

Uncertainty of channel	SR1LBin0	SR1LBin1	SR1LBin2	SR1LBin3	SR1LBin4
Total background expectation	175.81	180.63	58.48	21.75	15.37
Total statistical ( $\sqrt{N_{\text{exp}}}$ )	$\pm 13.26$	$\pm 13.44$	$\pm 7.65$	$\pm 4.66$	$\pm 3.92$
Total background systematic	$\pm 9.41$ [5.35%]	$\pm 9.42$ [5.21%]	$\pm 4.33$ [7.40%]	$\pm 2.21$ [10.16%]	$\pm 2.18$ [14.20%]
mu_tt_1L	$\pm 7.92$ [4.5%]	$\pm 6.81$ [3.8%]	$\pm 1.68$ [2.9%]	$\pm 0.43$ [2.0%]	$\pm 0.23$ [1.5%]
alpha_JER_EffectiveNP_1	$\pm 6.45$ [3.7%]	$\pm 2.01$ [1.1%]	$\pm 1.01$ [1.7%]	$\pm 0.17$ [0.80%]	$\pm 0.25$ [1.7%]
alpha_JER_EffectiveNP_2	$\pm 5.11$ [2.9%]	$\pm 1.15$ [0.64%]	$\pm 1.08$ [1.8%]	$\pm 0.31$ [1.4%]	$\pm 0.64$ [4.2%]
alpha_JES_Group2	$\pm 4.45$ [2.5%]	$\pm 1.22$ [0.67%]	$\pm 1.12$ [1.9%]	$\pm 0.04$ [0.20%]	$\pm 0.00$ [0.02%]
gamma_stat_SR1LBin0.cuts_bin_0	$\pm 4.19$ [2.4%]	$\pm 0.00$ [0.00%]	$\pm 0.00$ [0.00%]	$\pm 0.00$ [0.00%]	$\pm 0.00$ [0.00%]
alpha_JER_DataVsMC	$\pm 4.01$ [2.3%]	$\pm 0.96$ [0.53%]	$\pm 1.01$ [1.7%]	$\pm 0.31$ [1.4%]	$\pm 0.41$ [2.7%]
alpha_PartonShower-Top1L	$\pm 3.98$ [2.3%]	$\pm 6.65$ [3.7%]	$\pm 3.09$ [5.3%]	$\pm 0.95$ [4.4%]	$\pm 0.63$ [4.1%]
alpha_JER_EffectiveNP_7restTerm	$\pm 3.98$ [2.3%]	$\pm 1.07$ [0.59%]	$\pm 0.07$ [0.12%]	$\pm 0.27$ [1.2%]	$\pm 0.12$ [0.75%]
alpha_PartonShower-SingleTop	$\pm 3.87$ [2.2%]	$\pm 0.41$ [0.23%]	$\pm 1.88$ [3.2%]	$\pm 0.76$ [3.5%]	$\pm 0.37$ [2.4%]
alpha_JES_Group1	$\pm 3.51$ [2.0%]	$\pm 1.00$ [0.55%]	$\pm 0.87$ [1.5%]	$\pm 0.42$ [1.9%]	$\pm 0.01$ [0.04%]
alpha_JER_EffectiveNP_3	$\pm 3.01$ [1.7%]	$\pm 1.63$ [0.90%]	$\pm 0.29$ [0.49%]	$\pm 0.68$ [3.1%]	$\pm 0.45$ [3.0%]
alpha_JET_Flavor_Response	$\pm 2.92$ [1.7%]	$\pm 0.92$ [0.51%]	$\pm 0.06$ [0.10%]	$\pm 0.16$ [0.72%]	$\pm 0.06$ [0.39%]
alpha_JER_EffectiveNP_4	$\pm 2.91$ [1.7%]	$\pm 2.55$ [1.4%]	$\pm 0.66$ [1.1%]	$\pm 0.10$ [0.46%]	$\pm 0.10$ [0.67%]
alpha_FSR-Top1L	$\pm 2.66$ [1.5%]	$\pm 2.51$ [1.4%]	$\pm 0.11$ [0.20%]	$\pm 0.59$ [2.7%]	$\pm 0.08$ [0.49%]
alpha_muR_muF_ttV	$\pm 2.56$ [1.5%]	$\pm 4.88$ [2.7%]	$\pm 2.25$ [3.8%]	$\pm 1.22$ [5.6%]	$\pm 0.63$ [4.1%]
alpha_JER_EffectiveNP_5	$\pm 2.53$ [1.4%]	$\pm 1.87$ [1.0%]	$\pm 0.72$ [1.2%]	$\pm 0.28$ [1.3%]	$\pm 0.10$ [0.67%]
alpha_MatrixElement-Top1L	$\pm 2.04$ [1.2%]	$\pm 1.01$ [0.56%]	$\pm 0.46$ [0.78%]	$\pm 0.12$ [0.57%]	$\pm 0.75$ [4.9%]
alpha_ISR-SingleTop	$\pm 1.97$ [1.1%]	$\pm 3.11$ [1.7%]	$\pm 1.09$ [1.9%]	$\pm 0.57$ [2.6%]	$\pm 1.02$ [6.7%]
alpha_FSR-SingleTop	$\pm 1.71$ [0.97%]	$\pm 0.65$ [0.36%]	$\pm 0.11$ [0.19%]	$\pm 0.12$ [0.53%]	$\pm 1.11$ [7.2%]
alpha_MatrixElement-SingleTop	$\pm 1.59$ [0.90%]	$\pm 2.50$ [1.4%]	$\pm 0.12$ [0.21%]	$\pm 0.25$ [1.1%]	$\pm 0.35$ [2.3%]
alpha_btag_BT	$\pm 1.50$ [0.85%]	$\pm 1.30$ [0.72%]	$\pm 0.40$ [0.69%]	$\pm 0.19$ [0.86%]	$\pm 0.07$ [0.45%]
mu_W	$\pm 1.49$ [0.85%]	$\pm 1.92$ [1.1%]	$\pm 0.75$ [1.3%]	$\pm 0.32$ [1.5%]	$\pm 0.29$ [1.9%]
alpha_muR_muF-Diboson	$\pm 1.33$ [0.76%]	$\pm 1.69$ [0.94%]	$\pm 0.80$ [1.4%]	$\pm 0.38$ [1.7%]	$\pm 0.45$ [2.9%]
alpha_MUON_MS	$\pm 1.14$ [0.65%]	$\pm 0.49$ [0.27%]	$\pm 0.09$ [0.16%]	$\pm 0.03$ [0.12%]	$\pm 0.02$ [0.10%]
alpha_Interference-SingleTop	$\pm 1.03$ [0.59%]	$\pm 2.64$ [1.5%]	$\pm 2.01$ [3.4%]	$\pm 1.36$ [6.3%]	$\pm 1.09$ [7.1%]
alpha_muR_muF-Wjets	$\pm 1.03$ [0.58%]	$\pm 2.13$ [1.2%]	$\pm 0.99$ [1.7%]	$\pm 0.11$ [0.52%]	$\pm 0.64$ [4.1%]
alpha_pileup	$\pm 0.97$ [0.55%]	$\pm 0.48$ [0.27%]	$\pm 0.07$ [0.12%]	$\pm 0.27$ [1.2%]	$\pm 0.30$ [2.0%]
alpha_JES_Group3	$\pm 0.87$ [0.49%]	$\pm 0.06$ [0.03%]	$\pm 0.32$ [0.56%]	$\pm 0.21$ [0.96%]	$\pm 0.13$ [0.82%]
alpha_ISR-Top1L	$\pm 0.77$ [0.44%]	$\pm 1.39$ [0.77%]	$\pm 1.24$ [2.1%]	$\pm 0.58$ [2.7%]	$\pm 0.56$ [3.6%]
alpha_EG_SCALE_ALL	$\pm 0.71$ [0.41%]	$\pm 0.42$ [0.23%]	$\pm 0.05$ [0.09%]	$\pm 0.05$ [0.25%]	$\pm 0.01$ [0.08%]
Lumi	$\pm 0.69$ [0.39%]	$\pm 0.88$ [0.49%]	$\pm 0.36$ [0.62%]	$\pm 0.16$ [0.75%]	$\pm 0.11$ [0.73%]
alpha_MUON_ID	$\pm 0.68$ [0.39%]	$\pm 0.18$ [0.10%]	$\pm 0.03$ [0.06%]	$\pm 0.04$ [0.17%]	$\pm 0.04$ [0.27%]
alpha_EG_Eff	$\pm 0.61$ [0.35%]	$\pm 0.52$ [0.29%]	$\pm 0.22$ [0.37%]	$\pm 0.09$ [0.41%]	$\pm 0.08$ [0.51%]
alpha_MET_SoftTrk	$\pm 0.43$ [0.24%]	$\pm 0.01$ [0.01%]	$\pm 0.03$ [0.06%]	$\pm 0.03$ [0.12%]	$\pm 0.04$ [0.27%]
alpha_JVT	$\pm 0.39$ [0.22%]	$\pm 0.27$ [0.15%]	$\pm 0.12$ [0.21%]	$\pm 0.04$ [0.18%]	$\pm 0.02$ [0.12%]
alpha_EG_RESOLUTION_ALL	$\pm 0.37$ [0.21%]	$\pm 0.21$ [0.11%]	$\pm 0.02$ [0.03%]	$\pm 0.03$ [0.12%]	$\pm 0.01$ [0.09%]
alpha_qsf-Wjets	$\pm 0.28$ [0.16%]	$\pm 0.20$ [0.11%]	$\pm 0.05$ [0.08%]	$\pm 0.04$ [0.19%]	$\pm 0.04$ [0.26%]
alpha_muR_muF-Zjets	$\pm 0.25$ [0.14%]	$\pm 0.12$ [0.06%]	$\pm 0.02$ [0.03%]	$\pm 0.01$ [0.04%]	$\pm 0.01$ [0.05%]
alpha_MET_SoftTrk_ResoPara	$\pm 0.23$ [0.13%]	$\pm 1.72$ [0.95%]	$\pm 0.24$ [0.41%]	$\pm 0.27$ [1.2%]	$\pm 0.02$ [0.14%]
alpha_btag_ExtraFromCharm	$\pm 0.22$ [0.12%]	$\pm 0.10$ [0.06%]	$\pm 0.02$ [0.03%]	$\pm 0.00$ [0.00%]	$\pm 0.00$ [0.01%]
alpha_btag_Extra	$\pm 0.21$ [0.12%]	$\pm 0.18$ [0.10%]	$\pm 0.03$ [0.06%]	$\pm 0.01$ [0.03%]	$\pm 0.12$ [0.79%]
alpha_JET_EtaInt_negEta	$\pm 0.18$ [0.10%]	$\pm 0.02$ [0.01%]	$\pm 0.01$ [0.01%]	$\pm 0.00$ [0.01%]	$\pm 0.01$ [0.06%]
alpha_MUON_Eff_sys	$\pm 0.16$ [0.09%]	$\pm 0.22$ [0.12%]	$\pm 0.10$ [0.17%]	$\pm 0.07$ [0.32%]	$\pm 0.10$ [0.65%]
alpha_ckkw-Wjets	$\pm 0.10$ [0.05%]	$\pm 0.35$ [0.20%]	$\pm 0.06$ [0.09%]	$\pm 0.11$ [0.51%]	$\pm 0.12$ [0.76%]
alpha_btag_LightT	$\pm 0.09$ [0.05%]	$\pm 0.55$ [0.30%]	$\pm 0.10$ [0.18%]	$\pm 0.11$ [0.50%]	$\pm 0.03$ [0.20%]
alpha_MET_SoftTrk_ResoPerp	$\pm 0.09$ [0.05%]	$\pm 1.66$ [0.92%]	$\pm 0.22$ [0.37%]	$\pm 0.33$ [1.5%]	$\pm 0.02$ [0.15%]
alpha_btag_CT	$\pm 0.07$ [0.04%]	$\pm 0.09$ [0.05%]	$\pm 0.03$ [0.05%]	$\pm 0.01$ [0.07%]	$\pm 0.02$ [0.14%]
alpha_EG_Reco	$\pm 0.05$ [0.03%]	$\pm 0.05$ [0.03%]	$\pm 0.01$ [0.02%]	$\pm 0.01$ [0.03%]	$\pm 0.01$ [0.04%]
alpha_MUON_SCALE	$\pm 0.04$ [0.02%]	$\pm 0.28$ [0.15%]	$\pm 0.11$ [0.19%]	$\pm 0.01$ [0.04%]	$\pm 0.00$ [0.03%]
alpha_JET_EtaInt_highE	$\pm 0.03$ [0.02%]	$\pm 0.03$ [0.01%]	$\pm 0.00$ [0.00%]	$\pm 0.00$ [0.00%]	$\pm 0.00$ [0.00%]
alpha_ckkw-Zjets	$\pm 0.03$ [0.02%]	$\pm 0.01$ [0.00%]	$\pm 0.01$ [0.02%]	$\pm 0.00$ [0.00%]	$\pm 0.00$ [0.01%]
alpha_MUON_Eff_Iso_sys	$\pm 0.02$ [0.01%]	$\pm 0.04$ [0.02%]	$\pm 0.01$ [0.02%]	$\pm 0.01$ [0.03%]	$\pm 0.00$ [0.00%]
alpha_qsf-Zjets	$\pm 0.02$ [0.01%]	$\pm 0.00$ [0.00%]	$\pm 0.01$ [0.02%]	$\pm 0.00$ [0.01%]	$\pm 0.00$ [0.01%]
alpha_MUON_Eff_stat	$\pm 0.01$ [0.01%]	$\pm 0.02$ [0.01%]	$\pm 0.01$ [0.01%]	$\pm 0.01$ [0.03%]	$\pm 0.00$ [0.01%]
alpha_JET_RelNonClos_AFII	$\pm 0.01$ [0.01%]	$\pm 0.02$ [0.01%]	$\pm 0.01$ [0.01%]	$\pm 0.00$ [0.00%]	$\pm 0.00$ [0.01%]
alpha_MUON_TTVA_stat	$\pm 0.00$ [0.00%]	$\pm 0.01$ [0.00%]	$\pm 0.00$ [0.00%]	$\pm 0.00$ [0.01%]	$\pm 0.00$ [0.00%]
alpha_MUON_Eff_Iso_stat	$\pm 0.00$ [0.00%]	$\pm 0.01$ [0.00%]	$\pm 0.00$ [0.00%]	$\pm 0.00$ [0.00%]	$\pm 0.00$ [0.00%]
alpha_JER_EffectiveNP_6	$\pm 0.00$ [0.00%]	$\pm 2.35$ [1.3%]	$\pm 0.28$ [0.47%]	$\pm 0.25$ [1.1%]	$\pm 0.11$ [0.74%]
alpha_JER_DataVsMC_AFII	$\pm 0.00$ [0.00%]	$\pm 0.01$ [0.01%]	$\pm 0.00$ [0.00%]	$\pm 0.00$ [0.00%]	$\pm 0.00$ [0.00%]
alpha_EG_SCALE_AF2	$\pm 0.00$ [0.00%]	$\pm 0.00$ [0.00%]	$\pm 0.00$ [0.00%]	$\pm 0.00$ [0.00%]	$\pm 0.00$ [0.00%]
alpha_MUON_TTVA_sys	$\pm 0.00$ [0.00%]	$\pm 0.00$ [0.00%]	$\pm 0.00$ [0.00%]	$\pm 0.00$ [0.00%]	$\pm 0.00$ [0.00%]
alpha_JET_EtaInt_posEta	$\pm 0.00$ [0.00%]	$\pm 0.03$ [0.02%]	$\pm 0.02$ [0.04%]	$\pm 0.00$ [0.01%]	$\pm 0.00$ [0.03%]
alpha_EG-Trig	$\pm 0.00$ [0.00%]	$\pm 0.00$ [0.00%]	$\pm 0.00$ [0.00%]	$\pm 0.00$ [0.00%]	$\pm 0.00$ [0.00%]
alpha_MUON-Trig_sys	$\pm 0.00$ [0.00%]	$\pm 0.00$ [0.00%]	$\pm 0.00$ [0.00%]	$\pm 0.00$ [0.00%]	$\pm 0.00$ [0.00%]
alpha_fJVT	$\pm 0.00$ [0.00%]	$\pm 0.00$ [0.00%]	$\pm 0.00$ [0.00%]	$\pm 0.00$ [0.00%]	$\pm 0.00$ [0.00%]
alpha_EG-TrigEff	$\pm 0.00$ [0.00%]	$\pm 0.00$ [0.00%]	$\pm 0.00$ [0.00%]	$\pm 0.00$ [0.00%]	$\pm 0.00$ [0.00%]
gamma_stat_tW1L_CRWm.cuts_bin_0	$\pm 0.00$ [0.00%]	$\pm 0.00$ [0.00%]	$\pm 0.00$ [0.00%]	$\pm 0.00$ [0.00%]	$\pm 0.00$ [0.00%]
gamma_stat_SR1LBin3.cuts_bin_0	$\pm 0.00$ [0.00%]	$\pm 0.00$ [0.00%]	$\pm 0.00$ [0.00%]	$\pm 1.16$ [5.3%]	$\pm 0.00$ [0.00%]