

Uncertainty of channel	SR1LBin0	SR1LBin1	SR1LBin2	SR1LBin3	SR1LBin4
Total background expectation	175.55	179.49	58.39	21.67	15.50
Total statistical ($\sqrt{N_{\text{exp}}}$)	± 13.25	± 13.40	± 7.64	± 4.66	± 3.94
Total background systematic	± 9.18 [5.23%]	± 8.89 [4.95%]	± 4.16 [7.13%]	± 2.18 [10.05%]	± 2.22 [14.35%]
mu_tt_1L	± 19.15 [10.9%]	± 16.43 [9.2%]	± 4.04 [6.9%]	± 1.04 [4.8%]	± 0.55 [3.6%]
alpha_ISR-Top1L	± 17.45 [9.9%]	± 15.27 [8.5%]	± 4.36 [7.5%]	± 1.34 [6.2%]	± 0.93 [6.0%]
alpha_PartonShower-Top1L	± 12.49 [7.1%]	± 13.70 [7.6%]	± 4.70 [8.0%]	± 1.37 [6.3%]	± 0.85 [5.5%]
alpha_JER_EffectiveNP_1	± 6.40 [3.6%]	± 1.99 [1.1%]	± 1.02 [1.7%]	± 0.17 [0.79%]	± 0.25 [1.6%]
alpha_MatrixElement-Top1L	± 5.52 [3.1%]	± 6.71 [3.7%]	± 1.74 [3.0%]	± 0.45 [2.1%]	± 0.77 [4.9%]
alpha_muR_muF-Wjets	± 5.14 [2.9%]	± 7.57 [4.2%]	± 3.14 [5.4%]	± 0.68 [3.1%]	± 1.48 [9.5%]
alpha_JER_EffectiveNP_2	± 5.08 [2.9%]	± 1.13 [0.63%]	± 1.09 [1.9%]	± 0.31 [1.4%]	± 0.62 [4.0%]
mu_W	± 4.71 [2.7%]	± 6.10 [3.4%]	± 2.41 [4.1%]	± 1.01 [4.7%]	± 0.92 [5.9%]
alpha_JES_Group2	± 4.49 [2.6%]	± 1.23 [0.69%]	± 1.11 [1.9%]	± 0.05 [0.23%]	± 0.01 [0.08%]
gamma_stat_SR1LBin0.cuts_bin_0	± 4.18 [2.4%]	± 0.00 [0.00%]	± 0.00 [0.00%]	± 0.00 [0.00%]	± 0.00 [0.00%]
alpha_JER_DataVsMC	± 4.02 [2.3%]	± 0.96 [0.53%]	± 1.00 [1.7%]	± 0.31 [1.4%]	± 0.40 [2.6%]
alpha_JER_EffectiveNP_7restTerm	± 3.96 [2.3%]	± 1.05 [0.59%]	± 0.06 [0.10%]	± 0.28 [1.3%]	± 0.10 [0.66%]
alpha_PartonShower-SingleTop	± 3.86 [2.2%]	± 0.41 [0.23%]	± 1.88 [3.2%]	± 0.75 [3.5%]	± 0.36 [2.4%]
alpha_JES_Group1	± 3.56 [2.0%]	± 1.01 [0.56%]	± 0.86 [1.5%]	± 0.41 [1.9%]	± 0.02 [0.13%]
alpha_JER_EffectiveNP_3	± 3.00 [1.7%]	± 1.60 [0.89%]	± 0.30 [0.52%]	± 0.67 [3.1%]	± 0.44 [2.9%]
alpha_JET_Flavor_Response	± 3.00 [1.7%]	± 0.95 [0.53%]	± 0.05 [0.08%]	± 0.16 [0.72%]	± 0.05 [0.35%]
alpha_JER_EffectiveNP_4	± 2.88 [1.6%]	± 2.50 [1.4%]	± 0.66 [1.1%]	± 0.11 [0.50%]	± 0.09 [0.61%]
alpha_JER_EffectiveNP_5	± 2.52 [1.4%]	± 1.83 [1.0%]	± 0.73 [1.3%]	± 0.29 [1.3%]	± 0.10 [0.61%]
alpha_muR_muF-ttV	± 2.44 [1.4%]	± 4.77 [2.7%]	± 2.21 [3.8%]	± 1.22 [5.6%]	± 0.61 [3.9%]
alpha_ISR-SingleTop	± 2.02 [1.2%]	± 3.19 [1.8%]	± 1.13 [1.9%]	± 0.60 [2.7%]	± 1.14 [7.3%]
alpha_FSR-SingleTop	± 1.78 [1.0%]	± 0.65 [0.36%]	± 0.10 [0.17%]	± 0.10 [0.47%]	± 1.23 [7.9%]
alpha_MatrixElement-SingleTop	± 1.58 [0.90%]	± 2.47 [1.4%]	± 0.12 [0.21%]	± 0.25 [1.1%]	± 0.35 [2.2%]
alpha_muR_muF-Diboson	± 1.33 [0.76%]	± 1.67 [0.93%]	± 0.79 [1.4%]	± 0.38 [1.7%]	± 0.45 [2.9%]
alpha_Interference-SingleTop	± 1.03 [0.59%]	± 2.61 [1.5%]	± 2.00 [3.4%]	± 1.35 [6.2%]	± 1.17 [7.5%]
alpha_qsf-Wjets	± 1.00 [0.57%]	± 1.11 [0.62%]	± 0.40 [0.68%]	± 0.09 [0.41%]	± 0.08 [0.49%]
alpha_ckkw-Wjets	± 0.98 [0.56%]	± 1.01 [0.56%]	± 0.49 [0.84%]	± 0.11 [0.50%]	± 0.08 [0.51%]
alpha_JES_Group3	± 0.85 [0.49%]	± 0.06 [0.03%]	± 0.32 [0.54%]	± 0.21 [0.95%]	± 0.13 [0.86%]
Lumi	± 0.70 [0.40%]	± 0.88 [0.49%]	± 0.37 [0.63%]	± 0.17 [0.77%]	± 0.12 [0.75%]
alpha_FSR-Top1L	± 0.55 [0.31%]	± 0.21 [0.11%]	± 0.71 [1.2%]	± 0.71 [3.3%]	± 0.16 [1.0%]
alpha_muR_muF-Zjets	± 0.25 [0.14%]	± 0.12 [0.06%]	± 0.02 [0.03%]	± 0.01 [0.04%]	± 0.01 [0.05%]
alpha_JET_EtaInt_negEta	± 0.18 [0.10%]	± 0.02 [0.01%]	± 0.01 [0.01%]	± 0.00 [0.01%]	± 0.01 [0.06%]
alpha_JET_EtaInt_highE	± 0.03 [0.02%]	± 0.03 [0.01%]	± 0.00 [0.00%]	± 0.00 [0.00%]	± 0.00 [0.00%]
alpha_ckkw-Zjets	± 0.03 [0.02%]	± 0.01 [0.00%]	± 0.01 [0.02%]	± 0.00 [0.00%]	± 0.00 [0.01%]
alpha_JER_EffectiveNP_6	± 0.02 [0.01%]	± 2.31 [1.3%]	± 0.28 [0.49%]	± 0.25 [1.2%]	± 0.10 [0.67%]
alpha_qsf-Zjets	± 0.02 [0.01%]	± 0.00 [0.00%]	± 0.01 [0.02%]	± 0.00 [0.01%]	± 0.00 [0.01%]
alpha_JET_RelNonClos_AFII	± 0.01 [0.01%]	± 0.02 [0.01%]	± 0.01 [0.01%]	± 0.00 [0.00%]	± 0.00 [0.01%]
alpha_JER_DataVsMC_AFII	± 0.00 [0.00%]	± 0.01 [0.01%]	± 0.00 [0.00%]	± 0.00 [0.00%]	± 0.00 [0.00%]
alpha_JET_EtaInt_posEta	± 0.00 [0.00%]	± 0.03 [0.02%]	± 0.02 [0.04%]	± 0.00 [0.01%]	± 0.00 [0.03%]
gamma_stat_SR1LBin3.cuts_bin_0	± 0.00 [0.00%]	± 0.00 [0.00%]	± 0.00 [0.00%]	± 1.16 [5.3%]	± 0.00 [0.00%]
gamma_stat_tW1L_CRWm.cuts_bin_0	± 0.00 [0.00%]	± 0.00 [0.00%]	± 0.00 [0.00%]	± 0.00 [0.00%]	± 0.00 [0.00%]
gamma_stat_SR1LBin2.cuts_bin_0	± 0.00 [0.00%]	± 0.00 [0.00%]	± 2.42 [4.1%]	± 0.00 [0.00%]	± 0.00 [0.00%]
gamma_stat_SR1LBin4.cuts_bin_0	± 0.00 [0.00%]	± 0.00 [0.00%]	± 0.00 [0.00%]	± 0.00 [0.00%]	± 1.21 [7.8%]
gamma_stat_SR1LBin1.cuts_bin_0	± 0.00 [0.00%]	± 4.21 [2.3%]	± 0.00 [0.00%]	± 0.00 [0.00%]	± 0.00 [0.00%]
gamma_stat_tW1L_CRWp.cuts_bin_0	± 0.00 [0.00%]	± 0.00 [0.00%]	± 0.00 [0.00%]	± 0.00 [0.00%]	± 0.00 [0.00%]
gamma_stat_tW1L_CRtt.cuts_bin_0	± 0.00 [0.00%]	± 0.00 [0.00%]	± 0.00 [0.00%]	± 0.00 [0.00%]	± 0.00 [0.00%]

Table 1: Breakdown of the dominant systematic uncertainties on background estimates in the various signal regions. Note that the individual uncertainties can be correlated, and do not necessarily add up quadratically to the total background uncertainty. The percentages show the size of the uncertainty relative to the total expected background.