

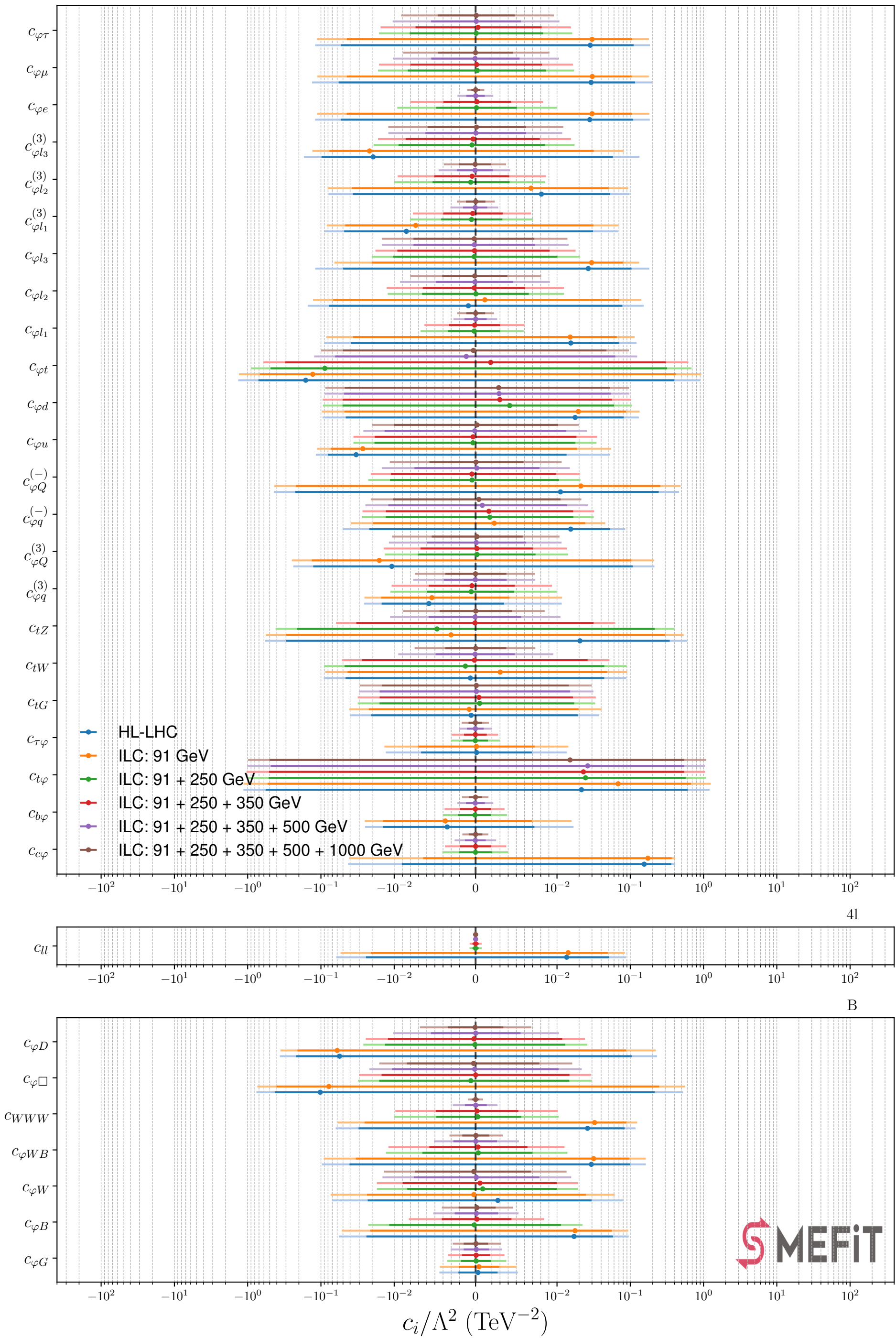
		HL-LHC		ILC: 91 GeV		ILC: 91 + 250 GeV		ILC: 91 + 250 + 350 GeV		ILC:
Class	Coefficients	Fitted	Fixed	Fitted	Fixed	Fitted	Fixed	Fitted	Fixed	Fitted
2FB	$c_{c\varphi}$	✓		✓		✓		✓		✓
	$c_{b\varphi}$	✓		✓		✓		✓		✓
	$c_{t\varphi}$	✓		✓		✓		✓		✓
	$c_{\tau\varphi}$	✓		✓		✓		✓		✓
	c_{tG}	✓		✓		✓		✓		✓
	c_{tW}	✓		✓		✓		✓		✓
	c_{tZ}	✓		✓		✓		✓		✓
	$c_{\varphi q}^{(3)}$	✓		✓		✓		✓		✓
	$c_{\varphi Q}^{(3)}$	✓		✓		✓		✓		✓
	$c_{\varphi q}^{(-)}$	✓		✓		✓		✓		✓
	$c_{\varphi Q}^{(-)}$	✓		✓		✓		✓		✓
	$c_{\varphi u}$	✓		✓		✓		✓		✓
	$c_{\varphi d}$	✓		✓		✓		✓		✓
	$c_{\varphi t}$	✓		✓		✓		✓		✓
	$c_{\varphi l_1}$	✓		✓		✓		✓		✓
	$c_{\varphi l_2}$	✓		✓		✓		✓		✓
	$c_{\varphi l_3}$	✓		✓		✓		✓		✓
	$c_{\varphi l_1}^{(3)}$	✓		✓		✓		✓		✓
	$c_{\varphi l_2}^{(3)}$	✓		✓		✓		✓		✓
	$c_{\varphi l_3}^{(3)}$	✓		✓		✓		✓		✓
	$c_{\varphi e}$	✓		✓		✓		✓		✓
	$c_{\varphi \mu}$	✓		✓		✓		✓		✓
	$c_{\varphi \tau}$	✓		✓		✓		✓		✓
4l	c_{ll}	✓		✓		✓		✓		✓
B	$c_{\varphi G}$	✓		✓		✓		✓		✓
	$c_{\varphi B}$	✓		✓		✓		✓		✓
	$c_{\varphi W}$	✓		✓		✓		✓		✓
	$c_{\varphi WB}$	✓		✓		✓		✓		✓
	c_{WWWW}	✓		✓		✓		✓		✓
	$c_{\varphi \square}$	✓		✓		✓		✓		✓
	$c_{\varphi D}$	✓		✓		✓		✓		✓
	Number fitted coefficients	31		31		31		31		31

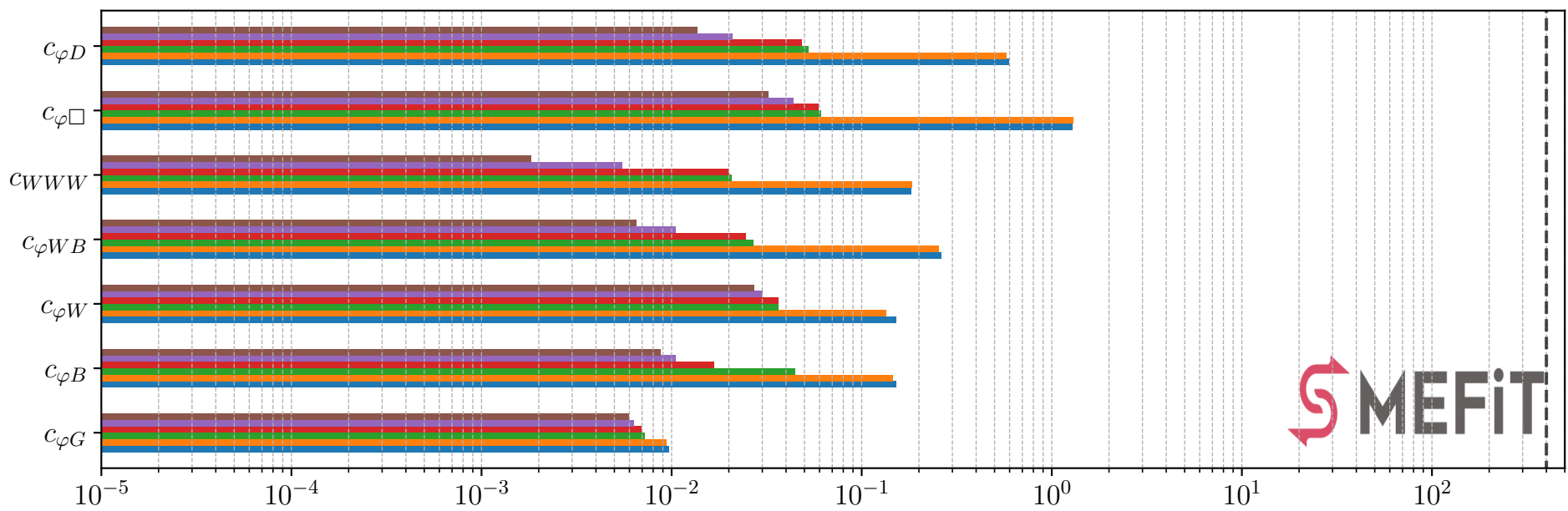
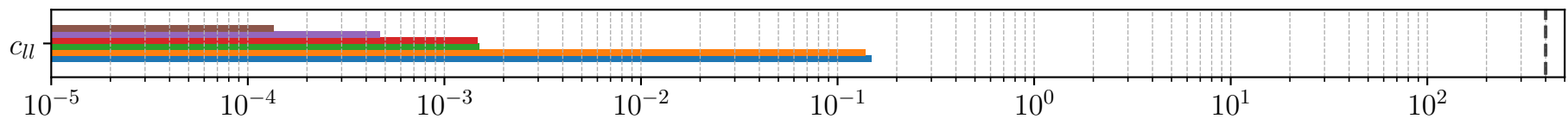
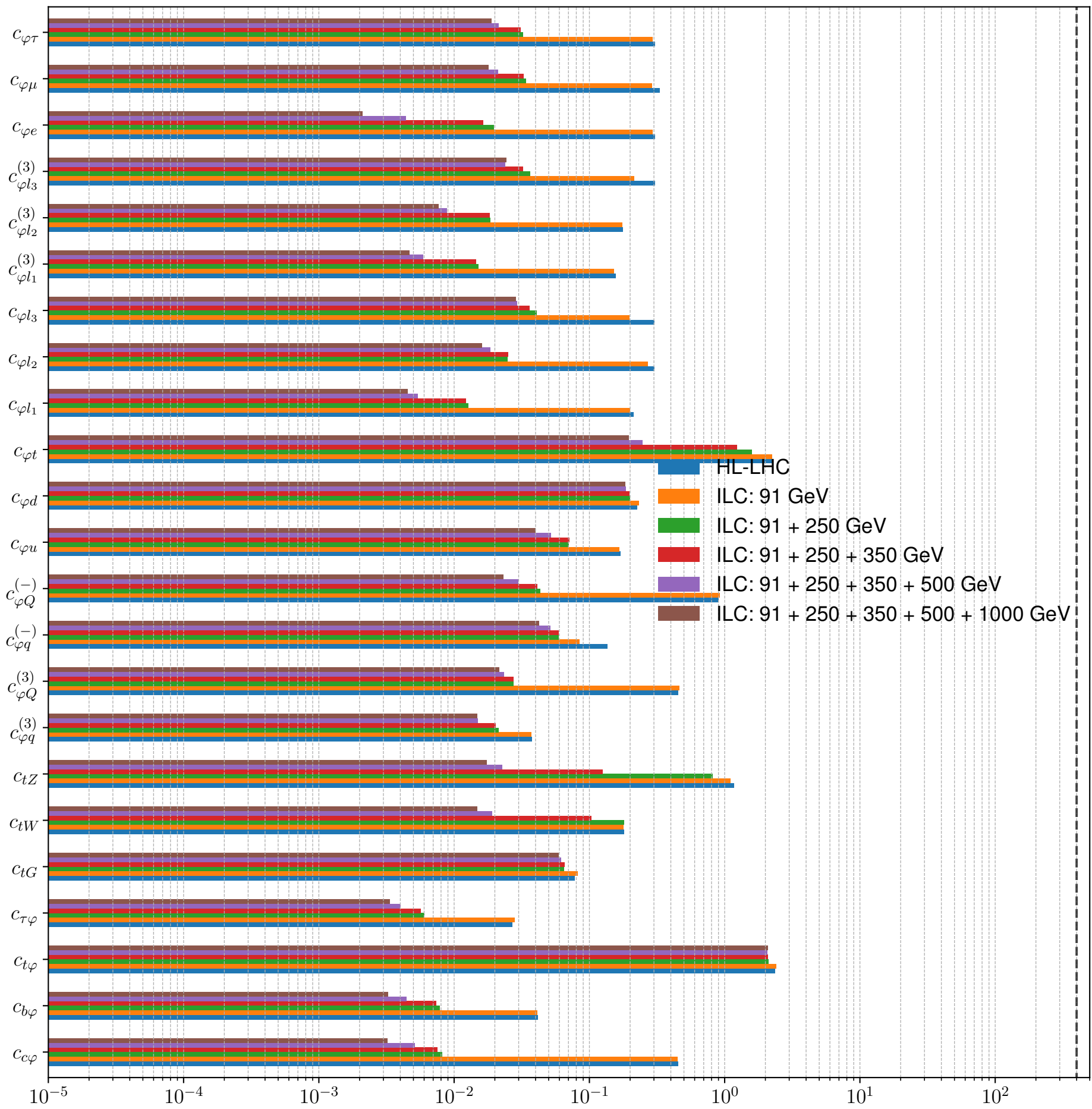
Table 1: Coefficient comparison

Type	Datasets	HL-LHC	ILC: 91 GeV	ILC: 91 + 250 GeV	ILC: 91 + 250 + 350 GeV	ILC:
4H	ATLAS.ttbb_13TeV_2016	✓	✓	✓	✓	
	ATLAS.tttt_13TeV_run2	✓	✓	✓	✓	
	ATLAS.tttt_13TeV_slep_inc	✓	✓	✓	✓	
	ATLAS.tttt_13TeV_2023	✓	✓	✓	✓	
	CMS.ttbb_13TeV	✓	✓	✓	✓	
	CMS.ttbb_13TeV_2016	✓	✓	✓	✓	
	CMS.ttbb_13TeV_dilepton_inc	✓	✓	✓	✓	
	CMS.ttbb_13TeV_ljets_inc	✓	✓	✓	✓	
	CMS.tttt_13TeV	✓	✓	✓	✓	
	CMS.tttt_13TeV_run2	✓	✓	✓	✓	
	CMS.tttt_13TeV_slep_inc	✓	✓	✓	✓	
	CMS.tttt_13TeV_2023	✓	✓	✓	✓	
HrunI	ATLAS.CMS_SSinc_RunI	✓	✓	✓	✓	
	ATLAS_SSinc_RunII	✓	✓	✓	✓	
	CMS_SSinc_RunII	✓	✓	✓	✓	
	ATLAS.WH.Hbb_13TeV	✓	✓	✓	✓	
	ATLAS.ZH.Hbb_13TeV	✓	✓	✓	✓	
	ATLAS.ggF_13TeV_2015	✓	✓	✓	✓	
	ATLAS.ggF_ZZ_13TeV	✓	✓	✓	✓	
	CMS.H_13TeV_2015_pTH	✓	✓	✓	✓	
	CMS.ggF_aa_13TeV	✓	✓	✓	✓	
	ATLAS.STXS.runII_13TeV	✓	✓	✓	✓	
LEP	LEP1.EWPOs_2006	✓	✓	✓	✓	
	LEP.Bhabha_2013	✓	✓	✓	✓	
	LEP.BrW_2013	✓	✓	✓	✓	
	LEP.alphaEW	✓	✓	✓	✓	
VV	ATLAS.WW_13TeV_2016_memu	✓	✓	✓	✓	
	ATLAS.WZ_13TeV_2016_mTWZ	✓	✓	✓	✓	
	CMS.WZ_13TeV_2016_pTZ	✓	✓	✓	✓	
	CMS.WZ_13TeV_2022_pTZ	✓	✓	✓	✓	
	LEP.eeWW_182GeV	✓	✓	✓	✓	
	LEP.eeWW_189GeV	✓	✓	✓	✓	
	LEP.eeWW_198GeV	✓	✓	✓	✓	
	LEP.eeWW_206GeV	✓	✓	✓	✓	
t8	ATLAS.t_sch_8TeV	✓	✓	✓	✓	
	ATLAS.t_tch_8TeV_diff_Yt	✓	✓	✓	✓	
	CMS.t_sch_8TeV	✓	✓	✓	✓	
	CMS.t_tch_8TeV_diff_Yt	✓	✓	✓	✓	
	CMS.t_tch_8TeV_inc	✓	✓	✓	✓	
	ATLAS.t_sch_13TeV_inc	✓	✓	✓	✓	
	ATLAS.t_tch_13TeV_inc	✓	✓	✓	✓	
	CMS.t_tch_13TeV_2016_diff_Yt	✓	✓	✓	✓	
	CMS.t_tch_13TeV_2019_diff_Yt	✓	✓	✓	✓	
	CMS.t_tch_13TeV_inc	✓	✓	✓	✓	
tW	ATLAS.tW_13TeV_inc	✓	✓	✓	✓	
	ATLAS.tW_8TeV_inc	✓	✓	✓	✓	
	ATLAS.tW_slep_8TeV_inc	✓	✓	✓	✓	
	CMS.tW_13TeV_inc	✓	✓	✓	✓	
	CMS.tW_13TeV_slep_inc	✓	✓	✓	✓	
	CMS.tW_8TeV_inc	✓	✓	✓	✓	
	ATLAS.tZ_13TeV_inc	✓	✓	✓	✓	
	ATLAS.tZ_13TeV_run2_inc	✓	✓	✓	✓	
	CMS.tZ_13TeV_2016_inc	✓	✓	✓	✓	
	CMS.tZ_13TeV_inc	✓	✓	✓	✓	
	CMS.tZ_13TeV_pTt	✓	✓	✓	✓	
	ATLAS.tt_8TeV_dilep_Mtt	✓	✓	✓	✓	
	ATLAS.tt_8TeV_ljets_Mtt	✓	✓	✓	✓	
	CMS.tt2D_8TeV_dilep_MttYtt	✓	✓	✓	✓	
	CMS.tt_8TeV_ljets_Ytt	✓	✓	✓	✓	
	ATLAS.tt_13TeV_ljets_2016_Mtt	✓	✓	✓	✓	
	CMS.tt_13TeV_Mtt	✓	✓	✓	✓	

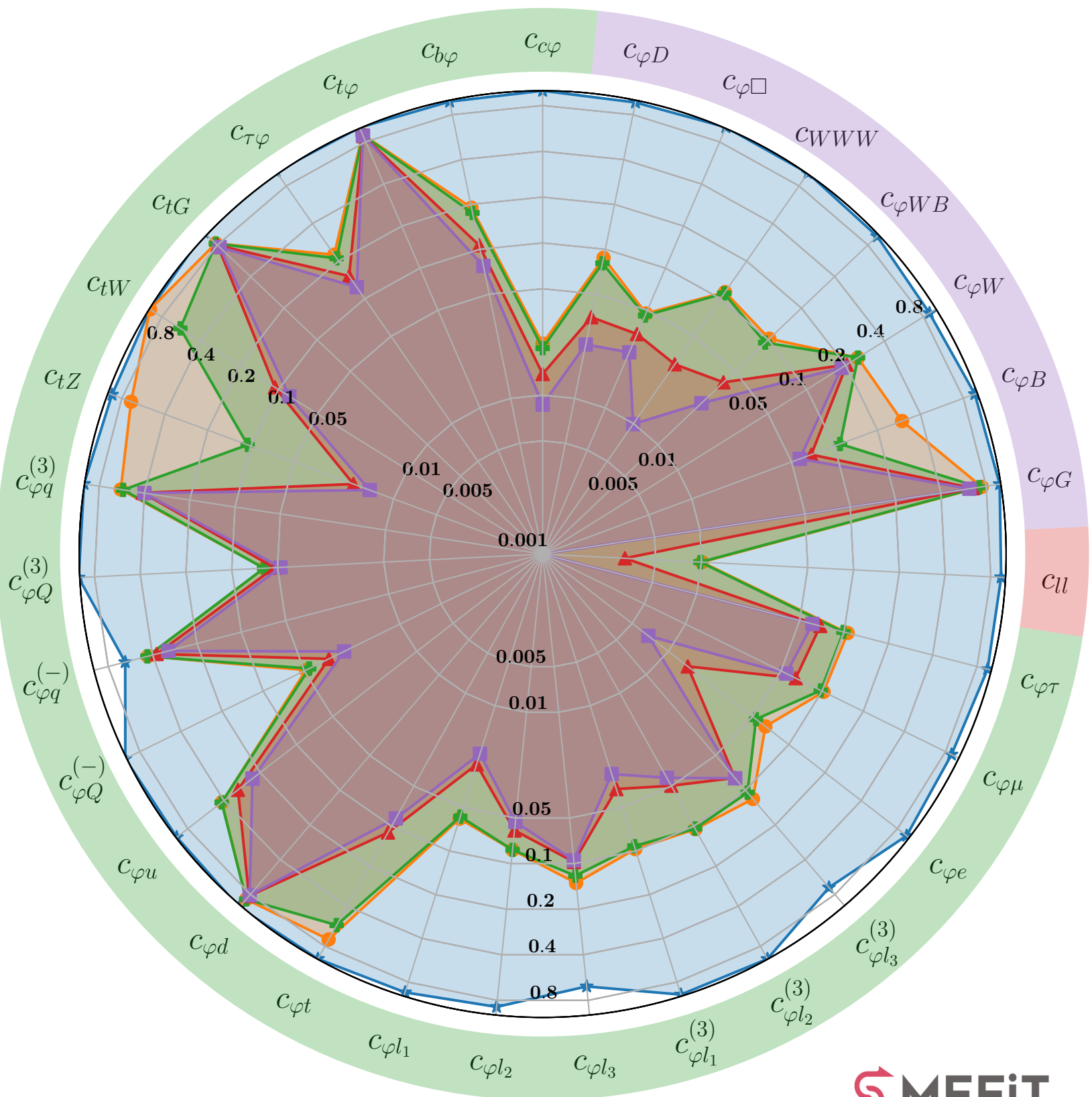
	CMS_tt_13TeV_dilep_2015_Mtt	✓	✓	✓	✓
	CMS_tt_13TeV_dilep_2016_Mtt	✓	✓	✓	✓
	CMS_tt_13TeV_ljets_2015_Mtt	✓	✓	✓	✓
	CMS_tt_13TeV_ljets_2016_Mtt	✓	✓	✓	✓
	CMS_tt_13TeV_ljets_inc	✓	✓	✓	✓
	ATLAS_WhelF_8TeV	✓	✓	✓	✓
	ATLAS_WhelF_13TeV	✓	✓	✓	✓
	CMS_WhelF_8TeV	✓	✓	✓	✓
	ATLAS_CMS_tt_AC_8TeV	✓	✓	✓	✓
	ATLAS_tt_13TeV_asy_2022	✓	✓	✓	✓
	CMS_tt_13TeV_asy	✓	✓	✓	✓
ttV	ATLAS_ttZ_13TeV	✓	✓	✓	✓
	ATLAS_ttZ_13TeV_2016	✓	✓	✓	✓
	ATLAS_ttZ_13TeV_pTZ	✓	✓	✓	✓
	ATLAS_ttZ_8TeV	✓	✓	✓	✓
	CMS_ttZ_13TeV	✓	✓	✓	✓
	CMS_ttZ_13TeV_pTZ	✓	✓	✓	✓
	CMS_ttZ_8TeV	✓	✓	✓	✓
	ATLAS_ttW_13TeV	✓	✓	✓	✓
	ATLAS_ttW_13TeV_2016	✓	✓	✓	✓
	ATLAS_ttW_8TeV	✓	✓	✓	✓
	CMS_ttW_13TeV	✓	✓	✓	✓
	CMS_ttW_8TeV	✓	✓	✓	✓
tta	ATLAS_tta_8TeV	✓	✓	✓	✓
	CMS_tta_8TeV	✓	✓	✓	✓

Table 1: Dataset comparison





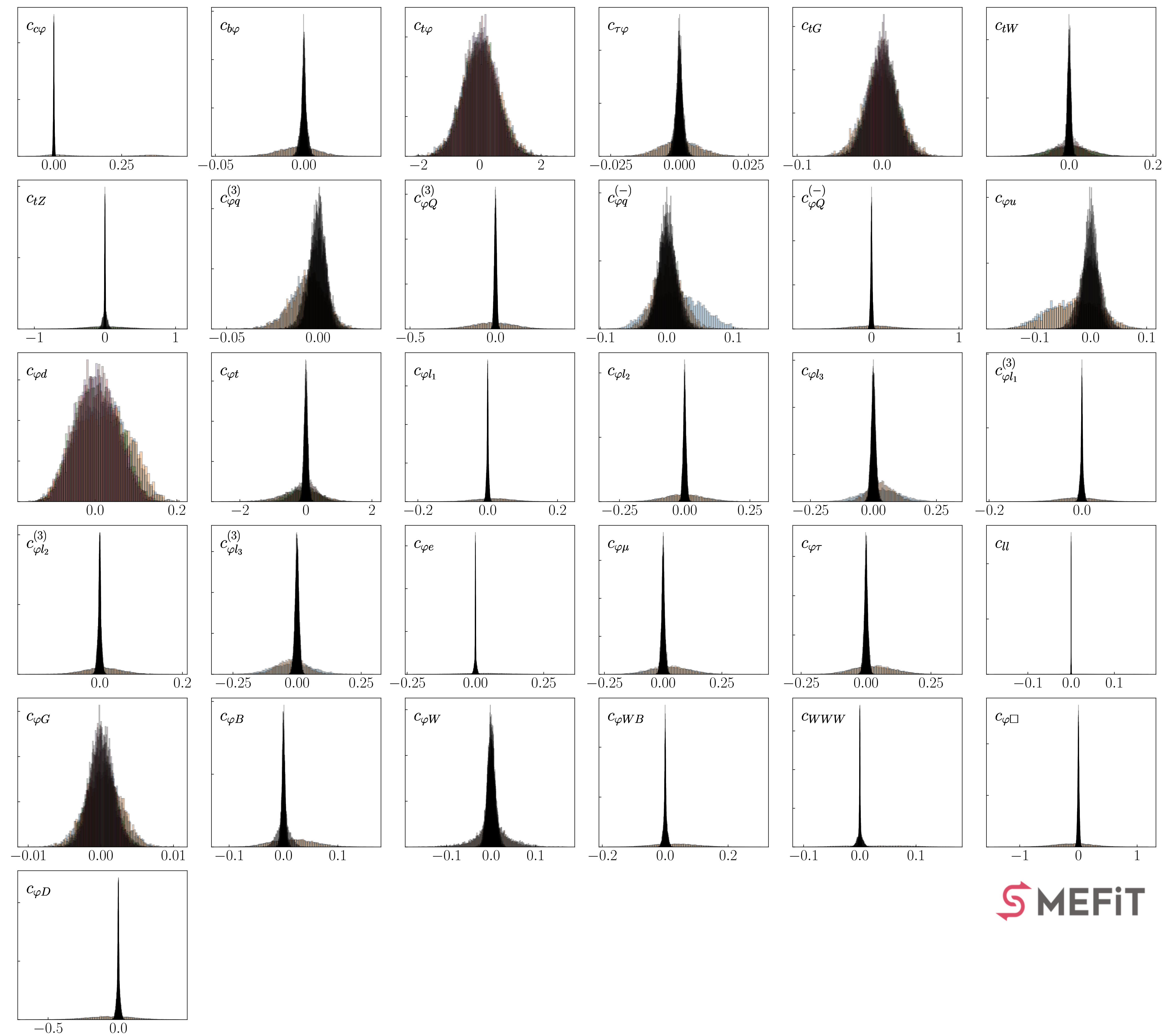
Ratio of Uncertainties to HL – LHC Baseline, $\mathcal{O}(\Lambda^{-4})$, Marginalised



 MEFIT

- ★ ILC: 91 GeV
- ILC: 91 + 250 GeV
- ✚ ILC: 91 + 250 + 350 GeV
- ▲ ILC: 91 + 250 + 350 + 500 GeV
- ILC: 91 + 250 + 350 + 500 + 1000 GeV

GeV ILC: 91 + 250 GeV ILC: 91 + 250 + 350 GeV ILC: 91 + 250 + 350 + 500 GeV ILC: 91 + 250 + 350 + 500 + 1000 GeV



		HL-LHC			ILC: 91 GeV				
Class	Coefficients	best	68% CL Bounds	95% CL Bounds	best	68% CL Bounds	95% CL Bounds	best	68%
2FB	$c_{c\varphi}$	0.155	[-0.009,0.363]	[-0.043,0.41]	0.174	[-0.006,0.368]	[-0.041,0.409]	-0.0	[-0.0
	$c_{b\varphi}$	-0.003	[-0.014,0.007]	[-0.025,0.017]	-0.004	[-0.014,0.007]	[-0.025,0.016]	-0.0	[-0.0
	$c_{t\varphi}$	0.022	[-0.568,0.607]	[-1.144,1.208]	0.068	[-0.534,0.675]	[-1.14,1.257]	0.024	[-0.0
	$c_{\tau\varphi}$	0.0	[-0.007,0.007]	[-0.013,0.014]	0.0	[-0.007,0.007]	[-0.014,0.014]	-0.0	[-0.0
	c_{tG}	-0.001	[-0.021,0.019]	[-0.04,0.038]	-0.001	[-0.022,0.02]	[-0.041,0.041]	0.0	[-0.0
	c_{tW}	-0.001	[-0.046,0.044]	[-0.092,0.088]	0.003	[-0.043,0.048]	[-0.087,0.091]	-0.001	[-0.0
	c_{tZ}	0.021	[-0.298,0.345]	[-0.577,0.599]	-0.003	[-0.298,0.3]	[-0.567,0.535]	-0.005	[-0.0
	$c_{\varphi q}^{(3)}$	-0.006	[-0.015,0.003]	[-0.026,0.012]	-0.005	[-0.015,0.004]	[-0.026,0.012]	-0.001	[-0.0
	$c_{\varphi Q}^{(3)}$	-0.011	[-0.127,0.108]	[-0.238,0.213]	-0.016	[-0.133,0.103]	[-0.249,0.21]	0.0	[-0.0
	$c_{\varphi q}^{(-)}$	0.015	[-0.022,0.053]	[-0.051,0.085]	0.002	[-0.02,0.024]	[-0.039,0.046]	0.002	[-0.0
	$c_{\varphi Q}^{(-)}$	0.011	[-0.224,0.244]	[-0.437,0.463]	0.021	[-0.219,0.257]	[-0.433,0.487]	-0.0	[-0.0
	$c_{\varphi u}$	-0.033	[-0.081,0.014]	[-0.117,0.052]	-0.027	[-0.073,0.019]	[-0.112,0.055]	-0.0	[-0.0
	$c_{\varphi d}$	0.018	[-0.046,0.081]	[-0.095,0.131]	0.02	[-0.048,0.087]	[-0.097,0.134]	0.004	[-0.0
	$c_{\varphi t}$	-0.161	[-0.713,0.4]	[-1.346,0.899]	-0.129	[-0.683,0.417]	[-1.312,0.931]	-0.088	[-0.0
	$c_{\varphi l_1}$	0.015	[-0.039,0.071]	[-0.09,0.121]	0.015	[-0.036,0.065]	[-0.084,0.114]	-0.0	[-0.0
	$c_{\varphi l_2}$	-0.001	[-0.078,0.078]	[-0.151,0.153]	0.001	[-0.068,0.071]	[-0.128,0.141]	0.0	[-0.0
	$c_{\varphi l_3}$	0.027	[-0.05,0.104]	[-0.12,0.182]	0.03	[-0.02,0.08]	[-0.065,0.132]	-0.0	[-0.0
	$c_{\varphi l_1}^{(3)}$	-0.009	[-0.048,0.031]	[-0.089,0.068]	-0.007	[-0.047,0.031]	[-0.083,0.069]	-0.001	[-0.0
	$c_{\varphi l_2}^{(3)}$	0.008	[-0.037,0.053]	[-0.079,0.098]	0.007	[-0.038,0.051]	[-0.081,0.093]	-0.001	[-0.0
	$c_{\varphi l_3}^{(3)}$	-0.019	[-0.098,0.058]	[-0.17,0.134]	-0.022	[-0.076,0.032]	[-0.131,0.082]	-0.0	[-0.0
	$c_{\varphi e}$	0.028	[-0.054,0.11]	[-0.12,0.185]	0.03	[-0.044,0.105]	[-0.112,0.182]	0.0	[-0.0
	$c_{\varphi \mu}$	0.029	[-0.057,0.116]	[-0.132,0.198]	0.03	[-0.044,0.105]	[-0.112,0.179]	0.0	[-0.0
	$c_{\varphi \tau}$	0.028	[-0.053,0.111]	[-0.12,0.186]	0.03	[-0.044,0.106]	[-0.113,0.18]	0.0	[-0.0
4l	c_{ll}	0.014	[-0.024,0.052]	[-0.062,0.087]	0.014	[-0.021,0.049]	[-0.054,0.085]	-0.0	[-0.0
B	$c_{\varphi G}$	0.0	[-0.002,0.003]	[-0.004,0.005]	0.0	[-0.002,0.003]	[-0.004,0.005]	0.0	[-0.0
	$c_{\varphi B}$	0.017	[-0.024,0.058]	[-0.057,0.095]	0.018	[-0.021,0.056]	[-0.052,0.094]	-0.0	[-0.0
	$c_{\varphi W}$	0.003	[-0.023,0.03]	[-0.071,0.081]	-0.0	[-0.024,0.025]	[-0.074,0.061]	0.001	[-0.0
	$c_{\varphi WB}$	0.029	[-0.041,0.1]	[-0.097,0.163]	0.032	[-0.033,0.097]	[-0.092,0.163]	0.0	[-0.0
	c_{WWWW}	0.026	[-0.031,0.084]	[-0.063,0.118]	0.033	[-0.025,0.088]	[-0.059,0.124]	0.0	[-0.0
	$c_{\varphi \square}$	-0.102	[-0.427,0.215]	[-0.761,0.525]	-0.078	[-0.404,0.248]	[-0.738,0.562]	-0.001	[-0.0
	$c_{\varphi D}$	-0.056	[-0.217,0.105]	[-0.363,0.232]	-0.06	[-0.209,0.088]	[-0.356,0.223]	-0.0	[-0.0

Table 1: Coefficient comparison