# Systematic uncertainties

Datacard for muon channel

| | | BulkG | DYJets | VV+TT |
|---|---|---|---|---|
| lumi_13TeV | lnN | 1.027 | 1. | 1. |
| CMS_eff_vtag_tau21_sf_13TeV | lnN | 0.74/1.26 | 1. | 0.74/1.26 |
| CMS_scale_j_13TeV | lnN | 1.01 | 1. | 1. |
| CMS_hlt_M_13TeV | lnN | 1.005 | 1. | 1. |
| CMS_idIso_M_13TeV | lnN | 1.10 | 1. | 1. |
| CMS_scale_M_13TeV | lnN | 1.005 | 1. | 1. |
| Bkg_MLP_normalization | lnN | 1. | 1.32 | 1. |
| Bkg_MLP_pdf_eig0 | param | 0. | 1. | |
| Bkg_MLP_pdf_eig1 | param | 0. | 1. | |
| Bkg_MLP_pdf_eig2 | param | 0. | 1. | |
| Bkg_MLP_pdf_eig3 | param | 0. | 1. | |
| Bkg_MLP_pdf_eig4 | param | 0. | 1. | |
| Bkg_MLP_pdf_eig5 | param | 0. | 1. | |

Background shape uncorrelated parameters

https://github.com/jruizvar/ExoDiBosonResonancesRun2/blob/Analysis76X/StatTools/dataCards/CMS_ZZ_1000_MLP_13TeV.txt