0	0.0
$W + jets$	9.0	0.0	68.6	0.0	31.4	$W + jets$	13.2	0.0	68.8	0.0	31.2	$W + jets$	13.0	0.0	51.8	0.0	48.2
$DY + jets$	6.1	49.3	50.7	0.0	0.0	$DY + jets$	10.9	46.4	27.4	26.2	0.0	QCD	8.6	55.2	44.8	0.0	0.0
Bkgs	1875.5	75.7	14.6	6.0	3.7	Bkgs	2048.6	73.8	15.7	6.3	4.2	Bkgs	3326.9	71.5	16.2	8.4	3.9
$m_T = 800$	21.1	0.0	99.6	0.4	0.0	$m_T = 800$	20.0	0.1	99.6	0.2	0.1	$m_T = 800$	28.9	0.0	99.8	0.2	0.0
$m_T = 1200$	0.5	0.0	100.0	0.0	0.0	$m_T = 1200$	0.5	0.0	99.4	0.4	0.2	$m_T = 1200$	0.9	-0.0	100.0	0.0	0.0
$m_T = 1600$	0.0	0.0	100.0	0.0	0.0	$m_T = 1600$	0.0	0.1	99.7	0.2	0.0	$m_T = 1600$	0.1	-0.5	100.5	0.0	0.0
Data/Bkgs	1.0	—	—	—	—	Data/Bkgs	1.22	—	—	—	—	Data/Bkgs	1.11	—	—	—	—



Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)	Process	Yield	Gen. $\gamma$ (%)	N. $\gamma$ (%)	M. e (%)	Multi. (%)
Data	6633.0	—	—	—	—	Data	9028.0	—	—	—	—	Data	11532.0	—	—	—	—
$W + \gamma$	3445.4	99.8	0.0	0.0	0.2	$W + \gamma$	3701.0	99.9	0.0	0.0	0.1	$W + \gamma$	5154.8	99.8	0.1	0.0	0.1
$t\bar{t}\gamma$	774.3	99.3	0.3	0.2	0.2	$Z + \gamma$	991.9	99.9	0.0	-0.1	0.1	$Z + \gamma$	1217.2	99.7	0.2	0.1	0.1
$Z + \gamma$	771.8	99.4	0.2	0.0	0.3	$t\bar{t}\gamma$	812.4	99.3	0.4	0.2	0.1	$t\bar{t}\gamma$	1085.1	99.2	0.4	0.2	0.1
$t/t\bar{t}$	484.7	28.6	44.9	16.7	9.8	$t/t\bar{t}$	542.9	26.8	46.0	16.3	10.9	$t/t\bar{t}$	808.6	22.7	48.1	19.9	9.3
QCD	399.8	66.3	33.5	0.0	0.2	$W + jets$	503.1	0.0	61.0	0.0	39.0	QCD	715.7	60.1	31.8	0.1	8.0
$W + jets$	323.7	0.0	65.0	0.4	34.5	$DY + jets$	283.0	38.0	36.3	0.0	25.7	$W + jets$	681.1	0.0	64.6	0.0	35.4
Others	181.0	81.3	12.7	3.2	2.8	QCD	279.1	71.5	24.3	0.0	4.2	Others	399.8	85.2	9.3	2.7	2.8
$DY + jets$	143.3	31.0	35.7	3.6	29.7	Others	277.2	86.1	8.6	2.1	3.3	$DY + jets$	370.5	36.7	42.5	1.8	19.0
Bkgs	6524.1	85.4	9.8	1.5	3.3	Bkgs	7390.7	83.7	10.2	1.3	4.8	Bkgs	10432.8	81.7	12.1	1.7	4.4
$m_T = 800$	36.7	0.0	99.5	0.3	0.3	$m_T = 800$	47.8	0.1	99.8	0.0	0.1	$m_T = 800$	61.1	0.2	99.7	0.1	0.1
$m_T = 1200$	1.4	0.0	99.8	0.0	0.2	$m_T = 1200$	1.7	0.1	99.9	0.1	-0.0	$m_T = 1200$	2.3	0.1	99.8	0.1	0.0
$m_T = 1600$	0.1	0.5	99.5	0.0	0.0	$m_T = 1600$	0.1	-0.1	99.9	0.1	0.1	$m_T = 1600$	0.2	-0.1	99.8	0.2	0.1
Data/Bkgs	1.02	—	—	—	—	Data/Bkgs	1.22	—	—	—	—	Data/Bkgs	1.11	—	—	—	—