721 ## A.5 List of background simulation samples used for 2017 analyses

Table 42: Samples describing other processes than Higgs used in 2017 analyses.

Sample Name
/DiPhotonJets_MGG-80toInf_13TeV_amcatnloFXFX-pythia8/RunIIFall17MiniAODv2-PU2017_12Apr2018_94X_mc2017_realistic_v14-v1 — *not in our list, nor Snowmass*
/DiPhotonJetsBox1BJet_MGG-80toInf_13TeV-Sherpa/RunIIFall17MiniAODv2-PU2017_12Apr2018_94X_mc2017_realistic_v14-v1 — *not in our list, snowmass gridpack exists*
/DiPhotonJetsBox2BJets_MGG-80toInf_13TeV-Sherpa/RunIIFall17MiniAODv2-PU2017_12Apr2018_94X_mc2017_realistic_v14-v1 — *not in our list, snowmass gridpack exists*
/DiPhotonJetsBox_M40_80-Sherpa/RunIIFall17MiniAODv2-PU2017_12Apr2018_94X_mc2017_realistic_v14-v2 — *on our list, Snowmass sample exists*
/DiPhotonJetsBox_MGG-80toInf_13TeV-Sherpa/RunIIFall17MiniAODv2-PU2017_12Apr2018_94X_mc2017_realistic_v14-v2 — *on our list, Snowmass sample exists*
/DYJetsToLL_M-50_TuneCP5_13TeV-amcatnloFXFX-pythia8/RunIIFall17MiniAODv2-PU2017_12Apr2018_94X_mc2017_realistic_v14-v1 — *on our list, Snowmass TuneCUETP8M1 exists*
/DYJetsToLL_M-50_TuneCP5_13TeV-amcatnloFXFX-pythia8/RunIIFall17MiniAODv2-PU2017_12Apr2018_94X_mc2017_realistic_v14_ext1-v1
/GJet_Pt-**X**_DoubleEMEnriched_MGG-80toInf_TuneCP5_13TeV_Pythia8/RunIIFall17MiniAODv2-PU2017_12Apr2018_94X_mc2017_realistic_v14-v1, **X** = 20to40, 20to40
/GJet_Pt-20toInf_DoubleEMEnriched_MGG-40to80_TuneCP5_13TeV_Pythia8/RunIIFall17MiniAODv2-PU2017_12Apr2018_94X_mc2017_realistic_v14-v1
/GJet_Pt-40toInf_DoubleEMEnriched_MGG-80toInf_TuneCP5_13TeV_Pythia8/RunIIFall17MiniAODv2-PU2017_12Apr2018_94X_mc2017_realistic_v14-v2
/GJets_HT-40To100_TuneCP5_13TeV-madgraphMLM-pythia8/RunIIFall17MiniAODv2-PU2017_12Apr2018_94X_mc2017_realistic_v14-v2 — *not in our list nor Snowmass*
/GJets_HT-**X**_TuneCP5_13TeV-madgraphMLM-pythia8/RunIIFall17MiniAODv2-PU2017_12Apr2018_94X_mc2017_realistic_v14-v1, **X** = 100To200, 200To400, 400To600
/GJets_HT-600ToInf_TuneCP5_13TeV-madgraphMLM-pythia8/RunIIFall17MiniAODv2-PU2017_12Apr2018_94X_mc2017_realistic_v14-v2
/QCD_Pt-30to40_DoubleEMEnriched_MGG-80toInf_TuneCP5_13TeV_Pythia8/RunIIFall17MiniAODv2-PU2017_12Apr2018_94X_mc2017_realistic_v14-v1 — *on our list, Snowmass sample exists*
/QCD_Pt-30toInf_DoubleEMEnriched_MGG-40to80_TuneCP5_13TeV_Pythia8/RunIIFall17MiniAODv2-PU2017_12Apr2018_94X_mc2017_realistic_v14-v1
/QCD_Pt-40toInf_DoubleEMEnriched_MGG-80toInf_TuneCP5_13TeV_Pythia8/RunIIFall17MiniAODv2-PU2017_12Apr2018_94X_mc2017_realistic_v14-v1
/ST_tW_antitop_5f_inclusiveDecays_TuneCP5_13TeV-powheg-pythia8/RunIIFall17MiniAODv2-PU2017_12Apr2018_94X_mc2017_realistic_v14-v1
/ST_tW_antitop_5f_inclusiveDecays_TuneCP5_13TeV-powheg-pythia8/RunIIFall17MiniAODv2-PU2017_12Apr2018_94X_mc2017_realistic_v14-v2
/ST_tW_top_5f_inclusiveDecays_TuneCP5_13TeV-powheg-pythia8/RunIIFall17MiniAODv2-PU2017_12Apr2018_94X_mc2017_realistic_v14-v1
/ST_tW_top_5f_inclusiveDecays_TuneCP5_13TeV-powheg-pythia8/RunIIFall17MiniAODv2-PU2017_12Apr2018_94X_mc2017_realistic_v14-v2
/TGJets_TuneCP5_13TeV_amcatnlo_madspin_pythia8/RunIIFall17MiniAODv2-PU2017_12Apr2018_94X_mc2017_realistic_v14-v2
/TTGG_0Jets_TuneCP5_13TeV_amcatnlo_madspin_pythia8/RunIIFall17MiniAODv2-PU2017_12Apr2018_94X_mc2017_realistic_v14-v2 — *on our list, Snowmass smpl exists*
/TTGJets_TuneCP5_13TeV-amcatnloFXFX-madspin-pythia8/RunIIFall17MiniAODv2-PU2017_12Apr2018_94X_mc2017_realistic_v14-v1 — *on our list, already Snowmass requested*
/TTGJets_TuneCP5_13TeV-amcatnloFXFX-madspin-pythia8/RunIIFall17MiniAODv2-PU2017_12Apr2018_94X_mc2017_realistic_v14_ext1-v1
/TTJets_TuneCP5_13TeV-amcatnloFXFX-pythia8/RunIIFall17MiniAODv2-PU2017_12Apr2018_94X_mc2017_realistic_v14-v1 — *in our list (HT binned), nor Snowmass*
/TTTo2L2Nu_TuneCP5_13TeV-powheg-pythia8/RunIIFall17MiniAODv2-PU2017_12Apr2018_new_pmx_94X_mc2017_realistic_v14-v1
/TTToSemiLeptonic_TuneCP5_13TeV-powheg-pythia8/RunIIFall17MiniAODv2-PU2017_12Apr2018_new_pmx_94X_mc2017_realistic_v14-v1
/TTWJetsToLNu_TuneCP5_13TeV-amcatnloFXFX-madspin-pythia8/RunIIFall17MiniAODv2-PU2017_12Apr2018_94X_mc2017_realistic_v14-v1
/TTWJetsToLNu_TuneCP5_13TeV-amcatnloFXFX-madspin-pythia8/RunIIFall17MiniAODv2-PU2017_12Apr2018_94X_mc2017_realistic_v14-v2
/TTZToLLNuNu_M-10_TuneCP5_13TeV-amcatnlo-pythia8/RunIIFall17MiniAODv2-PU2017_12Apr2018_94X_mc2017_realistic_v14-v1
/TTZToLLNuNu_M-10_TuneCP5_13TeV-amcatnlo-pythia8/RunIIFall17MiniAODv2-PU2017_12Apr2018_94X_mc2017_realistic_v14-v2
/tZq_ll_4f_ckm_NLO_TuneCP5_PSweights_13TeV-amcatnlo-pythia8/RunIIFall17MiniAODv2-PU2017_12Apr2018_new_pmx_94X_mc2017_realistic_v14-v2
/WGToLNuG_01J_5f_TuneCP5_13TeV-amcatnloFXFX-pythia8/RunIIFall17MiniAODv2-PU2017_12Apr2018_94X_mc2017_realistic_v14-v3 — *not in our list, Snowmass TuneCUETP8M1 exists*
/WGToLNuG_TuneCP5_13TeV-madgraphMLM-pythia8/RunIIFall17MiniAODv2-PU2017_12Apr2018_94X_mc2017_realistic_v14-v1
/WW_TuneCP5_13TeV-pythia8/RunIIFall17MiniAODv2-PU2017_12Apr2018_94X_mc2017_realistic_v14-v1
/WZ_TuneCP5_13TeV-pythia8/RunIIFall17MiniAODv2-PU2017_12Apr2018_94X_mc2017_realistic_v14-v1
/ZGToLLG_01J_5f_TuneCP5_13TeV-amcatnloFXFX-pythia8/RunIIFall17MiniAODv2-PU2017_12Apr2018_94X_mc2017_realistic_v14-v3 — *on our list, Snowmass TuneCUETP8M1 exists*
/ZZ_TuneCP5_13TeV-pythia8/RunIIFall17MiniAODv2-PU2017_12Apr2018_new_pmx_94X_mc2017_realistic_v14-v2