

χ^2 table. Blue color text represents a value that is lower than the SM χ^2 by more than one standard deviation of the χ^2 distribution. Similarly, red color text represents values that are higher than the SM χ^2 by more than one standard deviation. In parenthesis is the total SM χ^2 for the dataset included in the fit.

		SM	mc	NS
Process	N_{data}	χ^2/N_{data}	χ^2/N_{data}	χ^2/N_{data}
CMS_ttbb_13TeV	1	4.959	2.388	2.640
CMS_ttbb_13TeV_2016	1	1.754	0.238	0.343
ATLAS_ttbb_13TeV_2016	1	0.906	1.809	1.687
CMS_tttt_13TeV	1	0.055	0.019	0.017
CMS_tttt_13TeV_run2	1	0.051	1.153	1.117
ATLAS_tttt_13TeV_run2	1	2.352	0.703	0.727
Total			1.052 (1.679)	1.088 (1.679)

Table 1: χ^2 table for 4H data

		SM	mc	NS
Process	N_{data}	χ^2/N_{data}	χ^2/N_{data}	χ^2/N_{data}
ATLAS_CMS_tt_AC_8TeV	6	0.861	0.783	0.783
ATLAS_tt_AC_13TeV	5	0.275	0.153	0.159
Total			0.496 (0.595)	0.500 (0.595)

Table 2: χ^2 table for AC data

		SM	mc	NS
Process	N_{data}	χ^2/N_{data}	χ^2/N_{data}	χ^2/N_{data}
ATLAS_ggF_ZZ_13TeV	6	0.958	0.845	0.844
CMS_ggF_aa_13TeV	6	1.049	1.064	1.064
ATLAS_H_13TeV_2015_pTH	9	1.11	1.100	1.100
CMS_H_13TeV_2015_pTH	9	0.8	0.789	0.791
ATLAS_WH_Hbb_13TeV	2	0.1	0.041	0.044
ATLAS_ZH_Hbb_13TeV	3	0.496	0.383	0.389
Total			0.848 (0.883)	0.849 (0.883)

Table 3: χ^2 table for Hdiff data

		SM	mc	NS
Process	N_{data}	χ^2/N_{data}	χ^2/N_{data}	χ^2/N_{data}
ATLAS_CMS_SSinc_RunI	22	0.859	0.843	0.854
Total			0.843 (0.859)	0.854 (0.859)

Table 4: χ^2 table for HrunI data

		SM	mc	NS
Process	N_{data}	χ^2/N_{data}	χ^2/N_{data}	χ^2/N_{data}
ATLAS_SSinc_RunII	16	0.542	0.547	0.542
CMS_SSinc_RunII	24	0.771	0.712	0.707
Total			0.646 (0.679)	0.641 (0.679)

Table 5: χ^2 table for HrunII data

		SM	mc	NS
Process	N_{data}	χ^2/N_{data}	χ^2/N_{data}	χ^2/N_{data}
LEP_eeWW_182GeV	10	1.38	1.379	1.378
LEP_eeWW_189GeV	10	0.885	0.884	0.884
LEP_eeWW_198GeV	10	1.609	1.612	1.612
LEP_eeWW_206GeV	10	1.085	1.084	1.083
Total			1.240 (1.240)	1.239 (1.240)

Table 6: χ^2 table for LEP data

		SM	mc	NS
Process	N_{data}	χ^2/N_{data}	χ^2/N_{data}	χ^2/N_{data}
ATLAS_WW_13TeV_2016_memu	13	1.651	1.653	1.651
ATLAS_WZ_13TeV_2016_mTWZ	6	0.861	0.834	0.834
CMS_WZ_13TeV_2016_pTZ	11	1.423	1.469	1.467
Total			1.422 (1.410)	1.420 (1.410)

Table 7: χ^2 table for VV data

		SM	mc	NS
Process	N_{data}	χ^2/N_{data}	χ^2/N_{data}	χ^2/N_{data}
ATLAS_WhelF_8TeV	3	1.967	1.304	1.334
CMS_WhelF_8TeV	3	0.296	0.640	0.616
Total			0.972 (1.131)	0.975 (1.131)

Table 8: χ^2 table for WhelF data

		SM	mc	NS
Process	N_{data}	χ^2/N_{data}	χ^2/N_{data}	χ^2/N_{data}
CMS_t_tch_13TeV_inc	2	0.345	0.267	0.261
CMS_t_tch_13TeV_diff_Yt	4	0.476	0.532	0.531
CMS_t_tch_13TeV_2016_diff_Yt	5	0.58	0.561	0.561
ATLAS_t_tch_13TeV	2	0.011	0.051	0.050
Total			0.428 (0.424)	0.427 (0.424)

Table 9: χ^2 table for t13 data

		SM	mc	NS
Process	N_{data}	χ^2/N_{data}	χ^2/N_{data}	χ^2/N_{data}
CMS_t_tch_8TeV_inc	2	0.293	0.114	0.115
CMS_t_tch_8TeV_diff_Yt	6	0.11	0.197	0.195
CMS_t_sch_8TeV	1	1.265	0.952	0.976
ATLAS_t_tch_8TeV	4	0.89	0.680	0.690
ATLAS_t_sch_8TeV	1	0.085	0.858	0.761
Total			0.424 (0.440)	0.422 (0.440)

Table 10: χ^2 table for t8 data

		SM	mc	NS
Process	N_{data}	χ^2/N_{data}	χ^2/N_{data}	χ^2/N_{data}
ATLAS_tW_8TeV_inc	1	0.026	0.016	0.011
ATLAS_tW_slep_8TeV_inc	1	0.134	0.128	0.137
CMS_tW_8TeV_inc	1	0.0	0.000	0.000
ATLAS_tW_13TeV_inc	1	0.549	0.538	0.553
CMS_tW_13TeV_inc	1	3.855	4.021	3.867
Total			0.941 (0.913)	0.914 (0.913)

Table 11: χ^2 table for tW data

		SM	mc	NS
Process	N_{data}	χ^2/N_{data}	χ^2/N_{data}	χ^2/N_{data}
ATLAS.tZ_13TeV_inc	1	0.0	0.032	0.035
ATLAS.tZ_13TeV_run2_inc	1	0.048	0.042	0.050
CMS.tZ_13TeV_inc	1	0.678	0.408	0.406
CMS.tZ_13TeV_2016_inc	1	1.23	0.418	0.414
Total			0.225 (0.489)	0.226 (0.489)

Table 12: χ^2 table for tZ data

		SM	mc	NS
Process	N_{data}	χ^2/N_{data}	χ^2/N_{data}	χ^2/N_{data}
CMS.tt_13TeV_ljets_2015_Mtt	8	0.939	0.681	0.683
CMS.tt_13TeV_dilep_2015_Mtt	6	1.299	1.353	1.355
CMS.tt_13TeV_ljets_2016_Mtt	10	1.992	1.628	1.627
CMS.tt_13TeV_dilep_2016_Mtt	7	2.282	1.888	1.885
ATLAS.tt_13TeV_ljets_2016_Mtt	7	0.986	1.725	1.740
Total			1.451 (1.529)	1.454 (1.529)

Table 13: χ^2 table for tt13 data

		SM	mc	NS
Process	N_{data}	χ^2/N_{data}	χ^2/N_{data}	χ^2/N_{data}
ATLAS.tt_8TeV_ljets_Mtt	7	2.953	2.797	2.766
ATLAS.tt_8TeV_dilep_Mtt	6	0.086	0.071	0.071
CMS.tt_8TeV_ljets_Ytt	10	0.906	1.037	1.049
CMS.tt2D_8TeV_dilep_MttYtt	16	1.628	1.280	1.281
Total			1.304 (1.443)	1.302 (1.443)

Table 14: χ^2 table for tt8 data

		SM	mc	NS
Process	N_{data}	χ^2/N_{data}	χ^2/N_{data}	χ^2/N_{data}
ATLAS.ttW_8TeV	1	1.334	0.357	0.336
ATLAS.ttW_13TeV	1	0.828	0.474	0.464
ATLAS.ttW_13TeV_2016	1	0.225	0.197	0.223
CMS.ttW_8TeV	1	1.781	0.733	0.708
CMS.ttW_13TeV	1	0.028	0.712	0.766
Total			0.495 (0.839)	0.500 (0.839)

Table 15: χ^2 table for ttW data

		SM	mc	NS
Process	N_{data}	χ^2/N_{data}	χ^2/N_{data}	χ^2/N_{data}
ATLAS.ttZ_8TeV	1	1.314	0.865	0.838
ATLAS.ttZ_13TeV	1	0.007	0.130	0.121
ATLAS.ttZ_13TeV_2016	1	0.001	0.392	0.355
CMS.ttZ_8TeV	1	0.042	0.164	0.175
CMS.ttZ_13TeV	1	1.011	0.168	0.191
CMS.ttZ_13TeV_pTZ	4	0.732	0.599	0.590
Total			0.457 (0.589)	0.449 (0.589)

Table 16: χ^2 table for ttZ data

	mc		NS	
Process	N_{data}	χ^2/N_{data}	N_{data}	χ^2/N_{data}
tt8	39	1.304 (1.443)	39	1.302 (1.443)
tt13	38	1.451 (1.529)	38	1.454 (1.529)
WhelF	6	0.972 (1.131)	6	0.975 (1.131)
AC	11	0.496 (0.595)	11	0.500 (0.595)
4H	6	1.052 (1.679)	6	1.088 (1.679)
ttZ	9	0.457 (0.589)	9	0.449 (0.589)
ttW	5	0.495 (0.839)	5	0.500 (0.839)
t8	14	0.424 (0.440)	14	0.422 (0.440)
t13	13	0.428 (0.424)	13	0.427 (0.424)
tW	5	0.941 (0.913)	5	0.914 (0.913)
tZ	4	0.225 (0.489)	4	0.226 (0.489)
HrunI	22	0.843 (0.859)	22	0.854 (0.859)
HrunII	40	0.646 (0.679)	40	0.641 (0.679)
Hdiff	35	0.848 (0.883)	35	0.849 (0.883)
VV	30	1.422 (1.410)	30	1.420 (1.410)
LEP	40	1.240 (1.240)	40	1.239 (1.240)
Total	317	0.989 (1.055)	317	0.990 (1.055)

Table 17: χ^2 table for grouped data. In parenthesis is the total SM χ^2 for the dataset included in the fit. The SM column refers to all the datasets available in the group