

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	NS NLO linear	NS LO linear
Process	N_{data}	χ^2/N_{data}	χ^2/N_{data}	χ^2/N_{data}
CMS_ttbb_13TeV	1	4.959	1.260	2.047
CMS_ttbb_13TeV_2016	1	1.754	0.001	0.121
ATLAS_ttbb_13TeV_2016	1	0.906	2.524	1.734
CMS_tttt_13TeV	1	0.055	0.001	0.018
CMS_tttt_13TeV_run2	1	0.051	0.687	1.142
ATLAS_tttt_13TeV_run2	1	2.352	1.080	0.710
Total			0.925 (1.679)	0.962 (1.679)

Table 1: χ^2 table for 4H data

		SM	NS NLO linear	NS LO linear
Process	N_{data}	χ^2/N_{data}	χ^2/N_{data}	χ^2/N_{data}
ATLAS_CMS_tt_AC_8TeV	6	0.861	0.800	0.883
ATLAS_tt_AC_13TeV	5	0.275	0.225	0.839
Total			0.539 (0.595)	0.863 (0.595)

Table 2: χ^2 table for AC data

		SM	NS NLO linear	NS LO linear
Process	N_{data}	χ^2/N_{data}	χ^2/N_{data}	χ^2/N_{data}
ATLAS_ggF_ZZ_13TeV	6	0.958	0.845	0.751
CMS_ggF_aa_13TeV	6	1.049	1.039	0.972
ATLAS_H_13TeV_2015_pTH	9	1.11	1.098	1.114
CMS_H_13TeV_2015_pTH	9	0.8	0.779	0.769
ATLAS_WH_Hbb_13TeV	2	0.1	0.041	0.042
ATLAS_ZH_Hbb_13TeV	3	0.496	0.429	0.353
Total			0.845 (0.883)	0.812 (0.883)

Table 3: χ^2 table for Hdiff data

		SM	NS NLO linear	NS LO linear
Process	N_{data}	χ^2/N_{data}	χ^2/N_{data}	χ^2/N_{data}
ATLAS_CMS_SSinc_RunI	22	0.859	0.857	0.922
Total			0.857 (0.859)	0.922 (0.859)

Table 4: χ^2 table for HrunI data

		SM	NS NLO linear	NS LO linear
Process	N_{data}	χ^2/N_{data}	χ^2/N_{data}	χ^2/N_{data}
ATLAS_SSinc_RunII	16	0.542	0.549	0.521
CMS_SSinc_RunII	24	0.771	0.697	0.756
Total			0.638 (0.679)	0.662 (0.679)

Table 5: χ^2 table for HrunII data

		SM	NS NLO linear	NS LO linear
Process	N_{data}	χ^2/N_{data}	χ^2/N_{data}	χ^2/N_{data}
LEP_eeWW_182GeV	10	1.38	1.378	1.363
LEP_eeWW_189GeV	10	0.885	0.884	0.917
LEP_eeWW_198GeV	10	1.609	1.613	1.641
LEP_eeWW_206GeV	10	1.085	1.083	1.054
Total			1.239 (1.240)	1.244 (1.240)

Table 6: χ^2 table for LEP data

		SM	NS NLO linear	NS LO linear
Process	N_{data}	χ^2/N_{data}	χ^2/N_{data}	χ^2/N_{data}
ATLAS_WW_13TeV_2016_memu	13	1.651	1.647	1.538
ATLAS_WZ_13TeV_2016_mTWZ	6	0.861	0.818	1.064
CMS_WZ_13TeV_2016_pTZ	11	1.423	1.470	1.067
Total			1.416 (1.410)	1.271 (1.410)

Table 7: χ^2 table for VV data

		SM	NS NLO linear	NS LO linear
Process	N_{data}	χ^2/N_{data}	χ^2/N_{data}	χ^2/N_{data}
ATLAS_WhelF_8TeV	3	1.967	1.278	1.335
CMS_WhelF_8TeV	3	0.296	0.662	0.615
Total			0.970 (1.131)	0.975 (1.131)

Table 8: χ^2 table for WhelF data

		SM	NS NLO linear	NS LO linear
Process	N_{data}	χ^2/N_{data}	χ^2/N_{data}	χ^2/N_{data}
CMS_t_tch_13TeV_inc	2	0.345	0.280	0.387
CMS_t_tch_13TeV_diff_Yt	4	0.476	0.524	0.501
CMS_t_tch_13TeV_2016_diff_Yt	5	0.58	0.594	0.586
ATLAS_t_tch_13TeV	2	0.011	0.050	0.031
Total			0.440 (0.424)	0.444 (0.424)

Table 9: χ^2 table for t13 data

		SM	NS NLO linear	NS LO linear
Process	N_{data}	χ^2/N_{data}	χ^2/N_{data}	χ^2/N_{data}
CMS_t_tch_8TeV_inc	2	0.293	0.084	0.158
CMS_t_tch_8TeV_diff_Yt	6	0.11	0.257	0.193
CMS_t_sch_8TeV	1	1.265	1.499	1.062
ATLAS_t_tch_8TeV	4	0.89	0.546	0.583
ATLAS_t_sch_8TeV	1	0.085	0.023	0.474
Total			0.387 (0.440)	0.382 (0.440)

Table 10: χ^2 table for t8 data

		SM	NS NLO linear	NS LO linear
Process	N_{data}	χ^2/N_{data}	χ^2/N_{data}	χ^2/N_{data}
ATLAS_tW_8TeV_inc	1	0.026	0.020	0.072
ATLAS_tW_slep_8TeV_inc	1	0.134	0.255	0.084
CMS_tW_8TeV_inc	1	0.0	0.030	0.011
ATLAS_tW_13TeV_inc	1	0.549	0.739	0.458
CMS_tW_13TeV_inc	1	3.855	2.306	4.932
Total			0.670 (0.913)	1.111 (0.913)

Table 11: χ^2 table for tW data

		SM	NS NLO linear	NS LO linear
Process	N_{data}	χ^2/N_{data}	χ^2/N_{data}	χ^2/N_{data}
ATLAS_tZ_13TeV_inc	1	0.0	0.023	0.012
ATLAS_tZ_13TeV_run2_inc	1	0.048	0.020	0.002
CMS_tZ_13TeV_inc	1	0.678	0.443	0.616
CMS_tZ_13TeV_2016_inc	1	1.23	0.509	1.026
Total			0.249 (0.489)	0.414 (0.489)

Table 12: χ^2 table for tZ data

		SM	NS NLO linear	NS LO linear
Process	N_{data}	χ^2/N_{data}	χ^2/N_{data}	χ^2/N_{data}
CMS_tt_13TeV_ljets_2015_Mtt	8	0.939	0.666	0.791
CMS_tt_13TeV_dilep_2015_Mtt	6	1.299	1.320	1.321
CMS_tt_13TeV_ljets_2016_Mtt	10	1.992	1.564	1.738
CMS_tt_13TeV_dilep_2016_Mtt	7	2.282	1.817	2.002
ATLAS_tt_13TeV_ljets_2016_Mtt	7	0.986	1.787	1.353
Total			1.424 (1.529)	1.450 (1.529)

Table 13: χ^2 table for tt13 data

		SM	NS NLO linear	NS LO linear
Process	N_{data}	χ^2/N_{data}	χ^2/N_{data}	χ^2/N_{data}
ATLAS_tt_8TeV_ljets_Mtt	7	2.953	3.009	2.808
ATLAS_tt_8TeV_dilep_Mtt	6	0.086	0.085	0.092
CMS_tt_8TeV_ljets_Ytt	10	0.906	0.987	1.000
CMS_tt2D_8TeV_dilep_MttYtt	16	1.628	1.141	1.258
Total			1.274 (1.443)	1.291 (1.443)

Table 14: χ^2 table for tt8 data

		SM	NS NLO linear	NS LO linear
Process	N_{data}	χ^2/N_{data}	χ^2/N_{data}	χ^2/N_{data}
ATLAS_ttW_8TeV	1	1.334	0.582	0.032
ATLAS_ttW_13TeV	1	0.828	0.600	0.331
ATLAS_ttW_13TeV_2016	1	0.225	0.064	0.832
CMS_ttW_8TeV	1	1.781	0.912	0.247
CMS_ttW_13TeV	1	0.028	0.402	0.025
Total			0.512 (0.839)	0.293 (0.839)

Table 15: χ^2 table for ttW data

		SM	NS NLO linear	NS LO linear
Process	N_{data}	χ^2/N_{data}	χ^2/N_{data}	χ^2/N_{data}
ATLAS_ttZ_8TeV	1	1.314	0.764	1.641
ATLAS_ttZ_13TeV	1	0.007	0.112	0.065
ATLAS_ttZ_13TeV_2016	1	0.001	0.320	0.140
CMS_ttZ_8TeV	1	0.042	0.208	0.006
CMS_ttZ_13TeV	1	1.011	0.216	0.406
CMS_ttZ_13TeV_pTZ	4	0.732	0.641	0.195
Total			0.465 (0.589)	0.338 (0.589)

Table 16: χ^2 table for ttZ data

	NS NLO linear		NS LO linear	
Process	N_{data}	χ^2/N_{data}	N_{data}	χ^2/N_{data}
tt8	39.0	1.274 (1.443)	39.0	1.291 (1.443)
tt13	38.0	1.424 (1.529)	38.0	1.450 (1.529)
WhelF	6.0	0.970 (1.131)	6.0	0.975 (1.131)
AC	11.0	0.539 (0.595)	11.0	0.863 (0.595)
4H	6.0	0.925 (1.679)	6.0	0.962 (1.679)
ttZ	9.0	0.465 (0.589)	9.0	0.338 (0.589)
ttW	5.0	0.512 (0.839)	5.0	0.293 (0.839)
t8	14.0	0.387 (0.440)	14.0	0.382 (0.440)
t13	13.0	0.440 (0.424)	13.0	0.444 (0.424)
tW	5.0	0.670 (0.913)	5.0	1.111 (0.913)
tZ	4.0	0.249 (0.489)	4.0	0.414 (0.489)
HrunI	22.0	0.857 (0.859)	22.0	0.922 (0.859)
HrunII	40.0	0.638 (0.679)	40.0	0.662 (0.679)
Hdiff	35.0	0.845 (0.883)	35.0	0.812 (0.883)
VV	30.0	1.416 (1.410)	30.0	1.271 (1.410)
LEP	40.0	1.239 (1.240)	40.0	1.244 (1.240)
Total	317.0	0.976 (1.055)	317.0	0.986 (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