

Class	Coefficients	old		new	
		Fitted	Fixed	Fitted	Fixed
2FB	$c_{tG}^{1,8}$	✓		✓	
2L2H	$c_{Qq}^{1,1}$	✓		✓	
	$c_{Qq}^{1,1}$	✓		✓	
	$c_{Qq}^{3,8}$	✓		✓	
	$c_{Qq}^{3,1}$	✓		✓	
	$c_{tq}^8$	✓		✓	
	$c_{tq}^1$	✓		✓	
	$c_{tu}^8$	✓		✓	
	$c_{tu}^1$	✓		✓	
	$c_{Qu}^8$	✓		✓	
	$c_{Qu}^1$	✓		✓	
	$c_{td}^8$	✓		✓	
	$c_{td}^1$	✓		✓	
	$c_{Qd}^8$	✓		✓	
	$c_{Qd}^1$	✓		✓	
Number fitted coefficients		15		15	

Table 1: Coefficient comparison

Type	Datasets	old	new
tt	ATLAS_CMS_tt_AC_8TeV	✓	✓
	ATLAS_tt_13TeV_asy_2022	✓	✓
	ATLAS_tt_13TeV_ljets_2016_Mtt	✓	✓
	ATLAS_tt_8TeV_dilep_Mtt	✓	✓
	ATLAS_tt_8TeV_ljets_Mtt	✓	✓
	CMS_tt2D_8TeV_dilep_MttYtt	✓	✓
	CMS_tt_13TeV_Mtt	✓	✓
	CMS_tt_13TeV_asy	✓	✓
	CMS_tt_13TeV_dilep_2015_Mtt	✓	✓
	CMS_tt_13TeV_dilep_2016_Mtt	✓	✓
	CMS_tt_13TeV_ljets_2015_Mtt	✓	✓
	CMS_tt_13TeV_ljets_2016_Mtt	✓	✓
	CMS_tt_13TeV_ljets.inc	✓	✓
	CMS_tt_8TeV_ljets_Ytt	✓	✓

Table 1: Dataset comparison

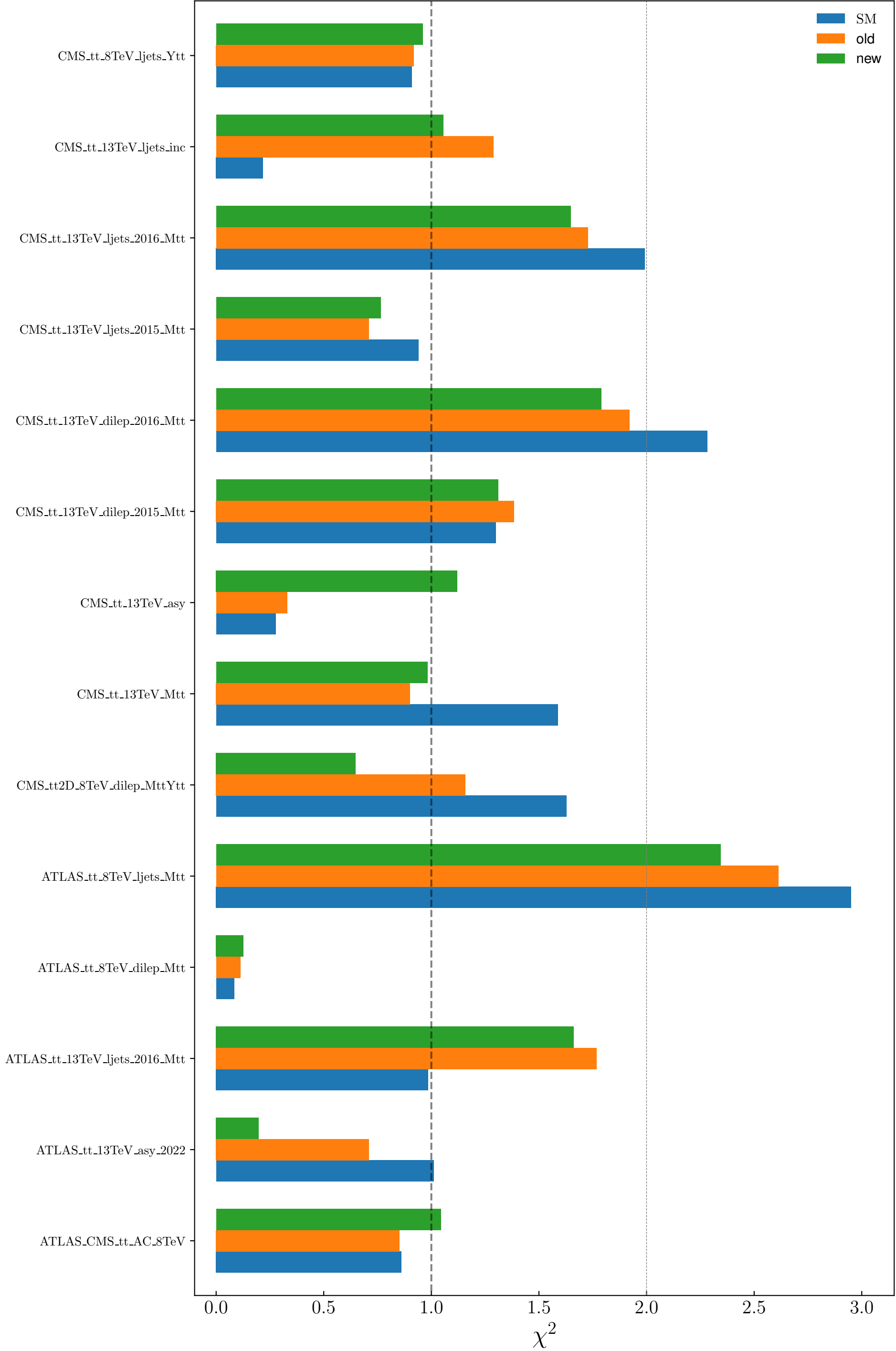
$\chi^2$  table. Blue color text represents a value that is lower than the SM  $\chi^2$  by more than one standard deviation of the  $\chi^2$  distribution. Similarly, red color text represents values that are higher than the SM  $\chi^2$  by more than one standard deviation. In parenthesis is the total SM  $\chi^2$  for the dataset included in the fit.

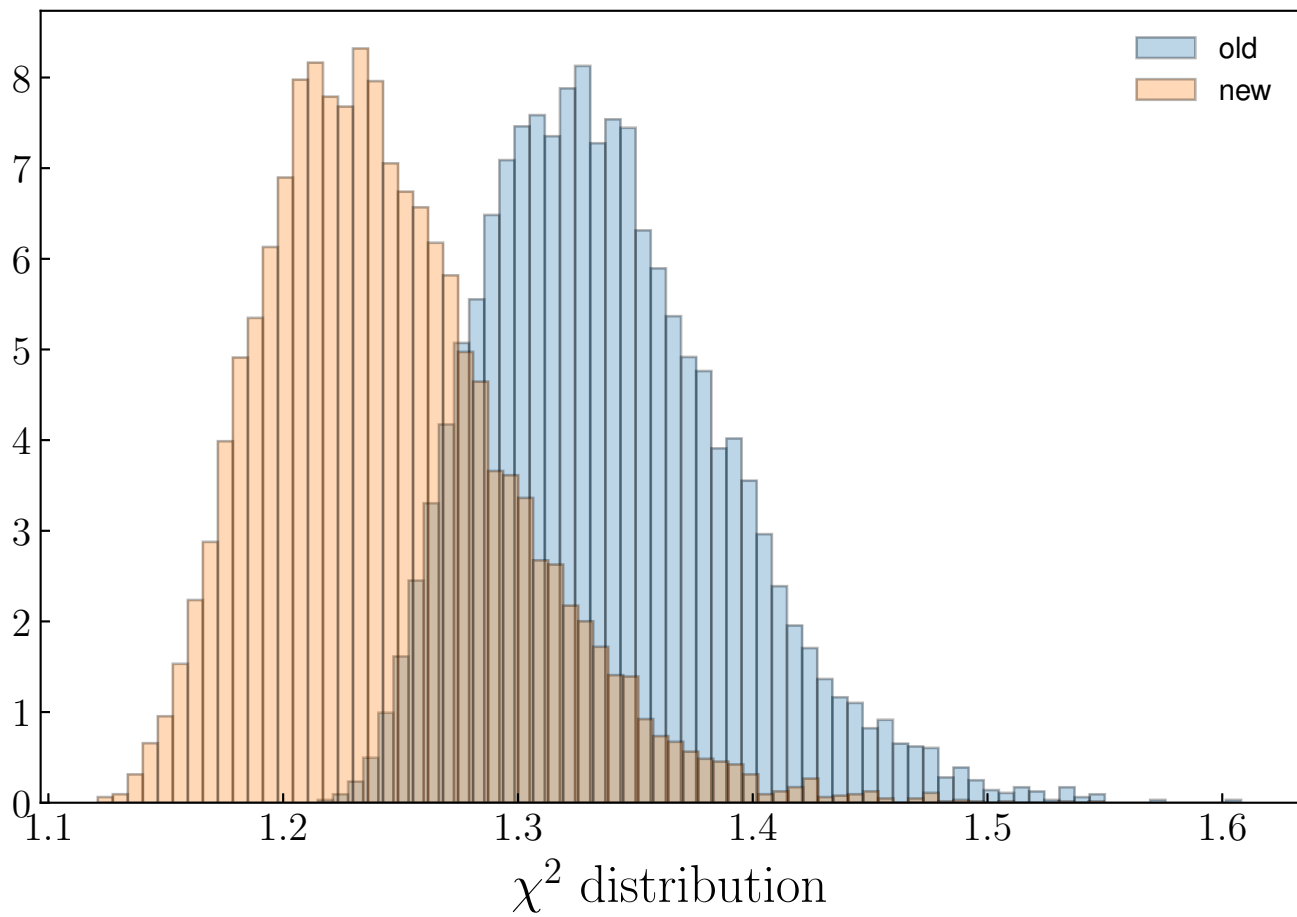
Process	$N_{\text{data}}$	SM	old	new
		$\chi^2/N_{\text{data}}$	$\chi^2/N_{\text{data}}$	$\chi^2/N_{\text{data}}$
ATLAS.CMS_tt_AC_8TeV	6	0.861	0.852	1.045
ATLAS_tt_13TeV_asy_2022	5	1.011	0.710	0.198
ATLAS_tt_13TeV_ljets_2016_Mtt	7	0.986	1.769	1.662
ATLAS_tt_8TeV_dilep_Mtt	6	0.084	0.112	0.127
ATLAS_tt_8TeV_ljets_Mtt	7	2.951	2.613	2.344
CMS_tt2D_8TeV_dilep_MttYtt	16	1.628	1.158	0.648
CMS_tt_13TeV_Mtt	15	1.588	0.902	0.982
CMS_tt_13TeV_asy	3	0.277	0.330	1.121
CMS_tt_13TeV_dilep_2015_Mtt	6	1.299	1.385	1.310
CMS_tt_13TeV_dilep_2016_Mtt	7	2.282	1.920	1.789
CMS_tt_13TeV_ljets_2015_Mtt	8	0.939	0.709	0.764
CMS_tt_13TeV_ljets_2016_Mtt	10	1.992	1.727	1.648
CMS_tt_13TeV_ljets_inc	1	0.218	1.288	1.055
CMS_tt_8TeV_ljets_Ytt	10	0.909	0.919	0.960
Total			1.198 (1.397)	1.104 (1.418)

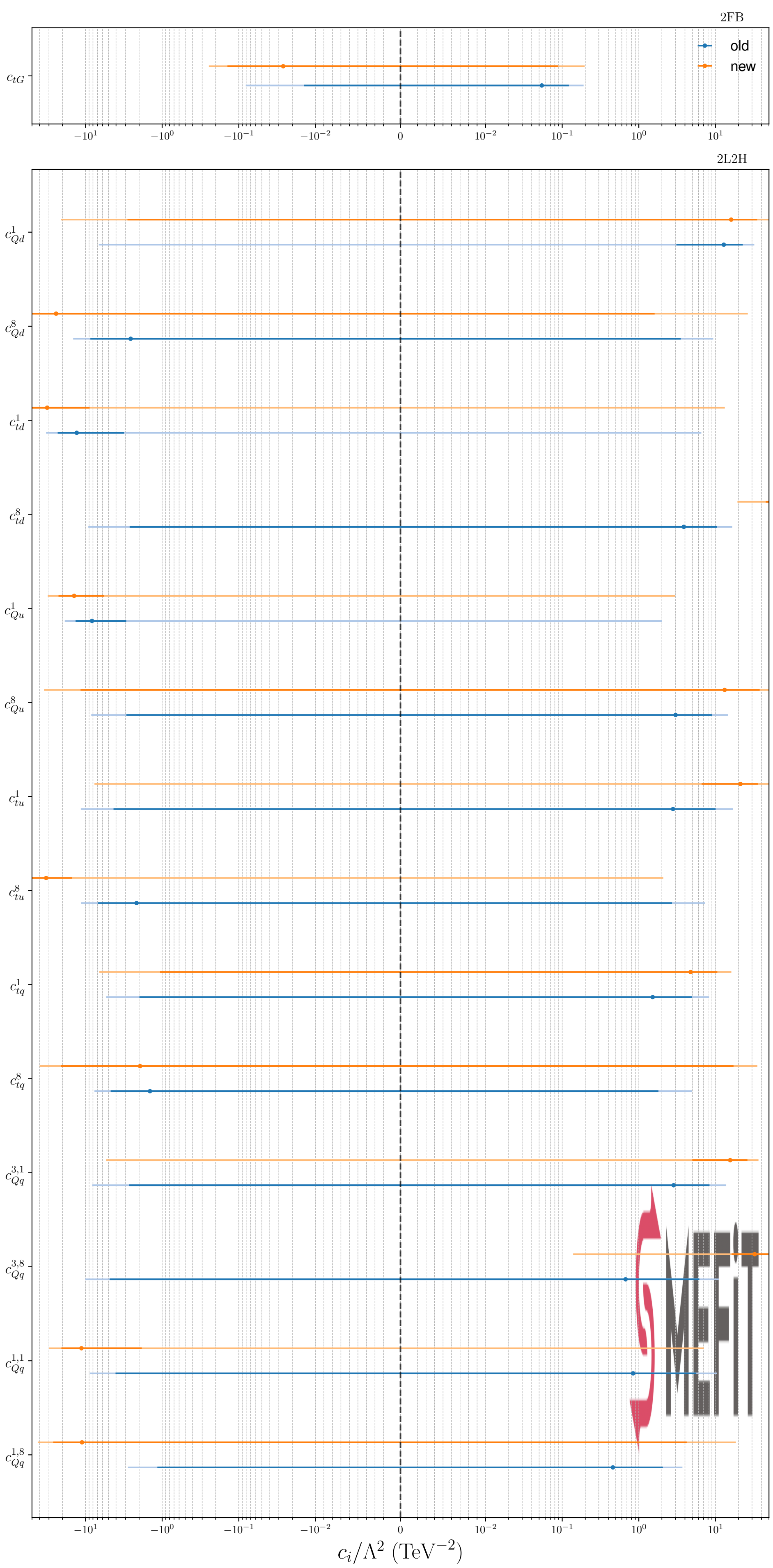
Table 1:  $\chi^2$  table for tt data

Process	old		new	
	$N_{\text{data}}$	$\chi^2/N_{\text{data}}$	$N_{\text{data}}$	$\chi^2/N_{\text{data}}$
tt	107.0	1.198 (1.397)	107.0	1.104 (1.418)
Total	107.0	1.198 (1.397)	107.0	1.104 (1.418)

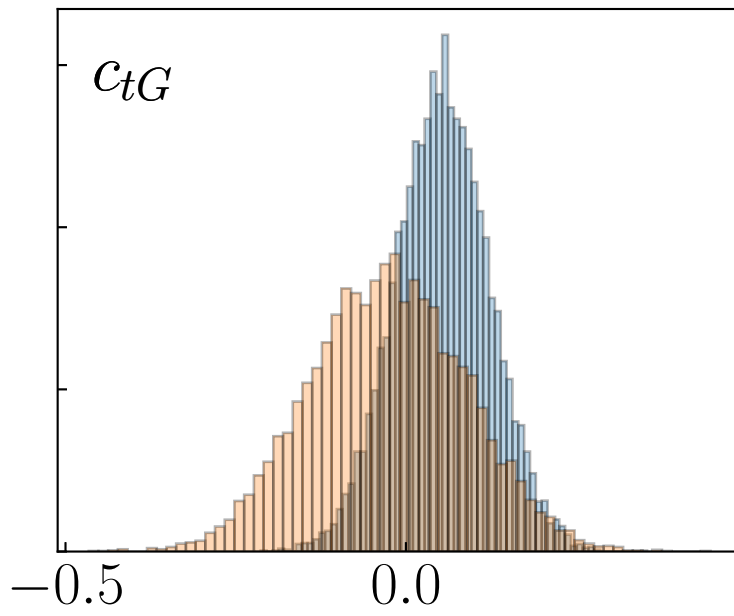
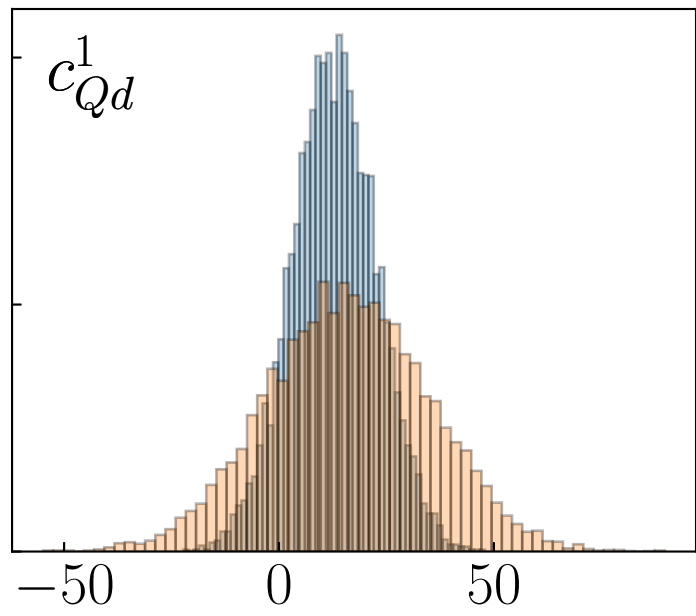
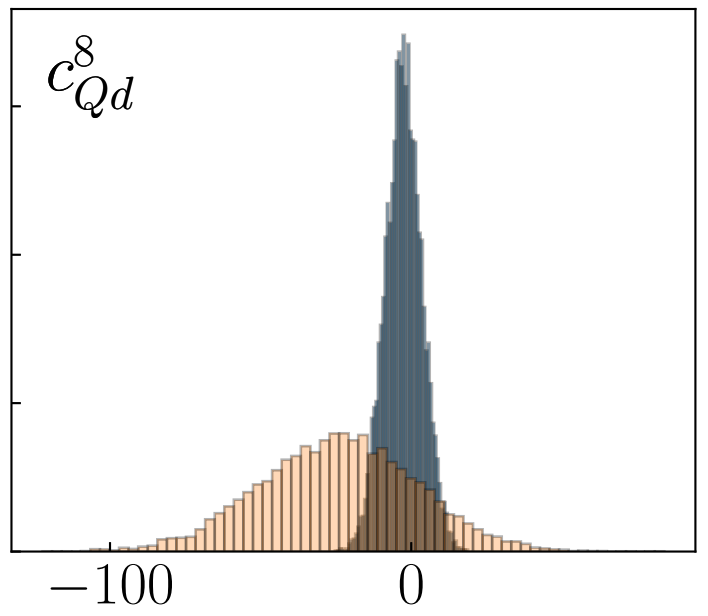
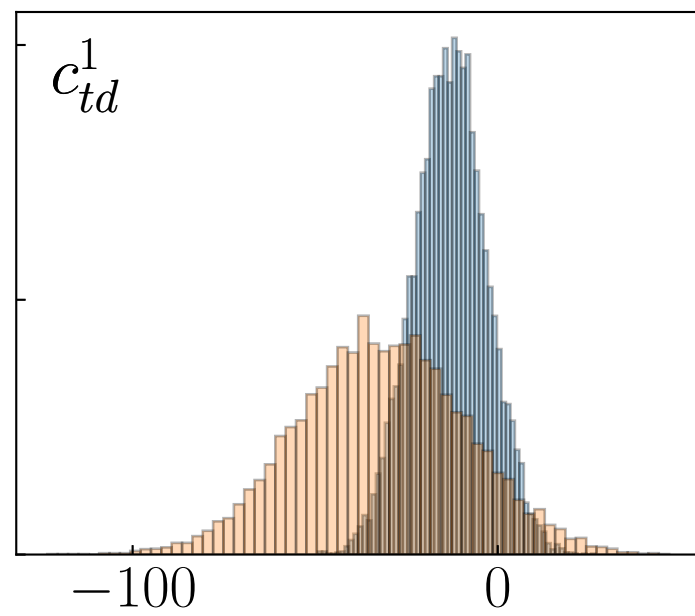
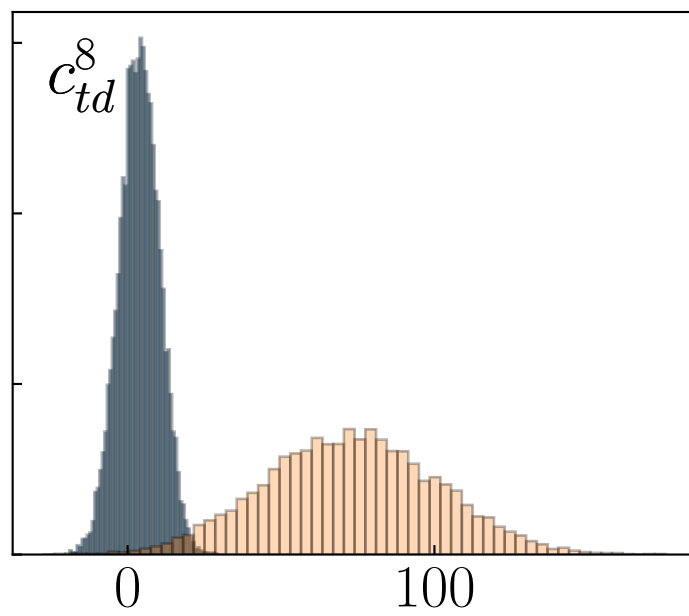
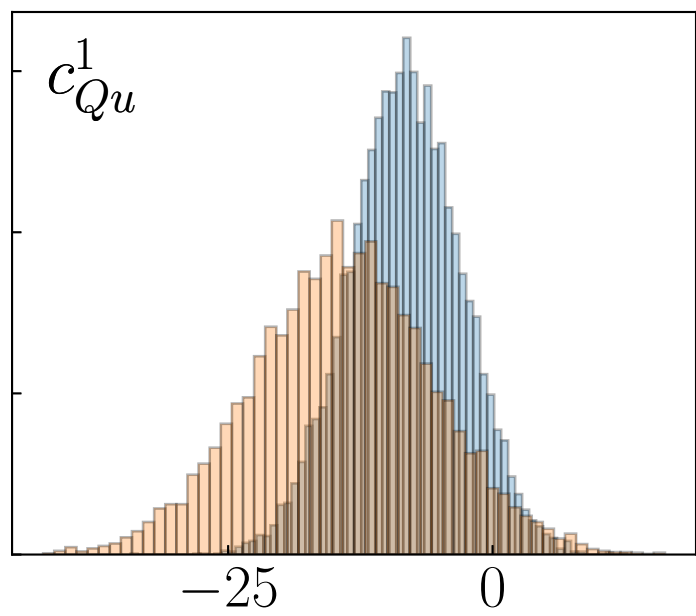
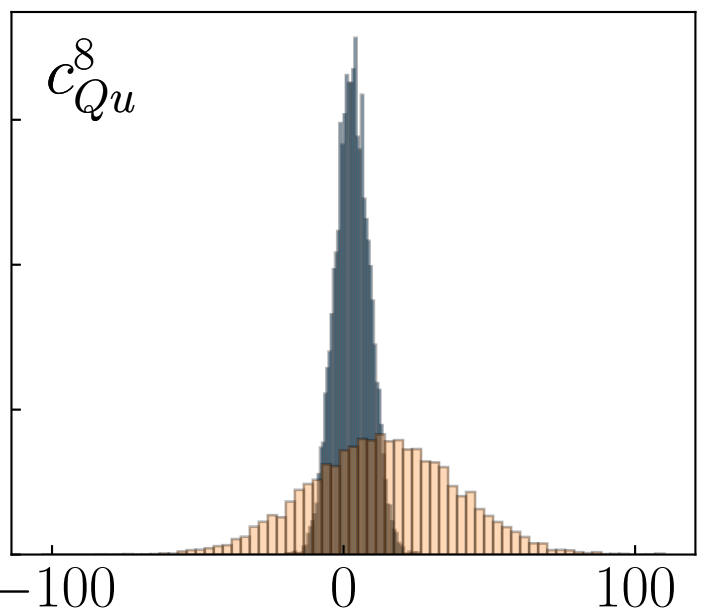
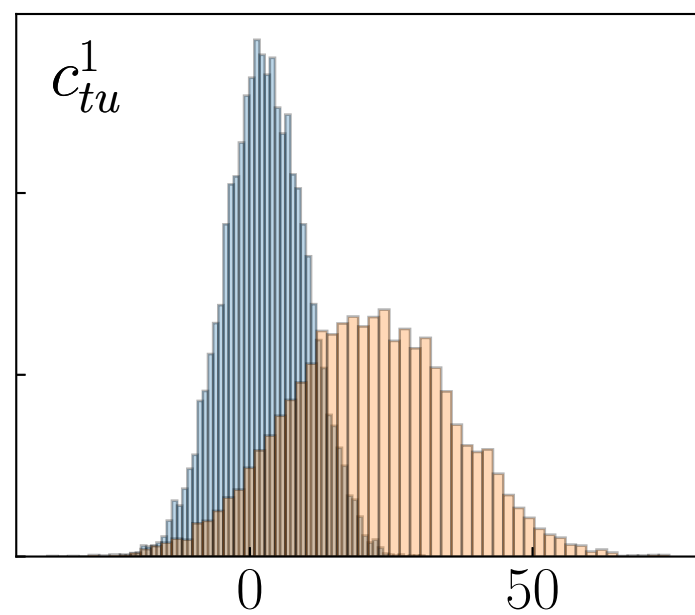
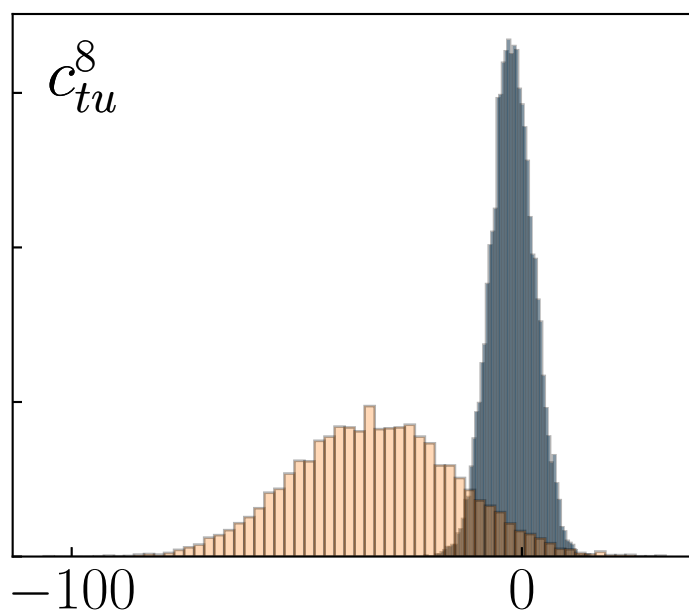
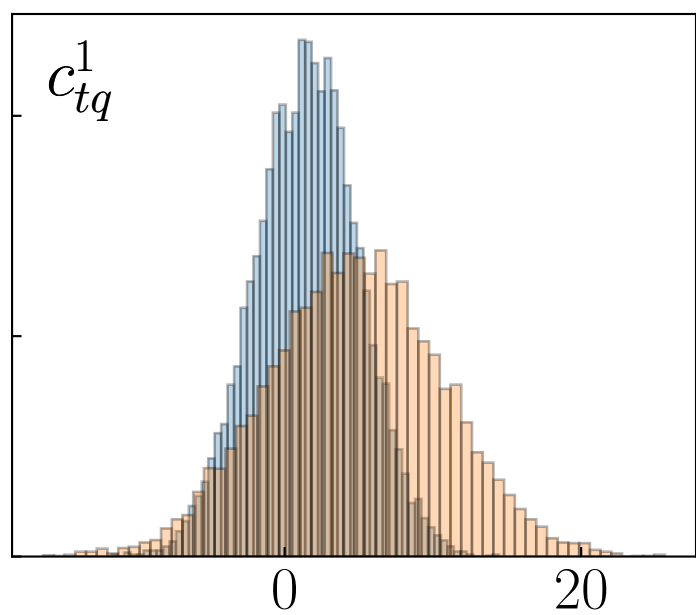
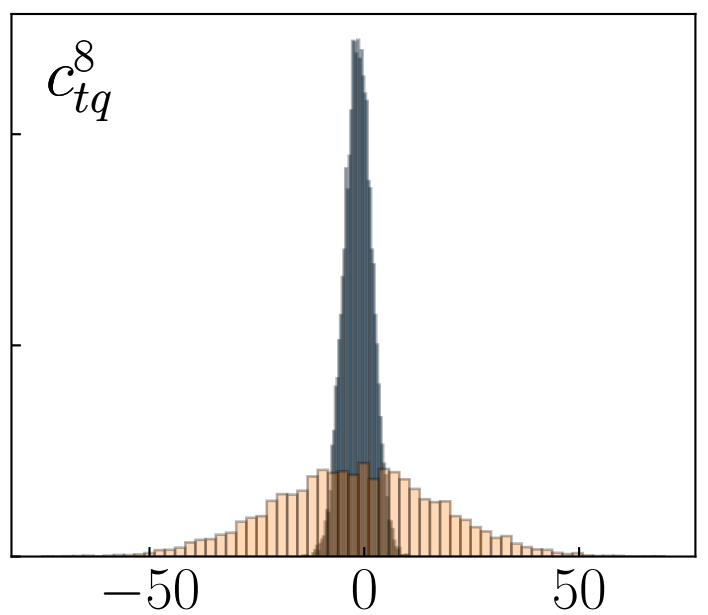
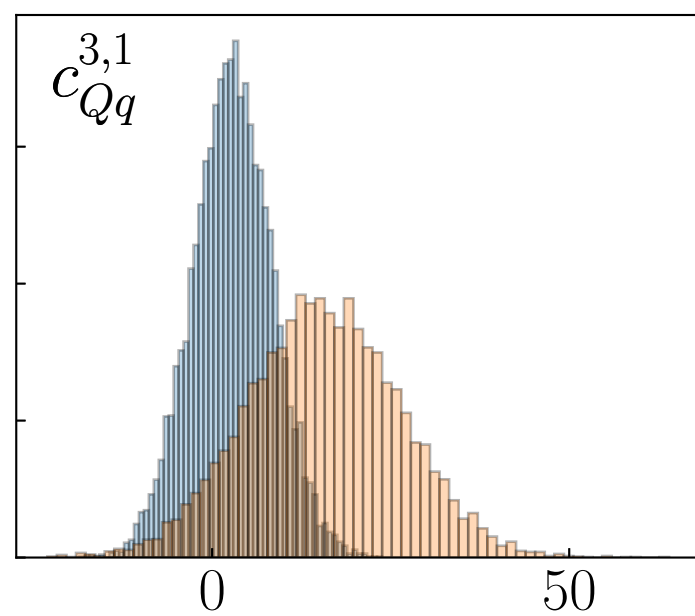
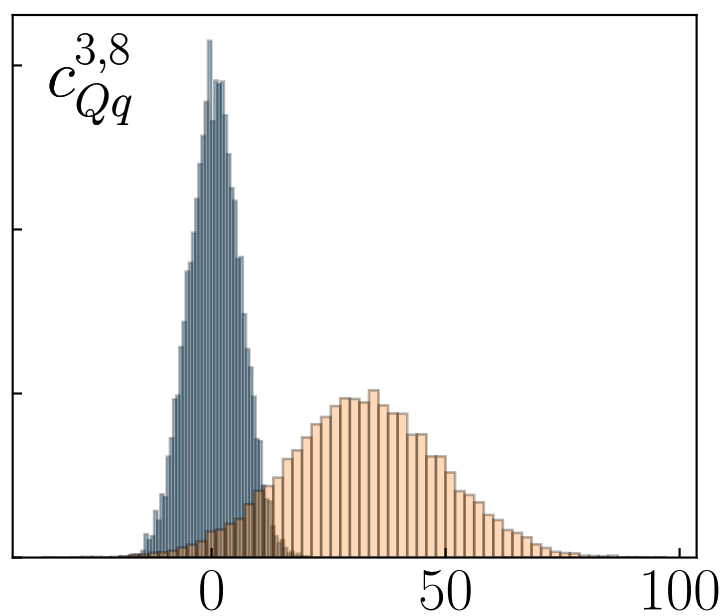
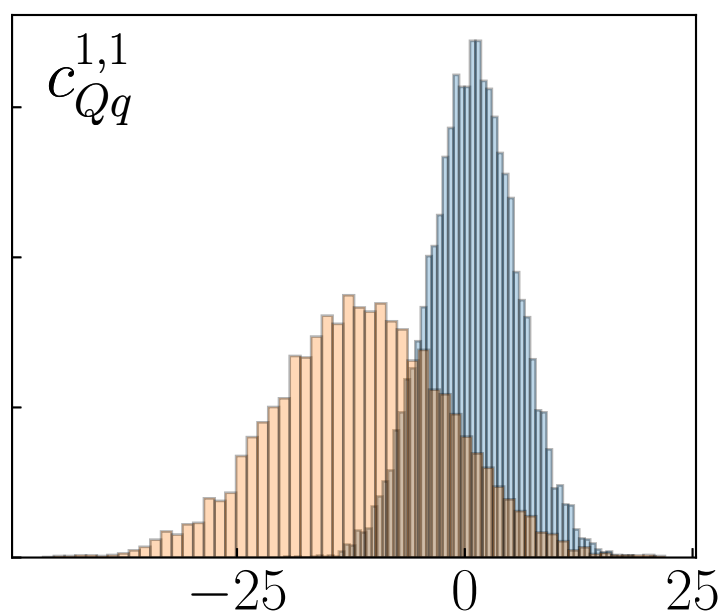
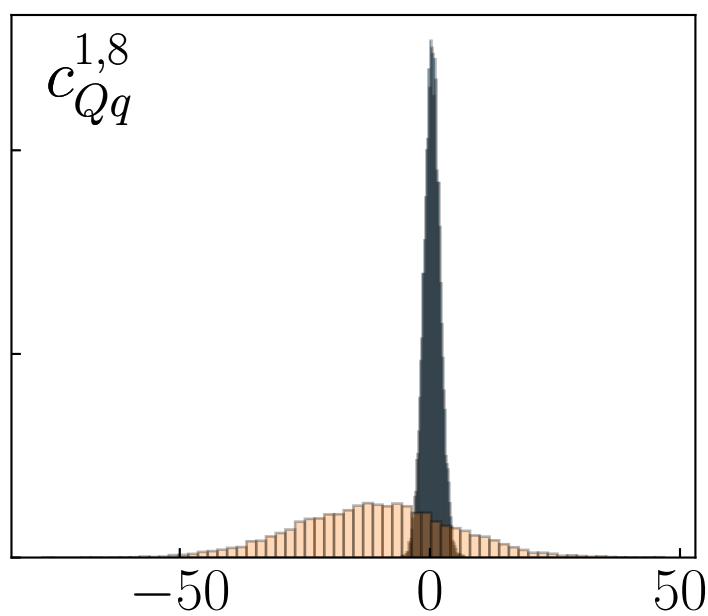
Table 2:  $\chi^2$  table for grouped data. In parenthesis is the total SM  $\chi^2$  for the dataset included in the fit. The SM column refers to all the datasets available in the group



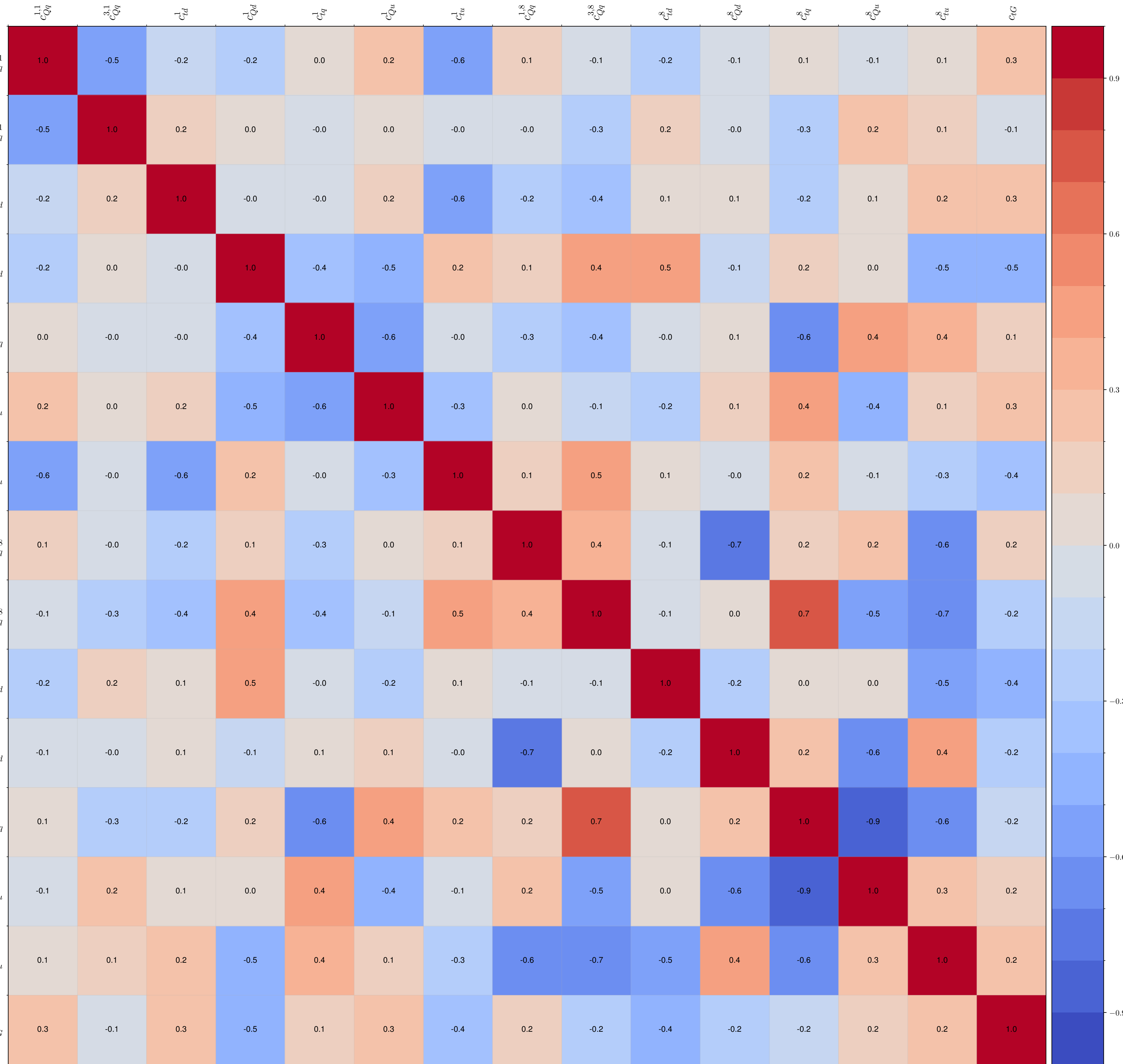




old new

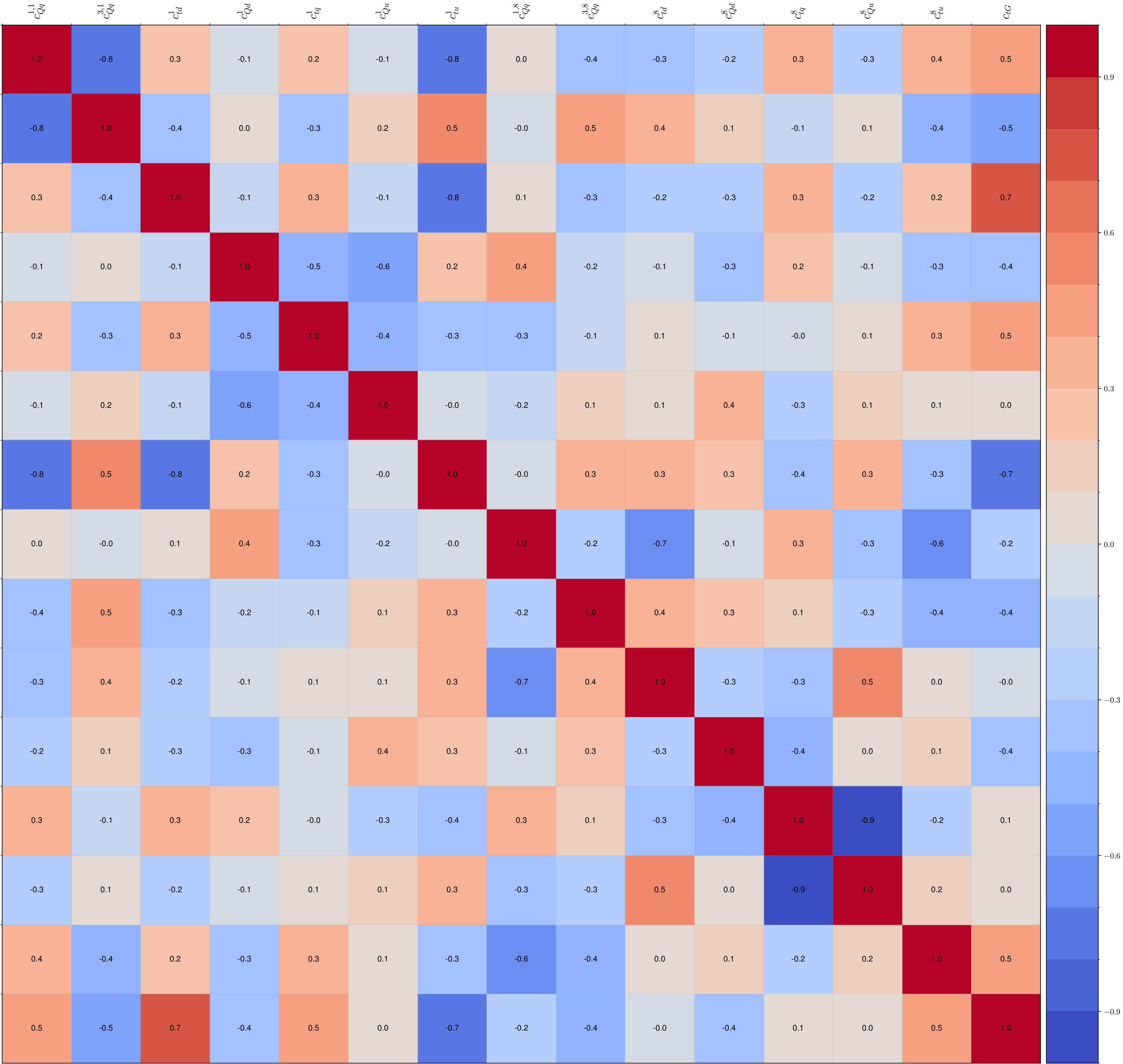


 MEFIT



Correlation: old





Correlation: new