Basis EOS (EFT WET)

Basis used by the EOS software as of version 0.4 or later. Neutrinos are in the flavour basis.

Sectors

The effective Lagrangian is defined as

$$\mathcal{L}_{\text{eff}} = -\mathcal{H}_{\text{eff}} = \sum_{O_i = O_i^{\dagger}} C_i O_i + \sum_{O_i \neq O_i^{\dagger}} \left(C_i O_i + C_i^* O_i^{\dagger} \right).$$

sbsb

WC name	Operator	Type
sbsb::c1	$-\frac{4G_F}{\sqrt{2}}(V_{tb}V_{ts}^*)^2(\bar{s}_L\gamma^{\mu}b_L)(\bar{s}_L\gamma_{\mu}b_L)$	С
sbsb::c1'	$-rac{4ar{Q}_{F}^{2}}{\sqrt{2}}(V_{tb}V_{ts}^{*})^{2}(ar{s}_{R}\gamma^{\mu}b_{R})(ar{s}_{R}\gamma_{\mu}b_{R})$	\mathbf{C}
sbsb::c2	$-rac{4\widetilde{G_F}}{\sqrt{2}}(V_{tb}V_{ts}^*)^2(ar{s}_Rb_L)(ar{s}_Rb_L)$	$^{\mathrm{C}}$
sbsb::c2'	$-\frac{4G_F}{\sqrt{2}}(V_{tb}V_{ts}^*)^2(\bar{s}_L b_R)(\bar{s}_L b_R)$	$^{\mathrm{C}}$
sbsb::c3	$-\frac{4\widetilde{G_F}}{\sqrt{2}}(V_{tb}V_{ts}^*)^2(\bar{s}_{\alpha R}b_{\beta L})(\bar{s}_{\beta R}b_{\alpha L})$	\mathbf{C}
sbsb::c3'	$-\frac{4\check{G}_F}{\sqrt{2}}(V_{tb}V_{ts}^*)^2(\bar{s}_{\alpha L}b_{\beta R})(\bar{s}_{\beta L}b_{\alpha R})$	\mathbf{C}
sbsb::c4	$-\frac{4\check{G}_{F}}{\sqrt{2}}(V_{tb}V_{ts}^{*})^{2}(\bar{s}_{R}b_{L})(\bar{s}_{L}b_{R})$	$^{\mathrm{C}}$
sbsb::c5	$-rac{4ar{G_F}}{\sqrt{2}}(V_{tb}V_{ts}^*)^2(ar{s}_{lpha R}b_{eta L})(ar{s}_{eta L}b_{lpha R})$	C

sbcu

WC name	Operator	Type
sbcu::c1	$\frac{4G_F}{\sqrt{2}}(\bar{s}P_R\gamma_\mu b)(\bar{c}\gamma^\mu u)$	\overline{C}
sbcu::c2	$\frac{4\overleftarrow{G}_F}{\sqrt{2}}(\bar{s}P_R\gamma_\mu T^A b)(\bar{c}\gamma^\mu T^A u)$	\mathbf{C}
sbcu::c3	$\frac{4\overleftarrow{G_F}}{\sqrt{2}}(\bar{s}P_R\gamma_{\mu\nu\rho}b)(\bar{c}\gamma^{\mu\nu\rho}u)$	\mathbf{C}
sbcu::c4	$\frac{4\tilde{G}_F^2}{\sqrt{2}}(\bar{s}P_R\gamma_{\mu\nu\rho}T^Ab)(\bar{c}\gamma^{\mu\nu\rho}T^Au)$	\mathbf{C}
sbcu::c5	$\frac{4\overset{\leftarrow}{G_F}}{\sqrt{2}}(\bar{s}P_Rb)(\bar{c}u)$	\mathbf{C}
sbcu::c6	$\frac{4\overleftarrow{G}_F}{\sqrt{2}}(\bar{s}P_RT^Ab)(\bar{c}T^Au)$	\mathbf{C}
sbcu::c7	$\frac{4 \overleftarrow{G}_F}{\sqrt{2}} (\bar{s} P_R \sigma^{\mu\nu} b) (\bar{c} \sigma_{\mu\nu} u)$	\mathbf{C}
sbcu::c8	$\frac{4G_F}{\sqrt{2}}(\bar{s}P_R\sigma^{\mu\nu}T^Ab)(\bar{c}\sigma_{\mu\nu}T^Au)$	\mathbf{C}
sbcu::c9	$\frac{4G_F}{\sqrt{2}}(\bar{s}P_R\gamma_{\mu\nu\rho\sigma}b)(\bar{c}\gamma^{\mu\nu\rho\sigma}u)$	\mathbf{C}
sbcu::c10	$\frac{4 \check{G}_F}{\sqrt{2}} (\bar{s} P_R \gamma_{\mu\nu\rho\sigma} T^A b) (\bar{c} \gamma^{\mu\nu\rho\sigma} T^A u)$	\mathbf{C}
sbcu::c1'	$\frac{4 \check{G}_F^2}{\sqrt{2}} (\bar{s} P_L \gamma_\mu b) (\bar{c} \gamma^\mu u)$	\mathbf{C}
sbcu::c2'	$\frac{4\tilde{\zeta}\tilde{f}_F}{\sqrt{2}}(\bar{s}P_L\gamma_\mu T^A b)(\bar{c}\gamma^\mu T^A u)$	\mathbf{C}

WC name	Operator	Type
sbcu::c3'	$\frac{\frac{4G_F}{\sqrt{2}}(\bar{s}P_L\gamma_{\mu\nu\rho}b)(\bar{c}\gamma^{\mu\nu\rho}u)}{\frac{4G_F}{\sqrt{2}}(\bar{s}P_L\gamma_{\mu\nu\rho}T^Ab)(\bar{c}\gamma^{\mu\nu\rho}T^Au)}$ $\frac{\frac{4G_F}{\sqrt{2}}(\bar{s}P_Lb)(\bar{c}u)}{\frac{4G_F}{\sqrt{2}}(\bar{s}P_LT^Ab)(\bar{c}T^Au)}$	C
sbcu::c4'	$\frac{4\widetilde{G}_F}{\sqrt{2}}(\bar{s}P_L\gamma_{\mu\nu\rho}T^Ab)(\bar{c}\gamma^{\mu\nu\rho}T^Au)$	\mathbf{C}
sbcu::c5'	$\frac{4\overleftarrow{Q}_F^c}{\sqrt{2}}(\bar{s}P_Lb)(\bar{c}u)$	\mathbf{C}
sbcu::c6'	$\frac{4\overleftarrow{G_F}}{\sqrt{2}}(\bar{s}P_LT^Ab)(\bar{c}T^Au)$	\mathbf{C}
sbcu::c7'	$\frac{4\widetilde{G}_F}{\sqrt{2}}(\bar{s}P_L\sigma^{\mu\nu}b)(\bar{c}\sigma_{\mu\nu}u)$	\mathbf{C}
sbcu::c8'	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{s}P_L\sigma^{\mu\nu}T^Ab)(\bar{c}\sigma_{\mu\nu}T^Au)$	\mathbf{C}
sbcu::c9'	$\frac{4\breve{G}_F}{\sqrt{2}}(\bar{s}P_L\gamma_{\mu\nu\rho\sigma}b)(\bar{c}\gamma^{\mu\nu\rho\sigma}u)$	\mathbf{C}
sbcu::c10'	$\frac{\frac{\sqrt{2}}{4G_F}(\bar{s}P_L\gamma_{\mu\nu\rho\sigma}b)(\bar{c}\gamma^{\mu\nu\rho\sigma}u)}{\frac{4G_F}{\sqrt{2}}(\bar{s}P_L\gamma_{\mu\nu\rho\sigma}T^Ab)(\bar{c}\gamma^{\mu\nu\rho\sigma}T^Au)}$	$^{\mathrm{C}}$

dbcu

WC name	Operator	Type
dbcu::c1	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_R\gamma_\mu b)(\bar{c}\gamma^\mu u)$	C
dbcu::c2	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_R\gamma_\mu T^A b)(\bar{c}\gamma^\mu T^A u)$	\mathbf{C}
dbcu::c3	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_R\gamma_{\mu\nu\rho}b)(\bar{c}\gamma^{\mu\nu\rho}u)$	\mathbf{C}
dbcu::c4	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{d}P_R\gamma_{\mu\nu\rho}T^Ab)(\bar{c}\gamma^{\mu\nu\rho}T^Au)$	$^{\mathrm{C}}$
dbcu::c5	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{d}P_Rb)(\bar{c}u)$	$^{\mathrm{C}}$
dbcu::c6	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_RT^Ab)(\bar{c}T^Au)$	$^{\mathrm{C}}$
dbcu::c7	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_R\sigma^{\mu\nu}b)(\bar{c}\sigma_{\mu\nu}u)$	$^{\mathrm{C}}$
dbcu::c8	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{d}P_R\sigma^{\mu\nu}T^Ab)(\bar{c}\sigma_{\mu\nu}T^Au)$	$^{\mathrm{C}}$
dbcu::c9	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{d}P_R\gamma_{\mu\nu\rho\sigma}b)(\bar{c}\gamma^{\mu\nu\rho\sigma}u)$	$^{\mathrm{C}}$
dbcu::c10	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{d}P_R\gamma_{\mu\nu\rho\sigma}T^Ab)(\bar{c}\gamma^{\mu\nu\rho\sigma}T^Au)$	$^{\mathrm{C}}$
dbcu::c1'	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_L\gamma_\mu b)(\bar{c}\gamma^\mu u)$	$^{\mathrm{C}}$
dbcu::c2'	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_L\gamma_\mu T^A b)(\bar{c}\gamma^\mu T^A u)$	$^{\mathrm{C}}$
dbcu::c3'	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{d}P_L\gamma_{\mu\nu\rho}b)(\bar{c}\gamma^{\mu\nu\rho}u)$	$^{\mathrm{C}}$
dbcu::c4'	$\frac{4\ddot{G}_F}{\sqrt{2}}(\bar{d}P_L\gamma_{\mu\nu\rho}T^Ab)(\bar{c}\gamma^{\mu\nu\rho}T^Au)$	\mathbf{C}
dbcu::c5'	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{d}P_Lb)(\bar{c}u)$	$^{\mathrm{C}}$
dbcu::c6'	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_LT^Ab)(\bar{c}T^Au)$	$^{\mathrm{C}}$
dbcu::c7'	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_L\sigma^{\mu\nu}b)(\bar{c}\sigma_{\mu\nu}u)$	\mathbf{C}
dbcu::c8'	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_L\sigma^{\mu\nu}T^Ab)(\bar{c}\sigma_{\mu\nu}T^Au)$	\mathbf{C}
dbcu::c9'	$\frac{4G_F^2}{\sqrt{2}}(\bar{d}P_L\gamma_{\mu\nu\rho\sigma}b)(\bar{c}\gamma^{\mu\nu\rho\sigma}u)$	\mathbf{C}
dbcu::c10'	$\frac{4\overset{Q^{\prime}}{G_{F}}}{\sqrt{2}}(\bar{d}P_{L}\gamma_{\mu\nu\rho\sigma}T^{A}b)(\bar{c}\gamma^{\mu\nu\rho\sigma}T^{A}u)$	\mathbf{C}

sb

WC name	Operator	Type
b->s::c1	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*(\bar{s}_L\gamma^{\mu}T^ac_L)(\bar{c}_L\gamma_{\mu}T^ab_L)$	R
b->s::c2	$rac{4ar{G}_F}{\sqrt{2}}V_{tb}V_{ts}^*(ar{s}_L\gamma^\mu c_L)(ar{c}_L\gamma_\mu b_L)$	R
b->s::c3	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*(\bar{s}_L\gamma^\mu b_L)\sum_q(\bar{q}\gamma_\mu q)$	R
b->s::c4	$\frac{4\ddot{G}_F^c}{\sqrt{2}}V_{tb}V_{ts}^*(\bar{s}_L\gamma^{\mu}T^ab_L)\sum_q(\bar{q}\gamma_{\mu}T^aq)$	R
b->s::c5	$\frac{4\bar{G}_F}{\sqrt{2}}V_{tb}V_{ts}^*(\bar{s}_L\gamma^{\mu_1}\gamma^{\mu_2}\gamma^{\mu_3}b_L)\sum_q(\bar{q}\gamma_{\mu_1}\gamma_{\mu_2}\gamma_{\mu_3}q)$	R
b->s::c6	$\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* (\bar{s}_L \gamma^{\mu_1} \gamma^{\mu_2} \gamma^{\mu_3} T^a b_L) \sum_q (\bar{q} \gamma_{\mu_1} \gamma_{\mu_2} \gamma_{\mu_3} T^a q) $ $\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e}{16\pi^2} m_b (\bar{s}_L \sigma_{\mu\nu} b_R) F^{\mu\nu}$	R
b->s::Re{c7}	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*\frac{e}{16\pi^2}m_b(\bar{s}_L\sigma_{\mu\nu}b_R)F^{\mu\nu}$	R
b->s::Im{c7}	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*\frac{e}{16\pi^2}m_b(\bar{s}_L\sigma_{\mu\nu}b_R)F^{\mu\nu}$	R
b->s::Re{c7'}	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^* \frac{e}{16\pi^2} m_b(\bar{s}_R \sigma_{\mu\nu} b_L) F^{\mu\nu}$	R
b->s::Im{c7'}	$\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e}{16\pi^2} m_b (\bar{s}_R \sigma_{\mu\nu} b_L) F^{\mu\nu}$	R
b->s::c8	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^* \frac{g_s}{16\pi^2} m_b (\bar{s}_L \sigma_{\mu\nu} T^a b_R) G^{a\mu\nu}$	R
b->s::c8'	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^* \frac{g_s}{16\pi^2} m_b(\bar{s}_R \sigma_{\mu\nu} T^a b_L) G^{a\mu\nu}$	R
b->see::Re{c9}	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}(\bar{s}_L\gamma^\mu b_L)(\bar{e}\gamma_\mu e)$	R
b->see::Im{c9}	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^* \frac{e^2}{16\pi^2} (\bar{s}_L \gamma^{\mu} b_L)(\bar{e}\gamma_{\mu} e)$	R
b->see::Re{c9'}	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}(\bar{s}_R\gamma^\mu b_R)(\bar{e}\gamma_\mu e)$	R
b->see::Im{c9'}	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}(\bar{s}_R\gamma^\mu b_R)(\bar{e}\gamma_\mu e)$	R
b->see::Re{c10}	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}(\bar{s}_L\gamma^{\mu}b_L)(\bar{e}\gamma_{\mu}\gamma_5 e)$	R
b->see::Im{c10}	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}(\bar{s}_L\gamma^{\mu}b_L)(\bar{e}\gamma_{\mu}\gamma_5 e)$	R
b->see::Re{c10'}	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}(\bar{s}_R\gamma^\mu b_R)(\bar{e}\gamma_\mu\gamma_5 e)$	R
b->see::Im{c10'}	$\frac{4V_F^2}{\sqrt{2}}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}(\bar{s}_R\gamma^{\mu}b_R)(\bar{e}\gamma_{\mu}\gamma_5 e)$	R
b->see::Re{cS}	$\frac{\sqrt{4G_F}}{\sqrt{2}}V_{tb}V_{ts}^* \frac{e^2}{16\pi^2}m_b(\bar{s}_L b_R)(\bar{e}e)$	R
b->see::Im{cS}	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}m_b(\bar{s}_Lb_R)(\bar{e}e)$	R
b->see::Re{cS'}	$\frac{\sqrt{4G_F}}{\sqrt{2}}V_{tb}V_{ts}^* \frac{e^2}{16\pi^2} m_b(\bar{s}_R b_L)(\bar{e}e)$	R
b->see::Im{cS'}	$\frac{4\bar{G}_F}{\sqrt{2}}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}m_b(\bar{s}_Rb_L)(\bar{e}e)$	R
b->see::Re{cP}	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}m_b(\bar{s}_L b_R)(\bar{e}\gamma_5 e)$	R
b->see::Im{cP}	$\frac{4\dot{G}_F}{\sqrt{2}}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}m_b(\bar{s}_Lb_R)(\bar{e}\gamma_5 e)$	R
b->see::Re{cP'}	$\frac{4\ddot{G}_{F}}{\sqrt{2}}V_{tb}V_{ts}^{*}\frac{e^{2}}{16\pi^{2}}m_{b}(\bar{s}_{R}b_{L})(\bar{e}\gamma_{5}e)$	R
b->see::Im{cP'}	$rac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*rac{e^2}{16\pi^2}m_b(ar{s}_Rb_L)(ar{e}\gamma_5e)$	R
b->see::Re{cT}	$rac{4G_F}{\sqrt{2}}V_{ub}rac{e^2}{16\pi^2}(ar{s}\sigma_{\mu\nu}b)(ar{e}\sigma_{\mu\nu}e)$	R
b->see::Im{cT}	$\frac{\sqrt{4G_F}}{\sqrt{2}}V_{ub}\frac{e^2}{16\pi^2}(\bar{s}\sigma_{\mu\nu}b)(\bar{e}\sigma_{\mu\nu}e)$	R
b->see::Re{cT5}	$\frac{\sqrt{2}}{\sqrt{2}}V_{ub}\frac{e^2}{16\pi^2}(\bar{s}\sigma_{\mu\nu}b)(\bar{e}\sigma_{\mu\nu}\gamma_5e)$	R
	$\frac{4G_F}{\sqrt{2}}V_{ub}\frac{e^2}{16\pi^2}(ar{s}\sigma_{\mu\nu}b)(ar{e}\sigma_{\mu\nu}\gamma_5e)$	R
b->smumu::Re{c9}	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^* \frac{e^2}{16\pi^2}(\bar{s}_L\gamma^{\mu}b_L)(\bar{\mu}\gamma_{\mu}\mu)$	R
	$\frac{\sqrt{2}}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e^2}{16\pi^2} (\bar{s}_L \gamma^{\mu} b_L) (\bar{\mu} \gamma_{\mu} \mu)$	R
	$rac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*rac{e^2}{16\pi^2}(ar{s}_R\gamma^{\mu}b_R)(ar{\mu}\gamma_{\mu}\mu)$	R
	$\sqrt{2}$ 00 10 π^2 (10) (F) (μ F)	-

WC name	Operator	Type
b->smumu::Im{c9'}	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}(\bar{s}_R\gamma^{\mu}b_R)(\bar{\mu}\gamma_{\mu}\mu)$	R
b->smumu::Re{c10}	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^* \frac{e^2}{16\pi^2} (\bar{s}_L \gamma^{\mu} b_L) (\bar{\mu} \gamma_{\mu} \gamma_5 \mu)$	${ m R}$
b->smumu::Im{c10}	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^* \frac{e^2}{16\pi^2} (\bar{s}_L \gamma^{\mu} b_L) (\bar{\mu} \gamma_{\mu} \gamma_5 \mu)$	${ m R}$
b->smumu::Re{c10'	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^* \frac{e^2}{16\pi^2} (\bar{s}_R \gamma^{\mu} b_R) (\bar{\mu} \gamma_{\mu} \gamma_5 \mu)$	${ m R}$
b->smumu::Im{c10'	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^* \frac{e^2}{16\pi^2} (\bar{s}_R \gamma^{\mu} b_R) (\bar{\mu} \gamma_{\mu} \gamma_5 \mu)$	${ m R}$
b->smumu::Re{cS}	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^* \frac{e^2}{16\pi^2} m_b(\bar{s}_L b_R)(\bar{\mu}\mu)$	${ m R}$
b->smumu::Im{cS}	$\frac{4\overset{\leftarrow}{G_F}}{\sqrt{2}}V_{tb}V_{ts}^* \frac{e^2}{16\pi^2}m_b(\bar{s}_L b_R)(\bar{\mu}\mu)$	${ m R}$
b->smumu::Re{cS'}	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^* \frac{e^2}{16\pi^2} m_b(\bar{s}_R b_L)(\bar{\mu}\mu)$	${ m R}$
b->smumu::Im{cS'}	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^* \frac{e^2}{16\pi^2} m_b(\bar{s}_R b_L)(\bar{\mu}\mu)$	${ m R}$
b->smumu::Re{cP}	$\frac{4\dot{G}_{F}}{\sqrt{2}}V_{tb}V_{ts}^{*}\frac{e^{2}}{16\pi^{2}}m_{b}(\bar{s}_{L}b_{R})(\bar{\mu}\gamma_{5}\mu)$	${ m R}$
b->smumu::Im{cP}	$\frac{4\overset{.}{G_F}}{\sqrt{2}}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}m_b(\bar{s}_Lb_R)(\bar{\mu}\gamma_5\mu)$	${ m R}$
b->smumu::Re{cP'}	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^* \frac{e^2}{16\pi^2} m_b(\bar{s}_R b_L)(\bar{\mu}\gamma_5 \mu)$	${ m R}$
b->smumu::Im{cP'}	$\frac{4\dot{G}_{F}}{\sqrt{2}}V_{tb}V_{ts}^{*}\frac{e^{2}}{16\pi^{2}}m_{b}(\bar{s}_{R}b_{L})(\bar{\mu}\gamma_{5}\mu)$	${ m R}$
b->smumu::Re{cT}	$\frac{4\overset{\circ}{G_F}}{\sqrt{2}}V_{ub}\frac{e^2}{16\pi^2}(\bar{s}\sigma_{\mu\nu}b)(\bar{\mu}\sigma_{\mu\nu}\mu)$	${ m R}$
b->smumu::Im{cT}	$\frac{4G_F}{\sqrt{2}}V_{ub}\frac{e^2}{16\pi^2}(\bar{s}\sigma_{\mu\nu}b)(\bar{\mu}\sigma_{\mu\nu}\mu)$	${ m R}$
b->smumu::Re{cT5}	$\frac{4\overset{\circ}{G_F}}{\sqrt{2}}V_{ub}\frac{e^2}{16\pi^2}(\bar{s}\sigma_{\mu\nu}b)(\bar{\mu}\sigma_{\mu\nu}\gamma_5\mu)$	${ m R}$
b->smumu::Im{cT5}	$\frac{4G_F}{\sqrt{2}}V_{ub}\frac{e^2}{16\pi^2}(\bar{s}\sigma_{\mu\nu}b)(\bar{\mu}\sigma_{\mu\nu}\gamma_5\mu)$	R

cbenu

WC name	Operator	Type
cbenue::cVL	$-rac{4G_F}{\sqrt{2}}V_{cb}(ar{c}_L\gamma^\mu b_L)(ar{e}_L\gamma_\mu u_{eL})$	C
cbenue::cVR	$-rac{4G_F}{\sqrt{2}}V_{cb}(ar{c}_L\gamma^\mu b_L)(ar{e}_L\gamma_\mu u_{eL}) \ -rac{4G_F}{\sqrt{2}}V_{cb}(ar{c}_R\gamma^\mu b_R)(ar{e}_L\gamma_\mu u_{eL})$	$^{\mathrm{C}}$
cbenue::cSR	$-\frac{4G_F}{G}V_{ch}(\bar{c}_Lb_R)(\bar{e}_R\nu_{eL})$	$^{\mathrm{C}}$
cbenue::cSL	$-\frac{4G_F}{\sqrt{2}}V_{cb}(\bar{c}_Rb_L)(\bar{e}_R\nu_{eL})$	$^{\mathrm{C}}$
cbenue::cT	$-rac{4\widetilde{G}_F}{\sqrt{2}}V_{cb}(ar{c}_R\sigma^{\mu u}b_L)(ar{e}_R\sigma_{\mu u} u_{eL})$	\mathbf{C}

${\tt cbmunu}$

WC name	Operator	Type
cbmunumu::cVL	$-\frac{4G_F}{\sqrt{2}}V_{cb}(\bar{c}_L\gamma^{\mu}b_L)(\bar{\mu}_L\gamma_{\mu}\nu_{\mu L}) \\ -\frac{4G_F}{\sqrt{2}}V_{cb}(\bar{c}_R\gamma^{\mu}b_R)(\bar{\mu}_L\gamma_{\mu}\nu_{\mu L}) \\ -\frac{4G_F}{\sqrt{2}}V_{cb}(\bar{c}_Lb_R)(\bar{\mu}_R\nu_{\mu L})$	\overline{C}
cbmunumu::cVR	$-\frac{4G_F}{\sqrt{2}}V_{cb}(\bar{c}_R\gamma^{\mu}b_R)(\bar{\mu}_L\gamma_{\mu}\nu_{\mu L})$	\mathbf{C}
cbmunumu::cSR	$-rac{4ar{G_F}}{\sqrt{2}}V_{cb}(ar{c}_Lb_R)(ar{\mu}_R u_{\mu L})$	\mathbf{C}
cbmunumu::cSL	$-\frac{4G_F^2}{\sqrt{2}}V_{cb}(\bar{c}_Rb_L)(\bar{\mu}_R\nu_{\mu L})$	$^{\mathrm{C}}$

WC name	Operator	Type
cbmunumu::cT	$-rac{4G_F}{\sqrt{2}}V_{cb}(ar{c}_R\sigma^{\mu u}b_L)(ar{\mu}_R\sigma_{\mu u} u_{\mu L})$	С

${\tt cbtaunu}$

WC name	Operator	Type
cbtaunutau::cVL	$-rac{4G_F}{\sqrt{2}}V_{cb}(ar{c}_L\gamma^{ au}b_L)(ar{ au}_L\gamma_{ au} u_{ au L})$	C
cbtaunutau::cVR	$-\frac{4G_F}{\sqrt{2}}V_{cb}(\bar{c}_L\gamma^{\tau}b_L)(\bar{\tau}_L\gamma_{\tau}\nu_{\tau L}) -\frac{4G_F}{\sqrt{2}}V_{cb}(\bar{c}_R\gamma^{\tau}b_R)(\bar{\tau}_L\gamma_{\tau}\nu_{\tau L})$	\mathbf{C}
cbtaunutau::cSR	$-\frac{4G_F}{\sqrt{2}}V_{cb}(\bar{c}_L b_R)(\bar{\tau}_R \nu_{\tau L})$	\mathbf{C}
cbtaunutau::cSL	$-\frac{4G_F^2}{\sqrt{2}}V_{cb}(\bar{c}_Rb_L)(\bar{\tau}_R\nu_{\tau L}) \\ -\frac{4G_F}{\sqrt{2}}V_{cb}(\bar{c}_R\sigma^{\mu\nu}b_L)(\bar{\tau}_R\sigma_{\mu\nu}\nu_{\tau L})$	\mathbf{C}
cbtaunutau::cT	$-\frac{4G_F}{\sqrt{2}}V_{cb}(\bar{c}_R\sigma^{\mu\nu}b_L)(\bar{\tau}_R\sigma_{\mu\nu}\nu_{\tau L})$	С

ubenu

WC name	Operator	Type
ubenue::cVL	$-\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_L\gamma^{\mu}b_L)(\bar{e}_L\gamma_{\mu}\nu_{eL})$	C
ubenue::cVR	$-rac{4G_F}{\sqrt{2}}V_{ub}(ar{u}_L\gamma^\mu b_L)(ar{e}_L\gamma_\mu u_{eL}) \ -rac{4G_F}{\sqrt{2}}V_{ub}(ar{u}_R\gamma^\mu b_R)(ar{e}_L\gamma_\mu u_{eL})$	\mathbf{C}
ubenue::cSR	$-\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_Lb_R)(\bar{e}_R\nu_{eL})$	\mathbf{C}
ubenue::cSL	$-\frac{4\tilde{G}_F^c}{\sqrt{2}}V_{ub}(\bar{u}_Rb_L)(\bar{e}_R\nu_{eL})$	\mathbf{C}
ubenue::cT	$-rac{4\widetilde{G}_F^2}{\sqrt{2}}V_{ub}(ar{u}_R\sigma^{\mu u}b_L)(ar{e}_R\sigma_{\mu u} u_{eL})$	\mathbf{C}

ubmunu

WC name	Operator	Type
ubmunumu::cVL	$-rac{4G_F}{\sqrt{2}}V_{ub}(ar{u}_L\gamma^\mu b_L)(ar{\mu}_L\gamma_\mu u_{\mu L})$	C
ubmunumu::cVR	$-\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_L\gamma^{\mu}b_L)(\bar{\mu}_L\gamma_{\mu}\nu_{\mu L}) \\ -\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_R\gamma^{\mu}b_R)(\bar{\mu}_L\gamma_{\mu}\nu_{\mu L})$	$^{\mathrm{C}}$
ubmunumu::cSR	$-rac{4\check{G}_F}{\sqrt{2}}V_{ub}(\bar{u}_Lb_R)(\bar{\mu}_R u_{\mu L})$	$^{\mathrm{C}}$
ubmunumu::cSL	$-rac{4\check{G}_F}{\sqrt{2}}V_{ub}(\bar{u}_Rb_L)(\bar{\mu}_R u_{\mu L})$	$^{\mathrm{C}}$
ubmunumu::cT	$-\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_L b_R)(\bar{\mu}_R \nu_{\mu L}) \\ -\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_R b_L)(\bar{\mu}_R \nu_{\mu L}) \\ -\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_R \sigma^{\mu\nu} b_L)(\bar{\mu}_R \sigma_{\mu\nu} \nu_{\mu L})$	$^{\mathrm{C}}$

${\tt ubtaunu}$

WC name	Operator	Type
ubtaunutau::cVL	$-\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_L\gamma^{\tau}b_L)(\bar{\tau}_L\gamma_{\tau}\nu_{\tau L})$	С
ubtaunutau::cVR	$-rac{4rac{Q_F}{\sqrt{2}}}{\sqrt{2}}V_{ub}(ar{u}_R\gamma^ au b_R)(ar{ au}_L\gamma_ au u_{ au L})$	\mathbf{C}

WC name	Operator	Type
ubtaunutau::cSR	$-\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_Lb_R)(\bar{ au}_R u_{ au L})$	С
ubtaunutau::cSL	$-\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_Rb_L)(\bar{\tau}_R u_{ au L})$	\mathbf{C}
ubtaunutau::cT	$-\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_L b_R)(\bar{\tau}_R \nu_{\tau L}) -\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_R b_L)(\bar{\tau}_R \nu_{\tau L}) -\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_R \sigma^{\mu\nu} b_L)(\bar{\tau}_R \sigma_{\mu\nu} \nu_{\tau L})$	$^{\mathrm{C}}$