		HL-LHC		FCC-ee		CLIC		ILC	
Class	Coefficients	Fitted	Fixed	Fitted	Fixed	Fitted	Fixed	Fitted	Fixed
2FB	$c_{c\varphi}$	✓		✓		✓		✓	
	$c_{b\varphi}$	✓		✓		✓		✓	
	$c_{t\varphi}$	✓		✓		✓		✓	
	$c_{\tau\varphi}$	✓		✓		✓		✓	
	c_{tG}	✓		✓		✓		✓	
	c_{tW}	✓		✓		✓		✓	
	c_{tZ}	✓		✓		✓		✓	
	$c_{\varphi q}^{(3)}$	✓		✓		✓		✓	
	$c_{\varphi Q}^{(3)}$	✓		✓		✓		✓	
	$c_{\varphi q}^{(-)}$	✓		✓		✓		✓	
	$c_{\varphi Q}^{(-)}$	✓		✓		✓		✓	
	$c_{\varphi u}$	✓		✓		✓		✓	
	$c_{\varphi d}$	✓		✓		✓		✓	
	$c_{\varphi t}$	✓		✓		✓		✓	
	$c_{\varphi l_1}$	✓		✓		✓		✓	
	$c_{\varphi l_2}$	✓		✓		✓		✓	
	$c_{\varphi l_3}$	✓		✓		✓		✓	
	$c_{\varphi l_1}^{(3)}$	✓		✓		✓		✓	
	$c_{\varphi l_2}^{(3)}$	✓		✓		✓		✓	
	$c_{\varphi l_3}^{(3)}$	✓		✓		✓		✓	
	$c_{\varphi e}$	✓		✓		✓		✓	
	$c_{\varphi \mu}$	✓		✓		✓		✓	
	$c_{\varphi \tau}$	✓		✓		✓		✓	
2L2H	$c_{Qq}^{1,8}$	✓		✓		✓		✓	
	$c_{Qq}^{1,1}$	✓		✓		✓		✓	
	$c_{Qq}^{3,8}$	✓		✓		✓		✓	
	$c_{Qq}^{3,1}$	✓		✓		✓		✓	
	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}	✓		✓		✓		✓	
4H	c_{QQ}^{1}	✓		✓		✓		✓	
	c_{QQ}^{8}	✓		✓		✓		✓	
	c_{Qt}^{1}	✓		✓		✓		✓	
	c_{Qt}^{8}	✓		✓		✓		✓	
	c_{tt}^{1}	✓		✓		✓		✓	
4l	c_{ll}	✓		✓		✓		✓	
B	$c_{\varphi G}$	✓		✓		✓		✓	
	$c_{\varphi B}$	✓		✓		✓		✓	
	$c_{\varphi W}$	✓		✓		✓		✓	
	$c_{\varphi WB}$	✓		✓		✓		✓	
	c_{WWW}	✓		✓		✓		✓	
	$c_{\varphi\Box}$	✓		✓		✓		✓	
	$c_{\varphi D}$	✓		✓		✓		✓	
	Number fitted coefficients	50		50		50		50	

Table 1: Coefficient comparison

Type	Datasets	HL-LHC	FCC-ee	CLIC	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	✓	✓	✓	✓
CLIC	CLIC_zh_aa_380GeV			✓	
	CLIC_zh_bb_380GeV			✓	
	CLIC_zh_cc_380GeV			✓	
	CLIC_zh_gg_380GeV			✓	
	CLIC_zh_tautau_380GeV			✓	
	CLIC_zh_ww_380GeV			✓	
	CLIC_zh_xstot_380GeV			✓	
	CLIC_zh_zz_380GeV			✓	
	CLIC_vvh_aa_1500GeV			✓	
	CLIC_vvh_aa_3000GeV			✓	
	CLIC_vvh_aa_380GeV			✓	
	CLIC_vvh_bb_1500GeV			✓	
	CLIC_vvh_bb_3000GeV			✓	
	CLIC_vvh_bb_380GeV			✓	
	CLIC_vvh_cc_1500GeV			✓	
	CLIC_vvh_cc_3000GeV			✓	
	CLIC_vvh_cc_380GeV			✓	
	CLIC_vvh_gg_1500GeV			✓	
	CLIC_vvh_gg_3000GeV			✓	
	CLIC_vvh_gg_380GeV			✓	
	CLIC_vvh_tautau_1500GeV			✓	
	CLIC_vvh_tautau_3000GeV			✓	
	CLIC_vvh_tautau_380GeV			✓	
	CLIC_vvh_ww_1500GeV			✓	
	CLIC_vvh_ww_3000GeV			✓	
	CLIC_vvh_ww_380GeV			✓	
	CLIC_vvh_za_1500GeV			✓	
	CLIC_vvh_za_3000GeV			✓	
	CLIC_vvh_zz_1500GeV			✓	
	CLIC_vvh_zz_3000GeV			✓	
	CLIC_vvh_zz_380GeV			✓	
	CLIC_bb_1500GeV			✓	
	CLIC_bb_3000GeV			✓	
	CLIC_bb_380GeV			✓	
	CLIC_bb_Afb_1500GeV			✓	
	CLIC_bb_Afb_3000GeV			✓	
	CLIC_bb_Afb_380GeV			✓	
	CLIC_cc_1500GeV			✓	
	CLIC_cc_3000GeV			✓	
	CLIC_cc_380GeV			✓	
	CLIC_cc_Afb_1500GeV			✓	
	CLIC_cc_Afb_3000GeV			✓	
	CLIC_cc_Afb_380GeV			✓	
	CLIC_ee_1500GeV			✓	
	CLIC_ee_3000GeV			✓	
	CLIC_ee_380GeV			✓	
	CLIC_ee_Afb_1500GeV			✓	
	CLIC_ee_Afb_3000GeV			✓	
	CLIC_ee_Afb_380GeV			✓	

	CLIC_mumu_1500GeV			✓	
	CLIC_mumu_3000GeV			✓	
	CLIC_mumu_380GeV			✓	
	CLIC_mumu_Afb_1500GeV			✓	
	CLIC_mumu_Afb_3000GeV			✓	
	CLIC_mumu_Afb_380GeV			✓	
	CLIC_tautau_1500GeV			✓	
	CLIC_tautau_3000GeV			✓	
	CLIC_tautau_380GeV			✓	
	CLIC_tautau_Afb_1500GeV			✓	
	CLIC_tautau_Afb_3000GeV			✓	
	CLIC_tautau_Afb_380GeV			✓	
	CLIC_Zdata_380GeV			✓	
	CLIC_Brw_380GeV			✓	
	CLIC_Brw_1500GeV			✓	
	CLIC_Brw_3000GeV			✓	
	CLIC_ww_380GeV			✓	
	CLIC_ww_1500GeV			✓	
	CLIC_ww_3000GeV			✓	
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_Whel_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

2FB

$c_{\varphi\tau}$
$c_{\varphi\mu}$
$c_{\varphi e}$
$c^{(3)}_{\varphi l_3}$
$c^{(3)}_{\varphi l_2}$
$c^{(3)}_{\varphi l_1}$
$c_{\varphi l_3}$
$c_{\varphi l_2}$
$c_{\varphi l_1}$
$c_{\varphi t}$
$c_{\varphi d}$
$c_{\varphi u}$
$c^{(-)}_{\varphi Q}$
$c^{(-)}_{\varphi q}$
$c^{(3)}_{\varphi Q}$
$c^{(3)}_{\varphi q}$
c_{tZ}
c_{tW}
c_{tG}
$c_{\tau\varphi}$
$c_{t\varphi}$
$c_{b\varphi}$
$c_{c\varphi}$

HL-LHC
FCC-ee
CLIC
ILC

-10^{2} -10^{1} -10^{0} -10^{-1} -10^{-2} 0 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2}

2L2H

c^{1}_{Qd}
c^{8}_{Qd}
c^{1}_{td}
c^{8}_{td}
c^{1}_{Qu}
c^{8}_{Qu}
c^{1}_{tu}
c^{8}_{tu}
c^{1}_{tq}
c^{8}_{tq}
$c^{3,1}_{Qq}$
$c^{3,8}_{Qq}$
$c^{1,1}_{Qq}$
$c^{1,8}_{Qq}$

-10^{2} -10^{1} -10^{0} -10^{-1} -10^{-2} 0 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2}

4H

c^{1}_{tt}
c^{8}_{Qt}
c^{1}_{Qt}
c^{8}_{QQ}
c^{1}_{QQ}

-10^{2} -10^{1} -10^{0} -10^{-1} -10^{-2} 0 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2}

4l

c_{ll}

-10^{2} -10^{1} -10^{0} -10^{-1} -10^{-2} 0 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2}

B

$c_{\varphi D}$
$c_{\varphi\Box}$
c_{WWW}
$c_{\varphi WB}$
$c_{\varphi W}$
$c_{\varphi B}$
$c_{\varphi G}$

-10^{2} -10^{1} -10^{0} -10^{-1} -10^{-2} 0 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2}

SMEFiT

c_i/Λ^2 (TeV^{-2})

2FB

$c_{\varphi\tau}$
$c_{\varphi\mu}$
$c_{\varphi e}$
$c^{(3)}_{\varphi l_3}$
$c^{(3)}_{\varphi l_2}$
$c^{(3)}_{\varphi l_1}$
$c_{\varphi l_3}$
$c_{\varphi l_2}$
$c_{\varphi l_1}$
$c_{\varphi t}$
$c_{\varphi d}$
$c_{\varphi u}$
$c^{(-)}_{\varphi Q}$
$c^{(-)}_{\varphi q}$
$c^{(3)}_{\varphi Q}$
$c^{(3)}_{\varphi q}$
c_{tZ}
c_{tW}
c_{tG}
$c_{\tau\varphi}$
$c_{t\varphi}$
$c_{b\varphi}$
$c_{c\varphi}$

HL-LHC
FCC-ee
CLIC
ILC

10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2}

2L2H

c^{1}_{Qd}
c^{8}_{Qd}
c^{1}_{td}
c^{8}_{td}
c^{1}_{Qu}
c^{8}_{Qu}
c^{1}_{tu}
c^{8}_{tu}
c^{1}_{tq}
c^{8}_{tq}
$c^{3,1}_{Qq}$
$c^{3,8}_{Qq}$
$c^{1,1}_{Qq}$
$c^{1,8}_{Qq}$

10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2}

4H

c^{1}_{tt}
c^{8}_{Qt}
c^{1}_{Qt}
c^{8}_{QQ}
c^{1}_{QQ}

10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2}

4l

c_{ll}

10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2}

B

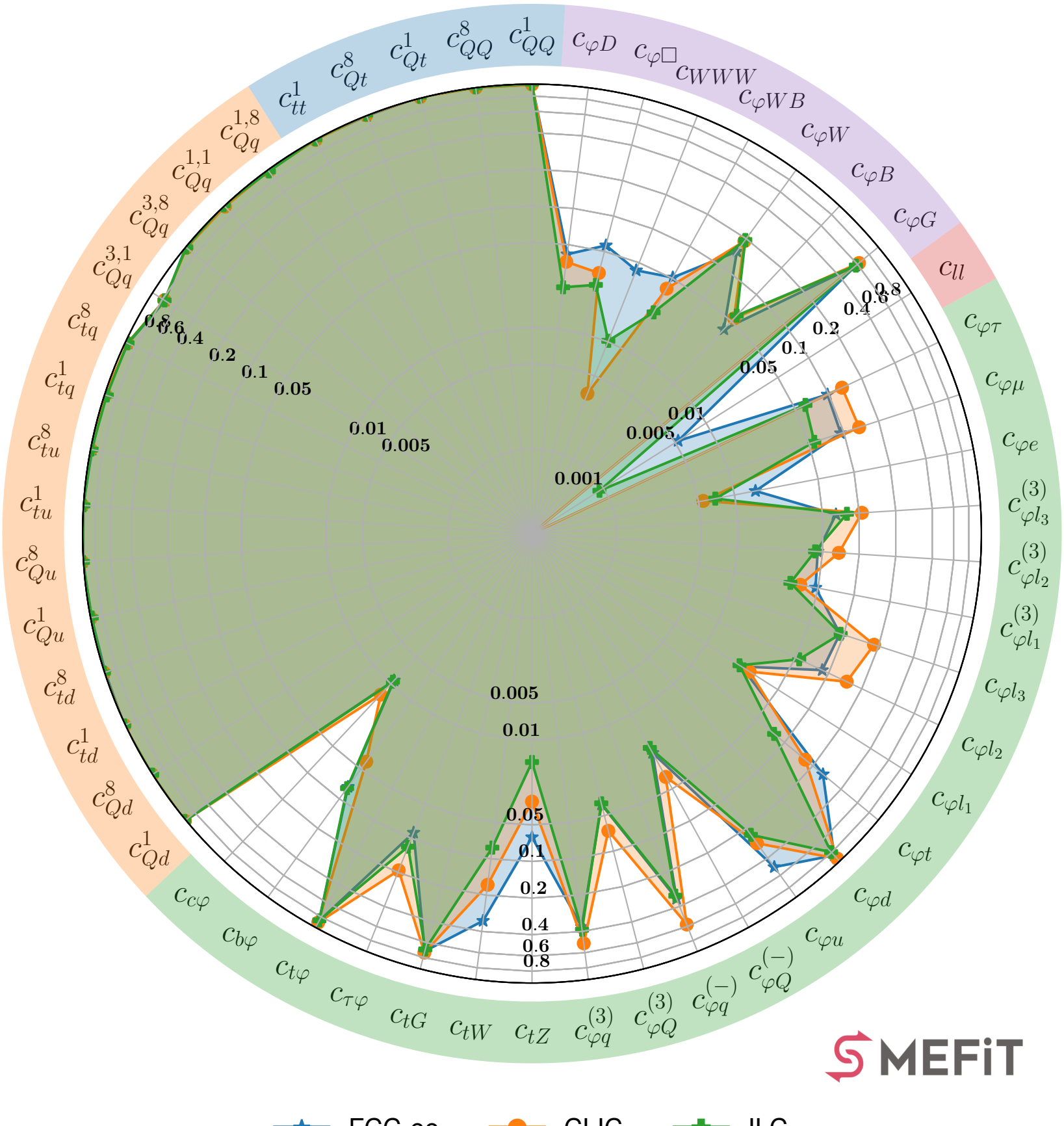
$c_{\varphi D}$
$c_{\varphi\Box}$
c_{WWW}
$c_{\varphi WB}$
$c_{\varphi W}$
$c_{\varphi B}$
$c_{\varphi G}$

SMEFiT

10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2}

95% Confidence Level Bounds ($1/\text{TeV}^2$)

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



HL-LHC FCC-ee CLIC ILC

c^1_{QQ} c^8_{QQ} c^1_{Qt} c^8_{Qt} c^1_{tt} $c^{1,8}_{Qq}$ $c^{1,1}_{Qq}$ $c^{3,8}_{Qq}$

$c^{3,1}_{Qq}$ c^8_{tq} c^1_{tq} c^8_{tu} c^1_{tu} c^8_{Qu} c^1_{Qu} c^8_{td}

c^1_{td} c^8_{Qd} c^1_{Qd} $c_{c\varphi}$ $c_{b\varphi}$ $c_{t\varphi}$ $c_{\tau\varphi}$ c_{tG}

c_{tW} c_{tZ} $c^{(3)}_{\varphi q}$ $c^{(3)}_{\varphi Q}$ $c^{(-)}_{\varphi q}$ $c^{(-)}_{\varphi Q}$ $c_{\varphi u}$ $c_{\varphi d}$

$c_{\varphi t}$ $c_{\varphi l_1}$ $c_{\varphi l_2}$ $c_{\varphi l_3}$ $c^{(3)}_{\varphi l_1}$ $c^{(3)}_{\varphi l_2}$ $c^{(3)}_{\varphi l_3}$ $c_{\varphi e}$

$c_{\varphi\mu}$ $c_{\varphi\tau}$ c_{ll} $c_{\varphi G}$ $c_{\varphi B}$ $c_{\varphi W}$ $c_{\varphi WB}$ c_{WWW}

$c_{\varphi\Box}$ $c_{\varphi D}$

SMEFiT