

Uncertainty of channel	SR1LBin0	SR1LBin1	SR1LBin2	SR1LBin3	SR1LBin4
Total background expectation	175.74	180.19	58.57	21.71	15.46
Total statistical ($\sqrt{N_{\text{exp}}}$)	± 13.26	± 13.42	± 7.65	± 4.66	± 3.93
Total background systematic	± 9.56 [5.44%]	± 9.40 [5.22%]	± 4.33 [7.39%]	± 2.17 [10.01%]	± 2.20 [14.21%]
mu_tt_1L	± 13.51 [7.7%]	± 11.66 [6.5%]	± 2.89 [4.9%]	± 0.74 [3.4%]	± 0.41 [2.6%]
alpha_MatrixElement-Top1L	± 7.75 [4.4%]	± 4.37 [2.4%]	± 0.85 [1.5%]	± 0.21 [0.98%]	± 0.42 [2.7%]
alpha_JER_EffectiveNP_1	± 6.44 [3.7%]	± 2.01 [1.1%]	± 1.00 [1.7%]	± 0.17 [0.78%]	± 0.26 [1.7%]
alpha_JER_EffectiveNP_2	± 5.11 [2.9%]	± 1.14 [0.63%]	± 1.07 [1.8%]	± 0.31 [1.4%]	± 0.64 [4.1%]
alpha_JES_Group2	± 4.44 [2.5%]	± 1.18 [0.65%]	± 1.12 [1.9%]	± 0.04 [0.20%]	± 0.00 [0.03%]
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	± 4.01 [2.3%]	± 0.92 [0.51%]	± 1.02 [1.7%]	± 0.31 [1.4%]	± 0.41 [2.7%]
alpha_JER_EffectiveNP_7restTerm	± 3.98 [2.3%]	± 1.08 [0.60%]	± 0.08 [0.13%]	± 0.27 [1.2%]	± 0.12 [0.75%]
alpha_PartonShower-SingleTop	± 3.85 [2.2%]	± 0.41 [0.23%]	± 1.88 [3.2%]	± 0.75 [3.5%]	± 0.36 [2.4%]
alpha_muR_muF-Top1L	± 3.84 [2.2%]	± 6.41 [3.6%]	± 2.97 [5.1%]	± 0.92 [4.2%]	± 0.61 [3.9%]
alpha_JES_Group1	± 3.46 [2.0%]	± 0.96 [0.54%]	± 0.86 [1.5%]	± 0.41 [1.9%]	± 0.01 [0.04%]
alpha_JER_EffectiveNP_3	± 3.01 [1.7%]	± 1.62 [0.90%]	± 0.28 [0.48%]	± 0.67 [3.1%]	± 0.46 [2.9%]
alpha_JER_EffectiveNP_4	± 2.90 [1.7%]	± 2.55 [1.4%]	± 0.65 [1.1%]	± 0.10 [0.47%]	± 0.10 [0.68%]
alpha_JET_Flavor_Response	± 2.89 [1.6%]	± 0.89 [0.50%]	± 0.06 [0.10%]	± 0.16 [0.72%]	± 0.06 [0.39%]
alpha_FSR-Top1L	± 2.62 [1.5%]	± 2.47 [1.4%]	± 0.12 [0.21%]	± 0.59 [2.7%]	± 0.07 [0.48%]
alpha_JER_EffectiveNP_5	± 2.54 [1.4%]	± 1.87 [1.0%]	± 0.72 [1.2%]	± 0.29 [1.3%]	± 0.10 [0.67%]
alpha_muR_muF-ttV	± 2.50 [1.4%]	± 4.82 [2.7%]	± 2.23 [3.8%]	± 1.22 [5.6%]	± 0.62 [4.0%]
alpha_ISR-SingleTop	± 1.83 [1.0%]	± 2.86 [1.6%]	± 1.01 [1.7%]	± 0.52 [2.4%]	± 1.00 [6.5%]
mu_W	± 1.77 [1.0%]	± 2.30 [1.3%]	± 0.90 [1.5%]	± 0.38 [1.8%]	± 0.35 [2.2%]
alpha_FSR-SingleTop	± 1.62 [0.92%]	± 0.63 [0.35%]	± 0.12 [0.21%]	± 0.13 [0.61%]	± 1.10 [7.1%]
alpha_MatrixElement-SingleTop	± 1.58 [0.90%]	± 2.46 [1.4%]	± 0.12 [0.21%]	± 0.24 [1.1%]	± 0.35 [2.2%]
alpha_muR_muF-Diboson	± 1.33 [0.76%]	± 1.68 [0.93%]	± 0.79 [1.4%]	± 0.38 [1.7%]	± 0.45 [2.9%]
alpha_Interference-SingleTop	± 1.03 [0.58%]	± 2.60 [1.4%]	± 2.00 [3.4%]	± 1.35 [6.2%]	± 1.09 [7.1%]
alpha_muR_muF-Wjets	± 1.02 [0.58%]	± 2.14 [1.2%]	± 1.01 [1.7%]	± 0.11 [0.51%]	± 0.65 [4.2%]
alpha_JES_Group3	± 0.87 [0.49%]	± 0.05 [0.03%]	± 0.33 [0.56%]	± 0.21 [0.95%]	± 0.13 [0.82%]
alpha_ISR-Top1L	± 0.76 [0.43%]	± 1.37 [0.76%]	± 1.23 [2.1%]	± 0.58 [2.7%]	± 0.55 [3.6%]
Lumi	± 0.69 [0.39%]	± 0.87 [0.48%]	± 0.36 [0.61%]	± 0.16 [0.76%]	± 0.11 [0.73%]
alpha_qsf-Wjets	± 0.28 [0.16%]	± 0.20 [0.11%]	± 0.05 [0.09%]	± 0.04 [0.18%]	± 0.04 [0.26%]
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_ckkw-Wjets	± 0.10 [0.05%]	± 0.37 [0.20%]	± 0.06 [0.10%]	± 0.11 [0.52%]	± 0.12 [0.78%]
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_qsf-Zjets	± 0.02 [0.01%]	± 0.00 [0.00%]	± 0.01 [0.02%]	± 0.00 [0.01%]	± 0.00 [0.01%]
alpha_JER_EffectiveNP_6	± 0.02 [0.01%]	± 2.35 [1.3%]	± 0.28 [0.47%]	± 0.25 [1.1%]	± 0.11 [0.74%]
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%]	± 1.20 [7.8%]
gamma_stat_SR1LBin1.cuts.bin_0	± 0.00 [0.00%]	± 4.22 [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.