Basis flavio (EFT WET)

Basis used by the flavio package. Neutrinos are in the flavour basis.

Sectors

sbsb

WC name	Operator	Туре
CVLL_bsbs	$(\bar{s}_L \gamma^\mu b_L)(\bar{s}_L \gamma_\mu b_L)$	С
CVRR_bsbs	$(\bar{s}_R \gamma^\mu b_R)(\bar{s}_R \gamma_\mu b_R)$	\mathbf{C}
CSLL_bsbs	$(\bar{s}_R b_L)(\bar{s}_R b_L)$	\mathbf{C}
CSRR_bsbs	$(\bar{s}_L b_R)(\bar{s}_L b_R)$	\mathbf{C}
CTLL_bsbs	$(\bar{s}_R \sigma^{\mu\nu} b_L)(\bar{s}_R \sigma_{\mu\nu} b_L)$	\mathbf{C}
CTRR_bsbs	$(\bar{s}_L \sigma^{\mu\nu} b_R)(\bar{s}_L \sigma_{\mu\nu} b_R)$	\mathbf{C}
CVLR_bsbs	$(\bar{s}_L \gamma^\mu b_L)(\bar{s}_R \gamma_\mu b_R)$	\mathbf{C}
CSLR_bsbs	$(ar{s}_R b_L)(ar{s}_L b_R)$	\mathbf{C}

dbdb

WC name	Operator	Туре
CVLL_bdbd	$(\bar{d}_L \gamma^\mu b_L)(\bar{d}_L \gamma_\mu b_L)$	С
CVRR_bdbd	$(\bar{d}_R \gamma^\mu b_R)(\bar{d}_R \gamma_\mu b_R)$	\mathbf{C}
CSLL_bdbd	$(ar{d}_R b_L)(ar{d}_R b_L)$	\mathbf{C}
CSRR_bdbd	$(ar{d}_L b_R)(ar{d}_L b_R)$	\mathbf{C}
CTLL_bdbd	$(\bar{d}_R \sigma^{\mu\nu} b_L)(\bar{d}_R \sigma_{\mu\nu} b_L)$	\mathbf{C}
CTRR_bdbd	$(\bar{d}_L \sigma^{\mu\nu} b_R) (\bar{d}_L \sigma_{\mu\nu} b_R)$	\mathbf{C}
CVLR_bdbd	$(\bar{d}_L \gamma^\mu b_L)(\bar{d}_R \gamma_\mu b_R)$	\mathbf{C}
CSLR_bdbd	$(ar{d}_R b_L)(ar{d}_L b_R)$	\mathbf{C}

sdsd

WC name	Operator	Type
CVLL_sdsd	$(\bar{d}_L \gamma^\mu s_L)(\bar{d}_L \gamma_\mu s_L)$	С
CVRR_sdsd	$(\bar{d}_R \gamma^\mu s_R)(\bar{d}_R \gamma_\mu s_R)$	\mathbf{C}
CSLL_sdsd	$(ar{d}_R s_L)(ar{d}_R s_L)$	\mathbf{C}
CSRR_sdsd	$(ar{d}_L s_R)(ar{d}_L s_R)$	\mathbf{C}
CTLL_sdsd	$(\bar{d}_R \sigma^{\mu\nu} s_L)(\bar{d}_R \sigma_{\mu\nu} s_L)$	\mathbf{C}
CTRR_sdsd	$(\bar{d}_L \sigma^{\mu\nu} s_R)(\bar{d}_L \sigma_{\mu\nu} s_R)$	$^{\mathrm{C}}$

WC name	Operator	Type
	$(\bar{d}_L \gamma^\mu s_L)(\bar{d}_R \gamma_\mu s_R)$	С
CSLR_sdsd	$(ar{d}_R s_L)(ar{d}_L s_R)$	\mathbf{C}

sb

WC name	Operator	Type
C9_bsee	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}(\bar{s}_L\gamma^{\mu}b_L)(\bar{e}\gamma_{\mu}e)$	С
C9p_bsee	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^* \frac{e^2}{16\pi^2} (\bar{s}_R \gamma^{\mu} b_R) (\bar{e}\gamma_{\mu} e)$	\mathbf{C}
C10_bsee	$rac{4ec{Q}_F}{\sqrt{2}}V_{tb}V_{ts}^*rac{e^2}{16\pi^2}(ar{s}_L\gamma^\mu b_L)(ar{e}\gamma_\mu\gamma_5 e)$	\mathbf{C}
C10p_bsee	$rac{4 V_{F}^{2}}{\sqrt{2}} V_{tb} V_{ts}^{*} rac{e^{2}}{16 \pi^{2}} (ar{s}_{R} \gamma^{\mu} b_{R}) (ar{e} \gamma_{\mu} \gamma_{5} e)$	\mathbf{C}
CS_bsee	$\frac{4Q_F^2}{\sqrt{2}}V_{tb}V_{ts}^* \frac{e^2}{16\pi^2}m_b(\bar{s}_L b_R)(\bar{e}e)$	\mathbf{C}
CSp_bsee	$\frac{4Q_F^2}{\sqrt{2}}V_{tb}V_{ts}^* \frac{e^2}{16\pi^2}m_b(\bar{s}_R b_L)(\bar{e}e)$	\mathbf{C}
CP_bsee	$\frac{4Q_F^2}{\sqrt{2}}V_{tb}V_{ts}^* \frac{e^2}{16\pi^2}m_b(\bar{s}_L b_R)(\bar{e}\gamma_5 e)$	\mathbf{C}
CPp_bsee	$rac{4 V_F^2}{\sqrt{2}} V_{tb} V_{ts}^* rac{e^2}{16 \pi^2} m_b (ar{s}_R b_L) (ar{e} \gamma_5 e)$	\mathbf{C}
C9_bsmumu	$rac{4Q_F^2}{\sqrt{2}}V_{tb}V_{ts}^*rac{e^2}{16\pi^2}(ar{s}_L\gamma^{\mu}b_L)(ar{\mu}\gamma_{\mu}\mu)$	\mathbf{C}
C9p_bsmumu	$\frac{4Q_F^2}{\sqrt{2}}V_{tb}V_{ts}^* \frac{e^2}{16\pi^2} (\bar{s}_R \gamma^{\mu} b_R) (\bar{\mu} \gamma_{\mu} \mu)$	\mathbf{C}
C10_bsmumu	$rac{4 V_F^2}{\sqrt{2}} V_{tb} V_{ts}^* rac{e^2}{16 \pi^2} (ar{s}_L \gamma^\mu b_L) (ar{\mu} \gamma_\mu \gamma_5 \mu)$	\mathbf{C}
C10p_bsmumu	$rac{4ar{Q}_{F}^{2}}{\sqrt{2}}V_{tb}V_{ts}^{*}rac{e^{2}}{16\pi^{2}}(ar{s}_{R}\gamma^{\mu}b_{R})(ar{\mu}\gamma_{\mu}\gamma_{5}\mu)$	\mathbf{C}
CS_bsmumu	$\frac{4Q_F^2}{\sqrt{2}}V_{tb}V_{ts}^* \frac{e^2}{16\pi^2}m_b(\bar{s}_L b_R)(\bar{\mu}\mu)$	\mathbf{C}
CSp_bsmumu	$\frac{4 \tilde{G}_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e^2}{16 \pi^2} m_b (\bar{s}_R b_L) (\bar{\mu} \mu)$	\mathbf{C}
CP_bsmumu	$rac{4 V_{F}^{2}}{\sqrt{2}} V_{tb} V_{ts}^{*} rac{e^{2}}{16 \pi^{2}} m_{b} (ar{s}_{L} b_{R}) (ar{\mu} \gamma_{5} \mu)$	\mathbf{C}
CPp_bsmumu	$rac{4ec{Q}_{F}}{\sqrt{2}}V_{tb}V_{ts}^{*}rac{e^{2}}{16\pi^{2}}m_{b}(ar{s}_{R}b_{L})(ar{\mu}\gamma_{5}\mu)$	\mathbf{C}
C9_bstautau	$rac{4 G_F}{\sqrt{2}} V_{tb} V_{ts}^* rac{e^2}{16 \pi^2} (ar{s}_L \gamma^\mu b_L) (ar{ au} \gamma_\mu au)$	\mathbf{C}
C9p_bstautau	$rac{4rac{ec{G}_F}}{\sqrt{2}}V_{tb}V_{ts}^*rac{e^2}{16\pi^2}(ar{s}_R\gamma^\mu b_R)(ar{ au}\gamma_\mu au)$	\mathbf{C}
C10_bstautau	$rac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*rac{e^2}{16\pi^2}(ar{s}_L\gamma^\mu b_L)(ar{ au}\gamma_\mu\gamma_5 au)$	\mathbf{C}
C10p_bstautau	$rac{4 G_F}{\sqrt{2}} V_{tb} V_{ts}^* rac{e^2}{16 \pi^2} (ar{s}_R \gamma^\mu b_R) (ar{ au} \gamma_\mu \gamma_5 au)$	\mathbf{C}
CS_bstautau	$\frac{4 G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e^2}{16 \pi^2} m_b (\bar{s}_L b_R) (\bar{ au} au)$	\mathbf{C}
CSp_bstautau	$rac{4 G_F}{\sqrt{2}} V_{tb} V_{ts}^* rac{e^2}{16 \pi^2} m_b (ar{s}_R b_L) (ar{ au} au)$	\mathbf{C}
CP_bstautau	$rac{4ar{V}_{F}}{\sqrt{2}}V_{tb}V_{ts}^{*}rac{e^{2}}{16\pi^{2}}m_{b}(ar{s}_{L}b_{R})(ar{ au}\gamma_{5} au)$	\mathbf{C}
CPp_bstautau	$rac{4 ar{V}_{F}}{\sqrt{2}} V_{tb} V_{ts}^* rac{e^2}{16 \pi^2} m_b (ar{s}_R b_L) (ar{ au} \gamma_5 au)$	\mathbf{C}
C7_bs	$\frac{4\tilde{G}_{F}}{\sqrt{2}}V_{tb}V_{ts}^{*}\frac{e}{16\pi^{2}}m_{b}(\bar{s}_{L}\sigma^{\mu\nu}b_{R})(F_{\mu\nu})$	\mathbf{C}
C7p_bs	$\frac{\sqrt{2}}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e}{16\pi^2} m_b (\bar{s}_R \sigma^{\mu\nu} b_L) (F_{\mu\nu})$	\mathbf{C}
C8_bs	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^* \frac{g_s}{16\pi^2} m_b (\bar{s}_L \sigma^{\mu\nu} T^a b_R)(G_{\mu\nu}^a)$	$^{\mathrm{C}}$
C8p_bs	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*\frac{g_s}{16\pi^2}m_b(\bar{s}_R\sigma^{\mu\nu}T^ab_L)(G_{\mu\nu}^a)$	С

sbnunu

WC name	Operator	Type
CL_bsnuenue	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^* \frac{e^2}{16\pi^2} (\bar{s}_L \gamma^{\mu} b_L) (\bar{\nu}_e \gamma_{\mu} (1 - \gamma_5) \nu_e)$	С
CL_bsnumunumu	$rac{4ar{G_F}}{\sqrt{2}}V_{tb}V_{ts}^*rac{e^2}{16\pi^2}(ar{s}_L\gamma^{\mu}b_L)(ar{ u}_{\mu}\gamma_{\mu}(1-\gamma_5) u_{\mu})$	\mathbf{C}
CL_bsnutaunutau	$rac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*rac{e^2}{16\pi^2}(\bar{s}_L\gamma^{\mu}b_L)(\bar{ u}_{ au}\gamma_{\mu}(1-\gamma_5) u_{ au})$	\mathbf{C}
CL_bsnuenumu	$rac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*rac{e^2}{16\pi^2}(ar{s}_L\gamma^{\mu}b_L)(ar{ u}_{\mu}\gamma_{\mu}(1-\gamma_5) u_e)$	\mathbf{C}
CL_bsnumunue	$\frac{4 \tilde{G}_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e^2}{16\pi^2} (\bar{s}_L \gamma^\mu b_L) (\bar{\nu}_e \gamma_\mu (1 - \gamma_5) \nu_\mu)$	\mathbf{C}
CL_bsnumunutau	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^* \frac{e^2}{16\pi^2} (\bar{s}_L \gamma^{\mu} b_L) (\bar{\nu}_{\tau} \gamma_{\mu} (1-\gamma_5) \nu_{\mu})$	\mathbf{C}
${\tt CL_bsnutaunumu}$	$rac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*rac{e^2}{16\pi^2}(ar{s}_L\gamma^{\mu}b_L)(ar{ u}_{\mu}\gamma_{\mu}(1-\gamma_5) u_{ au})$	\mathbf{C}
CL_bsnuenutau	$\frac{4\dot{G}_F}{\sqrt{2}}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}(\bar{s}_L\gamma^{\mu}b_L)(\bar{\nu}_{\tau}\gamma_{\mu}(1-\gamma_5)\nu_e)$	\mathbf{C}
CL_bsnutaunue	$rac{4\dot{G}_F}{\sqrt{2}}V_{tb}V_{ts}^*rac{e^2}{16\pi^2}(\bar{s}_L\gamma^{\mu}b_L)(\bar{ u}_e\gamma_{\mu}(1-\gamma_5) u_{ au})$	\mathbf{C}
CR_bsnuenue	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^* \frac{e^2}{16\pi^2}(\bar{s}_R\gamma^{\mu}b_R)(\bar{\nu}_e\gamma_{\mu}(1-\gamma_5)\nu_e)$	\mathbf{C}
CR_bsnumunumu	$rac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*rac{e^2}{16\pi^2}(ar{s}_R\gamma^{\mu}b_R)(ar{ u}_{\mu}\gamma_{\mu}(1-\gamma_5) u_{\mu})$	\mathbf{C}
CR_bsnutaunutau	$rac{4\dot{G}_F}{\sqrt{2}}V_{tb}V_{ts}^*rac{e^2}{16\pi^2}(\bar{s}_R\gamma^{\mu}b_R)(\bar{ u}_{ au}\gamma_{\mu}(1-\gamma_5) u_{ au})$	\mathbf{C}
CR_bsnuenumu	$rac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*rac{e^2}{16\pi^2}(ar{s}_R\gamma^{\mu}b_R)(ar{ u}_{\mu}\gamma_{\mu}(1-\gamma_5) u_e)$	\mathbf{C}
CR_bsnumunue	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^* \frac{e^2}{16\pi^2}(\bar{s}_R\gamma^{\mu}b_R)(\bar{\nu}_e\gamma_{\mu}(1-\gamma_5)\nu_{\mu})$	\mathbf{C}
CR_bsnumunutau	$rac{4\dot{G}_F}{\sqrt{2}}V_{tb}V_{ts}^*rac{e^2}{16\pi^2}(\bar{s}_R\gamma^{\mu}b_R)(\bar{\nu}_{ au}\gamma_{\mu}(1-\gamma_5)\nu_{\mu})$	\mathbf{C}
CR_bsnutaunumu	$rac{4\dot{G}_F}{\sqrt{2}}V_{tb}V_{ts}^*rac{e^2}{16\pi^2}(ar{s}_R\gamma^{\mu}b_R)(ar{ u}_{\mu}\gamma_{\mu}(1-\gamma_5) u_{ au})$	\mathbf{C}
CR_bsnuenutau	$rac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*rac{e^2}{16\pi^2}(ar{s}_R\gamma^{\mu}b_R)(ar{ u}_{ au}\gamma_{\mu}(1-\gamma_5) u_e)$	\mathbf{C}
CR_bsnutaunue	$\frac{4\tilde{G}_F}{\sqrt{2}}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}(\bar{s}_R\gamma^{\mu}b_R)(\bar{\nu}_e\gamma_{\mu}(1-\gamma_5)\nu_{\tau})$	\mathbf{C}

db

WC name	Operator	Type
C9_bdee	$\frac{4G_F}{\sqrt{2}} V_{tb} V_{td}^* \frac{e^2}{16\pi^2} (\bar{d}_L \gamma^{\mu} b_L) (\bar{e} \gamma_{\mu} e)$	C
C9p_bdee	$rac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*rac{e^2}{16\pi^2}(ar{d}_R\gamma^\mu b_R)(ar{e}\gamma_\mu e)$	\mathbf{C}
C10_bdee	$rac{4\ddot{G}_{F}}{\sqrt{2}}V_{tb}V_{td}^{*}rac{e^{2}}{16\pi^{2}}(ar{d}_{L}\gamma^{\mu}b_{L})(ar{e}\gamma_{\mu}\gamma_{5}e)$	\mathbf{C}
C10p_bdee	$rac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*rac{e^2}{16\pi^2}(ar{d}_R\gamma^{\mu}b_R)(ar{e}\gamma_{\mu}\gamma_5 e)$	\mathbf{C}
CS_bdee	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}m_b(\bar{d}_Lb_R)(\bar{e}e)$	\mathbf{C}
CSp_bdee	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}m_b(\bar{d}_Rb_L)(\bar{e}e)$	\mathbf{C}
CP_bdee	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}m_b(\bar{d}_Lb_R)(\bar{e}\gamma_5e)$	\mathbf{C}
CPp_bdee	$rac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*rac{e^2}{16\pi^2}m_b(ar{d}_Rb_L)(ar{e}\gamma_5e)$	\mathbf{C}
C9_bdmumu	$rac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*rac{e^2}{16\pi^2}(ar{d}_L\gamma^{\mu}b_L)(ar{\mu}\gamma_{\mu}\mu)$	$^{\mathrm{C}}$
C9p_bdmumu	$\frac{4\dot{G}_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_R\gamma^{\mu}b_R)(\bar{\mu}\gamma_{\mu}\mu)$	\mathbf{C}

WC name	Operator	Type
C10_bdmumu	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_L\gamma^{\mu}b_L)(\bar{\mu}\gamma_{\mu}\gamma_5\mu)$	С
C10p_bdmumu	$\frac{4Q_F^2}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_R\gamma^{\mu}b_R)(\bar{\mu}\gamma_{\mu}\gamma_5\mu)$	\mathbf{C}
CS_bdmumu	$\frac{4Q_F^2}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}m_b(\bar{d}_Lb_R)(\bar{\mu}\mu)$	\mathbf{C}
CSp_bdmumu	$\frac{4\tilde{Q}_{F}}{\sqrt{2}}V_{tb}V_{td}^{*}\frac{e^{2}}{16\pi^{2}}m_{b}(\bar{d}_{R}b_{L})(\bar{\mu}\mu)$	\mathbf{C}
CP_bdmumu	$rac{4ec{Q}_{F}^{2}}{\sqrt{2}}V_{tb}V_{td}^{*}rac{e^{2}}{16\pi^{2}}m_{b}(ar{d}_{L}b_{R})(ar{\mu}\gamma_{5}\mu)$	\mathbf{C}
CPp_bdmumu	$rac{4 V_F^2}{\sqrt{2}} V_{tb} V_{td}^* rac{e^2}{16 \pi^2} m_b (ar{d}_R b_L) (ar{\mu} \gamma_5 \mu)$	\mathbf{C}
C9_bdtautau	$rac{4rac{arphi_F}{\sqrt{2}}V_{tb}V_{td}^*rac{e^2}{16\pi^2}(ar{d}_L\gamma^\mu b_L)(ar{ au}\gamma_\mu au)$	\mathbf{C}
C9p_bdtautau	$rac{4ar{Q}_F}{\sqrt{2}}V_{tb}V_{td}^*rac{e^2}{16\pi^2}(ar{d}_R\gamma^\mu b_R)(ar{ au}\gamma_\mu au)$	\mathbf{C}
C10_bdtautau	$rac{4 V_F^2}{\sqrt{2}} V_{tb} V_{td}^* rac{e^2}{16 \pi^2} (ar{d}_L \gamma^\mu b_L) (ar{ au} \gamma_\mu \gamma_5 au)$	\mathbf{C}
C10p_bdtautau	$rac{4 reve{Q_F}}{\sqrt{2}} V_{tb} V_{td}^* rac{e^2}{16 \pi^2} (ar{d}_R \gamma^\mu b_R) (ar{ au} \gamma_\mu \gamma_5 au)$	\mathbf{C}
CS_bdtautau	$\frac{4 G_F}{\sqrt{2}} V_{tb} V_{td}^* \frac{e^2}{16\pi^2} m_b(\bar{d}_L b_R) (\bar{ au} au)$	\mathbf{C}
CSp_bdtautau	$\frac{4\dot{G}_{F}}{\sqrt{2}}V_{tb}V_{td}^{*}\frac{e^{2}}{16\pi^{2}}m_{b}(\bar{d}_{R}b_{L})(\bar{ au} au)$	\mathbf{C}
CP_bdtautau	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^* \frac{e^2}{16\pi^2} m_b(\bar{d}_L b_R)(\bar{ au}\gamma_5 au)$	\mathbf{C}
CPp_bdtautau	$\frac{4\dot{G}_{F}}{\sqrt{2}}V_{tb}V_{td}^{*}\frac{e^{2}}{16\pi^{2}}m_{b}(\bar{d}_{R}b_{L})(\bar{ au}\gamma_{5} au)$	\mathbf{C}
C7_bd	$\frac{4\widetilde{G_F}}{\sqrt{2}}V_{tb}V_{td}^*\frac{e}{16\pi^2}m_b(\bar{d}_L\sigma^{\mu\nu}b_R)(F_{\mu\nu})$	\mathbf{C}
C7p_bd	$\frac{4\bar{G}_F}{\sqrt{2}}V_{tb}V_{td}^* \frac{e}{16\pi^2} m_b (\bar{d}_R \sigma^{\mu\nu} b_L)(F_{\mu\nu})$	\mathbf{C}
C8_bd	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^* \frac{g_s}{16\pi^2}m_b(\bar{d}_L\sigma^{\mu\nu}T^ab_R)(G_{\mu\nu}^a)$	\mathbf{C}
C8p_bd	$\frac{4\tilde{G}_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{g_s}{16\pi^2}m_b(\bar{d}_R\sigma^{\mu\nu}T^ab_L)(G^a_{\mu\nu})$	\mathbf{C}

${\tt dbnunu}$

WC name	Operator	Type
CL_bdnuenue	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_L\gamma^{\mu}b_L)(\bar{\nu}_e\gamma_{\mu}(1-\gamma_5)\nu_e)$	С
${\tt CL_bdnumunumu}$	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_L\gamma^{\mu}b_L)(\bar{\nu}_{\mu}\gamma_{\mu}(1-\gamma_5)\nu_{\mu})$	\mathbf{C}
${\tt CL_bdnutaunutau}$	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_L\gamma^{\mu}b_L)(\bar{\nu}_{\tau}\gamma_{\mu}(1-\gamma_5)\nu_{\tau})$	\mathbf{C}
CL_bdnuenumu	$rac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*rac{e^2}{16\pi^2}(ar{d}_L\gamma^{\mu}b_L)(ar{ u}_{\mu}\gamma_{\mu}(1-\gamma_5) u_e)$	\mathbf{C}
CL_bdnumunue	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_L\gamma^{\mu}b_L)(\bar{\nu}_e\gamma_{\mu}(1-\gamma_5)\nu_{\mu})$	\mathbf{C}
${\tt CL_bdnumunutau}$	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_L\gamma^{\mu}b_L)(\bar{\nu}_{\tau}\gamma_{\mu}(1-\gamma_5)\nu_{\mu})$	\mathbf{C}
${\tt CL_bdnutaunumu}$	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_L\gamma^{\mu}b_L)(\bar{\nu}_{\mu}\gamma_{\mu}(1-\gamma_5)\nu_{ au})$	\mathbf{C}
CL_bdnuenutau	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_L\gamma^{\mu}b_L)(\bar{\nu}_{\tau}\gamma_{\mu}(1-\gamma_5)\nu_e)$	\mathbf{C}
CL_bdnutaunue	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_L\gamma^{\mu}b_L)(\bar{\nu}_e\gamma_{\mu}(1-\gamma_5)\nu_{ au})$	\mathbf{C}
CR_bdnuenue	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_R\gamma^{\mu}b_R)(\bar{\nu}_e\gamma_{\mu}(1-\gamma_5)\nu_e)$	\mathbf{C}
CR_bdnumunumu	$rac{4\dot{G}_F}{\sqrt{2}}V_{tb}V_{td}^*rac{e^2}{16\pi^2}(ar{d}_R\gamma^{\mu}b_R)(ar{ u}_{\mu}\gamma_{\mu}(1-\gamma_5) u_{\mu})$	\mathbf{C}
CR_bdnutaunutau	$\frac{{}^{4}\ddot{G}_{F}}{\sqrt{2}}V_{tb}V_{td}^{*}\frac{e^{2}}{16\pi^{2}}(\bar{d}_{R}\gamma^{\mu}b_{R})(\bar{\nu}_{\tau}\gamma_{\mu}(1-\gamma_{5})\nu_{\tau})$	\mathbf{C}

WC name	Operator	Type
CR_bdnuenumu	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_R\gamma^{\mu}b_R)(\bar{\nu}_{\mu}\gamma_{\mu}(1-\gamma_5)\nu_e)$	C
CR_bdnumunue	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_R\gamma^{\mu}b_R)(\bar{\nu}_e\gamma_{\mu}(1-\gamma_5)\nu_{\mu})$	\mathbf{C}
CR_bdnumunutau	$rac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*rac{e^2}{16\pi^2}(ar{d}_R\gamma^{\mu}b_R)(ar{ u}_{ au}\gamma_{\mu}(1-\gamma_5) u_{\mu})$	\mathbf{C}
CR_bdnutaunumu	$\frac{4\dot{G}_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_R\gamma^{\mu}b_R)(\bar{\nu}_{\mu}\gamma_{\mu}(1-\gamma_5)\nu_{ au})$	\mathbf{C}
CR_bdnuenutau	$rac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*rac{e^2}{16\pi^2}(ar{d}_R\gamma^{\mu}b_R)(ar{ u}_{ au}\gamma_{\mu}(1-\gamma_5) u_e)$	\mathbf{C}
CR_bdnutaunue	$\frac{4G_F}{\sqrt{2}} V_{tb} V_{td}^* \frac{e^2}{16\pi^2} (\bar{d}_R \gamma^{\mu} b_R) (\bar{\nu}_e \gamma_{\mu} (1 - \gamma_5) \nu_{\tau})$	\mathbf{C}

${\tt sbemu}$

WC name	Operator	Type
C9_bsemu	$rac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*rac{e^2}{16\pi^2}(\bar{s}_L\gamma^{\mu}b_L)(\bar{\mu}\gamma_{\mu}e)$	C
C9p_bsemu	$rac{4 G_F}{\sqrt{2}} V_{tb} V_{ts}^* rac{e^2}{16 \pi^2} (ar{s}_R \gamma^\mu b_R) (ar{\mu} \gamma_\mu e)$	\mathbf{C}
C10_bsemu	$rac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*rac{e^2}{16\pi^2}(ar{s}_L\gamma^\mu b_L)(ar{\mu}\gamma_\mu\gamma_5 e)$	\mathbf{C}
C10p_bsemu	$rac{4 \overleftarrow{G_F}}{\sqrt{2}} V_{tb} V_{ts}^* rac{e^2}{16\pi^2} (ar{s}_R \gamma^\mu b_R) (ar{\mu} \gamma_\mu \gamma_5 e)$	\mathbf{C}
CS_bsemu	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^* \frac{e^2}{16\pi^2}m_b(\bar{s}_L b_R)(\bar{\mu}e)$	\mathbf{C}
CSp_bsemu	$rac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*rac{e^2}{16\pi^2}m_b(ar{s}_Rb_L)(ar{\mu}e)$	\mathbf{C}
CP_bsemu	$rac{4\dot{G}_{F}}{\sqrt{2}}V_{tb}V_{ts}^{*}rac{e^{2}}{16\pi^{2}}m_{b}(ar{s}_{L}b_{R})(ar{\mu}\gamma_{5}e)$	\mathbf{C}
CPp_bsemu	$\frac{4\dot{G}_F}{\sqrt{2}}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}m_b(\bar{s}_Rb_L)(\bar{\mu}\gamma_5 e)$	\mathbf{C}

sbmue

WC name	Operator	Type
C9_bsmue	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^* \frac{e^2}{16\pi^2} (\bar{s}_L \gamma^{\mu} b_L)(\bar{e}\gamma_{\mu}\mu)$	С
C9p_bsmue	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^* \frac{e^2}{16\pi^2} (\bar{s}_R \gamma^{\mu} b_R) (\bar{e} \gamma_{\mu} \mu)$	$^{\mathrm{C}}$
C10_bsmue	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}(\bar{s}_L\gamma^{\mu}b_L)(\bar{e}\gamma_{\mu}\gamma_5\mu)$	\mathbf{C}
C10p_bsmue	$rac{4 G_F}{\sqrt{2}} V_{tb} V_{ts}^* rac{e^2}{16\pi^2} (ar{s}_R \gamma^\mu b_R) (ar{e} \gamma_\mu \gamma_5 \mu)$	$^{\mathrm{C}}$
CS_bsmue	$\frac{4\dot{G}_F}{\sqrt{2}}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}m_b(\bar{s}_Lb_R)(\bar{e}\mu)$	\mathbf{C}
CSp_bsmue	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}m_b(\bar{s}_Rb_L)(\bar{e}\mu)$	\mathbf{C}
CP_bsmue	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}m_b(\bar{s}_Lb_R)(\bar{e}\gamma_5\mu)$	$^{\mathrm{C}}$
CPp_bsmue	$\frac{4\dot{G}_F}{\sqrt{2}}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}m_b(\bar{s}_Rb_L)(\bar{e}\gamma_5\mu)$	\mathbf{C}

sbetau

WC name	Operator	Type
C9_bsetau	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^* \frac{e^2}{16\pi^2}(\bar{s}_L\gamma^{\mu}b_L)(\bar{\tau}\gamma_{\mu}e)$	C
C9p_bsetau	$rac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*rac{e^2}{16\pi^2}(ar{s}_R\gamma^{\mu}b_R)(ar{ au}\gamma_{\mu}e)$	\mathbf{C}
C10_bsetau	$rac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*rac{e^2}{16\pi^2}(ar{s}_L\gamma^{\mu}b_L)(ar{ au}\gamma_{\mu}\gamma_5 e)$	\mathbf{C}
C10p_bsetau	$rac{4\dot{G}_{F}}{\sqrt{2}}V_{tb}V_{ts}^{*}rac{e^{2}}{16\pi^{2}}(ar{s}_{R}\gamma^{\mu}b_{R})(ar{ au}\gamma_{\mu}\gamma_{5}e)$	\mathbf{C}
CS_bsetau	$rac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*rac{e^2}{16\pi^2}m_b(ar{s}_L b_R)(ar{ au}e)$	\mathbf{C}
CSp_bsetau	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^* \frac{e^2}{16\pi^2}m_b(\bar{s}_R b_L)(\bar{\tau}e)$	\mathbf{C}
CP_bsetau	$\frac{4\tilde{G}_{F}}{\sqrt{2}}V_{tb}V_{ts}^{*}\frac{e^{2}}{16\pi^{2}}m_{b}(\bar{s}_{L}b_{R})(\bar{ au}\gamma_{5}e)$	\mathbf{C}
CPp_bsetau	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^* \frac{e^2}{16\pi^2} m_b(\bar{s}_R b_L)(\bar{\tau}\gamma_5 e)$	\mathbf{C}

sbtaue

WC name	Operator	Type
C9_bstaue	$rac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*rac{e^2}{16\pi^2}(ar{s}_L\gamma^{\mu}b_L)(ar{e}\gamma_{\mu} au)$	C
C9p_bstaue	$rac{4 { m G}_F}{\sqrt{2}} V_{tb} V_{ts}^* rac{e^2}{16\pi^2} (ar{s}_R \gamma^\mu b_R) (ar{e} \gamma_\mu au)$	$^{\mathrm{C}}$
C10_bstaue	$rac{4ar{G_F}}{\sqrt{2}}V_{tb}V_{ts}^*rac{e^2}{16\pi^2}(ar{s}_L\gamma^\mu b_L)(ar{e}\gamma_\mu\gamma_5 au)$	\mathbf{C}
C10p_bstaue	$rac{4\dot{G}_F}{\sqrt{2}}V_{tb}V_{ts}^*rac{e^2}{16\pi^2}(ar{s}_R\gamma^\mu b_R)(ar{e}\gamma_\mu\gamma_5 au)$	$^{\mathrm{C}}$
CS_bstaue	$rac{4\dot{G}_{F}}{\sqrt{2}}V_{tb}V_{ts}^{*}rac{e^{2}}{16\pi^{2}}m_{b}(ar{s}_{L}b_{R})(ar{e} au)$	$^{\mathrm{C}}$
CSp_bstaue	$rac{4\dot{G}_F}{\sqrt{2}}V_{tb}V_{ts}^*rac{e^2}{16\pi^2}m_b(ar{s}_Rb_L)(ar{e} au)$	\mathbf{C}
CP_bstaue	$rac{4\dot{G}_{F}}{\sqrt{2}}V_{tb}V_{ts}^{*}rac{e^{2}}{16\pi^{2}}m_{b}(ar{s}_{L}b_{R})(ar{e}\gamma_{5} au)$	$^{\mathrm{C}}$
CPp_bstaue	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}m_b(\bar{s}_Rb_L)(\bar{e}\gamma_5\tau)$	\mathbf{C}

sbmutau

WC name	Operator	Type
C9_bsmutau	$rac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* rac{e^2}{16\pi^2} (ar{s}_L \gamma^\mu b_L) (ar{ au} \gamma_\mu \mu)$	C
C9p_bsmutau	$rac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*rac{e^2}{16\pi^2}(ar{s}_R\gamma^{\mu}b_R)(ar{ au}\gamma_{\mu}\mu)$	\mathbf{C}
C10_bsmutau	$rac{4 G_F}{\sqrt{2}} V_{tb} V_{ts}^* rac{e^2}{16 \pi^2} (ar{s}_L \gamma^\mu b_L) (ar{ au} \gamma_\mu \gamma_5 \mu)$	\mathbf{C}
C10p_bsmutau	$rac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*rac{e^2}{16\pi^2}(ar{s}_R\gamma^{\mu}b_R)(ar{ au}\gamma_{\mu}\gamma_5\mu)$	\mathbf{C}
CS_bsmutau	$rac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*rac{e^2}{16\pi^2}m_b(ar{s}_Lb_R)(ar{ au}\mu)$	\mathbf{C}
CSp_bsmutau	$rac{4 G_F}{\sqrt{2}} V_{tb} V_{ts}^* rac{e^2}{16 \pi^2} m_b (ar{s}_R b_L) (ar{ au} \mu)$	\mathbf{C}
CP_bsmutau	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}m_b(\bar{s}_Lb_R)(\bar{\tau}\gamma_5\mu)$	\mathbf{C}
CPp_bsmutau	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}m_b(\bar{s}_Rb_L)(\bar{\tau}\gamma_5\mu)$	\mathbf{C}

sbtaumu

WC name	Operator	Type
C9_bstaumu	$rac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*rac{e^2}{16\pi^2}(ar{s}_L\gamma^{\mu}b_L)(ar{\mu}\gamma_{\mu} au)$	C
C9p_bstaumu	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^* \frac{e^2}{16\pi^2} (\bar{s}_R \gamma^{\mu} b_R) (\bar{\mu} \gamma_{\mu} \tau)$	$^{\mathrm{C}}$
C10_bstaumu	$rac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*rac{e^2}{16\pi^2}(ar{s}_L\gamma^{\mu}b_L)(ar{\mu}\gamma_{\mu}\gamma_5 au)$	$^{\mathrm{C}}$
C10p_bstaumu	$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}\gamma_5 au)$	$^{\mathrm{C}}$
CS_bstaumu	$\frac{4\dot{G}_F}{\sqrt{2}}V_{tb}V_{ts}^* \frac{e^2}{16\pi^2}m_b(\bar{s}_L b_R)(\bar{\mu}\tau)$	\mathbf{C}
CSp_bstaumu	$rac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*rac{e^2}{16\pi^2}m_b(ar{s}_Rb_L)(ar{\mu} au)$	$^{\mathrm{C}}$
CP_bstaumu	$rac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*rac{e^2}{16\pi^2}m_b(ar{s}_Lb_R)(ar{\mu}\gamma_5 au)$	\mathbf{C}
CPp_bstaumu	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}m_b(\bar{s}_Rb_L)(\bar{\mu}\gamma_5\tau)$	\mathbf{C}

${\tt dbemu}$

WC name	Operator	Type
C9_bdemu	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_L\gamma^{\mu}b_L)(\bar{\mu}\gamma_{\mu}e)$	C
C9p_bdemu	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_R\gamma^{\mu}b_R)(\bar{\mu}\gamma_{\mu}e)$	\mathbf{C}
C10_bdemu	$rac{4\dot{G}_F}{\sqrt{2}}V_{tb}V_{td}^*rac{e^2}{16\pi^2}(ar{d}_L\gamma^{\mu}b_L)(ar{\mu}\gamma_{\mu}\gamma_5 e)$	$^{\mathrm{C}}$
C10p_bdemu	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^* \frac{e^2}{16\pi^2}(\bar{d}_R\gamma^{\mu}b_R)(\bar{\mu}\gamma_{\mu}\gamma_5 e)$	$^{\mathrm{C}}$
CS_bdemu	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}m_b(\bar{d}_Lb_R)(\bar{\mu}e)$	\mathbf{C}
CSp_bdemu	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}m_b(\bar{d}_Rb_L)(\bar{\mu}e)$	$^{\mathrm{C}}$
CP_bdemu	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}m_b(\bar{d}_Lb_R)(\bar{\mu}\gamma_5e)$	$^{\mathrm{C}}$
CPp_bdemu	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}m_b(\bar{d}_Rb_L)(\bar{\mu}\gamma_5e)$	$^{\mathrm{C}}$

dbmue

WC name	Operator	Type
C9_bdmue	$rac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*rac{e^2}{16\pi^2}(ar{d}_L\gamma^{\mu}b_L)(ar{e}\gamma_{\mu}\mu)$	\mathbf{C}
C9p_bdmue	$\frac{4\dot{G}_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_R\gamma^{\mu}b_R)(\bar{e}\gamma_{\mu}\mu)$	\mathbf{C}
C10_bdmue	$rac{4 \dot{G}_F}{\sqrt{2}} V_{tb} V_{td}^* rac{e^2}{16\pi^2} (ar{d}_L \gamma^{\mu} b_L) (ar{e} \gamma_{\mu} \gamma_5 \mu)$	\mathbf{C}
C10p_bdmue	$\frac{4\dot{G}_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_R\gamma^{\mu}b_R)(\bar{e}\gamma_{\mu}\gamma_5\mu)$	\mathbf{C}
CS_bdmue	$\frac{4\dot{G}_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}m_b(\bar{d}_Lb_R)(\bar{e}\mu)$	\mathbf{C}
CSp_bdmue	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}m_b(\bar{d}_Rb_L)(\bar{e}\mu)$	\mathbf{C}
CP_bdmue	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}m_b(\bar{d}_Lb_R)(\bar{e}\gamma_5\mu)$	\mathbf{C}

WC name	Operator	Type
CPp_bdmue	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}m_b(\bar{d}_Rb_L)(\bar{e}\gamma_5\mu)$	С

${\tt dbetau}$

WC name	Operator	Type
C9_bdetau	$rac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*rac{e^2}{16\pi^2}(ar{d}_L\gamma^{\mu}b_L)(ar{ au}\gamma_{\mu}e)$	\mathbf{C}
C9p_bdetau	$rac{4ar{G}_{F}}{\sqrt{2}}V_{tb}V_{td}^{*}rac{e^{2}}{16\pi^{2}}(ar{d}_{R}\gamma^{\mu}b_{R})(ar{ au}\gamma_{\mu}e)$	\mathbf{C}
C10_bdetau	$rac{4ar{G}_F}{\sqrt{2}}V_{tb}V_{td}^*rac{e^2}{16\pi^2}(ar{d}_L\gamma^\mu b_L)(ar{ au}\gamma_\mu\gamma_5 e)$	\mathbf{C}
C10p_bdetau	$rac{4 ar{G_F}}{\sqrt{2}} V_{tb} V_{td}^* rac{e^2}{16\pi^2} (ar{d}_R \gamma^\mu b_R) (ar{ au} \gamma_\mu \gamma_5 e)$	\mathbf{C}
CS_bdetau	$\frac{4\dot{G}_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}m_b(\bar{d}_Lb_R)(\bar{\tau}e)$	\mathbf{C}
CSp_bdetau	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}m_b(\bar{d}_Rb_L)(\bar{\tau}e)$	\mathbf{C}
CP_bdetau	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}m_b(\bar{d}_Lb_R)(\bar{\tau}\gamma_5e)$	\mathbf{C}
CPp_bdetau	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}m_b(\bar{d}_Rb_L)(\bar{\tau}\gamma_5 e)$	C

dbtaue

WC name	Operator	Type
C9_bdtaue	$rac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*rac{e^2}{16\pi^2}(ar{d}_L\gamma^\mu b_L)(ar{e}\gamma_\mu au)$	$^{\mathrm{C}}$
C9p_bdtaue	$rac{4 ar{G_F}}{\sqrt{2}} V_{tb} V_{td}^* rac{e^2}{16 \pi^2} (ar{d}_R \gamma^\mu b_R) (ar{e} \gamma_\mu au)$	\mathbf{C}
C10_bdtaue	$rac{4 \overset{\leftarrow}{Q_F}}{\sqrt{2}} V_{tb} V_{td}^* rac{e^2}{16\pi^2} (ar{d}_L \gamma^\mu b_L) (ar{e} \gamma_\mu \gamma_5 au)$	\mathbf{C}
C10p_bdtaue	$rac{4 \stackrel{\longleftarrow}{G_F}}{\sqrt{2}} V_{tb} V_{td}^* rac{e^2}{16\pi^2} (ar{d}_R \gamma^\mu b_R) (ar{e} \gamma_\mu \gamma_5 au)$	\mathbf{C}
CS_bdtaue	$rac{4ar{G_F}}{\sqrt{2}}V_{tb}V_{td}^*rac{e^2}{16\pi^2}m_b(ar{d}_L b_R)(ar{e} au)$	\mathbf{C}
CSp_bdtaue	$rac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*rac{e^2}{16\pi^2}m_b(ar{d}_Rb_L)(ar{e} au)$	\mathbf{C}
CP_bdtaue	$\frac{4 G_F}{\sqrt{2}} V_{tb} V_{td}^* \frac{e^2}{16\pi^2} m_b(\bar{d}_L b_R) (\bar{e} \gamma_5 \tau)$	\mathbf{C}
CPp_bdtaue	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}m_b(\bar{d}_Rb_L)(\bar{e}\gamma_5\tau)$	\mathbf{C}

${\tt dbmutau}$

WC name	Operator	Type
C9_bdmutau	$rac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*rac{e^2}{16\pi^2}(ar{d}_L\gamma^{\mu}b_L)(ar{ au}\gamma_{\mu}\mu)$	C
C9p_bdmutau	$rac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*rac{e^2}{16\pi^2}(ar{d}_R\gamma^{\mu}b_R)(ar{ au}\gamma_{\mu}\mu)$	\mathbf{C}
C10_bdmutau	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_L\gamma^{\mu}b_L)(\bar{\tau}\gamma_{\mu}\gamma_5\mu)$	\mathbf{C}

WC name	Operator	Type
C10p_bdmutau	$rac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*rac{e^2}{16\pi^2}(ar{d}_R\gamma^{\mu}b_R)(ar{ au}\gamma_{\mu}\gamma_{5}\mu)$	C
CS_bdmutau	$\frac{4G_F^2}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}m_b(\bar{d}_Lb_R)(\bar{\tau}\mu)$	\mathbf{C}
CSp_bdmutau	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}m_b(\bar{d}_Rb_L)(\bar{\tau}\mu)$	\mathbf{C}
CP_bdmutau	$\frac{4 \check{G}_F}{\sqrt{2}} V_{tb} V_{td}^* \frac{e^2}{16\pi^2} m_b (\bar{d}_L b_R) (\bar{\tau} \gamma_5 \mu)$	\mathbf{C}
CPp_bdmutau	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}m_b(\bar{d}_Rb_L)(\bar{\tau}\gamma_5\mu)$	С

${\tt dbtaumu}$

WC name	Operator	Type
C9_bdtaumu	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_L\gamma^{\mu}b_L)(\bar{\mu}\gamma_{\mu}\tau)$	C
C9p_bdtaumu	$rac{4 \overset{.}{G_F}}{\sqrt{2}} V_{tb} V_{td}^* rac{e^2}{16 \pi^2} (ar{d}_R \gamma^\mu b_R) (ar{\mu} \gamma_\mu au)$	$^{\mathrm{C}}$
C10_bdtaumu	$rac{4 ilde{G}_F}{\sqrt{2}} V_{tb} V_{td}^* rac{e^2}{16 \pi^2} (ar{d}_L \gamma^\mu b_L) (ar{\mu} \gamma_\mu \gamma_5 au)$	\mathbf{C}
C10p_bdtaumu	$rac{4\dot{G}_F}{\sqrt{2}}V_{tb}V_{td}^*rac{e^2}{16\pi^2}(ar{d}_R\gamma^\mu b_R)(ar{\mu}\gamma_\mu\gamma_5 au)$	$^{\mathrm{C}}$
CS_bdtaumu	$rac{4\dot{G}_F}{\sqrt{2}}V_{tb}V_{td}^*rac{e^2}{16\pi^2}m_b(ar{d}_Lb_R)(ar{\mu} au)$	$^{\mathrm{C}}$
CSp_bdtaumu	$rac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*rac{e^2}{16\pi^2}m_b(ar{d}_Rb_L)(ar{\mu} au)$	$^{\mathrm{C}}$
CP_bdtaumu	$rac{4\dot{G}_{F}}{\sqrt{2}}V_{tb}V_{td}^{*}rac{e^{2}}{16\pi^{2}}m_{b}(ar{d}_{L}b_{R})(ar{\mu}\gamma_{5} au)$	$^{\mathrm{C}}$
CPp_bdtaumu	$\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}m_b(\bar{d}_Rb_L)(\bar{\mu}\gamma_5\tau)$	C

cbenu

WC name	Operator	Type
CVL_bcenue	$-\frac{4G_F}{\sqrt{2}}V_{cb}(\bar{c}_L\gamma^{\mu}b_L)(\bar{e}_L\gamma_{\mu}\nu_{eL})$	
CVR_bcenue	$-rac{4rac{arphi_F}{\sqrt{2}}V_{cb}(ar{c}_R\gamma^\mu b_R)(ar{e}_L\gamma_\mu u_{eL})$	\mathbf{C}
CSR_bcenue	$-\frac{4G_F}{\sqrt{2}}V_{cb}(\bar{c}_Lb_R)(\bar{e}_R\nu_{eL})$	\mathbf{C}
CSL_bcenue	$-rac{4G_F}{\sqrt{2}}V_{cb}(ar{c}_Rb_L)(ar{e}_R u_{eL})$	\mathbf{C}
CT_bcenue	$-rac{4ar{G}_F}{\sqrt{2}}V_{cb}(ar{c}_R\sigma^{\mu u}b_L)(ar{e}_R\sigma_{\mu u} u_{eL})$	\mathbf{C}
CVL_bcenumu	$-rac{4ar{G}_F}{\sqrt{2}}V_{cb}(ar{c}_L\gamma^\mu b_L)(ar{e}_L\gamma_\mu u_{\mu L})$	\mathbf{C}
CVR_bcenumu	$-rac{4ar{G}_F}{\sqrt{2}}V_{cb}(ar{c}_R\gamma^\mu b_R)(ar{e}_L\gamma_\mu u_{\mu L})$	\mathbf{C}
CSR_bcenumu	$-\frac{4\widetilde{G}_F}{\sqrt{2}}V_{cb}(\bar{c}_Lb_R)(\bar{e}_R\nu_{\mu L})$	\mathbf{C}
CSL_bcenumu	$-\frac{4\widetilde{G}_F}{\sqrt{2}}V_{cb}(\bar{c}_Rb_L)(\bar{e}_R\nu_{\mu L})$	\mathbf{C}
CT_bcenumu	$-\frac{4G_F}{\sqrt{2}}V_{cb}(\bar{c}_R\sigma^{\mu\nu}b_L)(\bar{e}_R\sigma_{\mu\nu}\nu_{\mu L})$	\mathbf{C}
CVL_bcenutau	$-\frac{4G_F}{\sqrt{2}}V_{cb}(\bar{c}_L\gamma^\mu b_L)(\bar{e}_L\gamma_\mu u_{\tau L})$	\mathbf{C}
CVR_bcenutau	$-rac{4\widetilde{G_F}}{\sqrt{2}}V_{cb}(ar{c}_R\gamma^\mu b_R)(ar{e}_L\gamma_\mu u_{ au L})$	\mathbf{C}
CSR_bcenutau	$-rac{4\overleftarrow{G}_F}{\sqrt{2}}V_{cb}(ar{c}_Lb_R)(ar{e}_R u_{ au L})$	\mathbf{C}

WC name	Operator	Type
CSL_bcenutau	$-\frac{4G_F}{\sqrt{2}}V_{cb}(\bar{c}_Rb_L)(\bar{e}_R\nu_{\tau L})$	С
CT_bcenutau	$-\frac{4G_F}{\sqrt{2}}V_{cb}(\bar{c}_Rb_L)(\bar{e}_R\nu_{\tau L}) \\ -\frac{4G_F}{\sqrt{2}}V_{cb}(\bar{c}_R\sigma^{\mu\nu}b_L)(\bar{e}_R\sigma_{\mu\nu}\nu_{\tau L})$	\mathbf{C}

${\tt ubenu}$

WC name	Operator	Type
CVL_buenue	$-\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_L\gamma^{\mu}b_L)(\bar{e}_L\gamma_{\mu}\nu_{eL})$	
CVR_buenue	$-rac{4\widetilde{G}_F^2}{\sqrt{2}}V_{ub}(\bar{u}_R\gamma^\mu b_R)(\bar{e}_L\gamma_\mu u_{eL})$	$^{\mathrm{C}}$
CSR_buenue	$-rac{4\check{G}_F}{\sqrt{2}}V_{ub}(\bar{u}_Lb_R)(\bar{e}_R u_{eL})$	$^{\mathrm{C}}$
CSL_buenue	$-\frac{4\tilde{G}_F}{\sqrt{2}}V_{ub}(\bar{u}_Rb_L)(\bar{e}_R\nu_{eL})$	$^{\mathrm{C}}$
CT_buenue	$-rac{4\check{G}_F}{\sqrt{2}}V_{ub}(\bar{u}_R\sigma^{\mu u}b_L)(\bar{e}_R\sigma_{\mu u} u_{eL})$	$^{\mathrm{C}}$
CVL_buenumu	$-rac{4\check{G}_F}{\sqrt{2}}V_{ub}(\bar{u}_L\gamma^\mu b_L)(\bar{e}_L\gamma_\mu u_{\mu L})$	$^{\mathrm{C}}$
CVR_buenumu	$-\frac{4\tilde{G}_F}{\sqrt{2}}V_{ub}(\bar{u}_R\gamma^\mu b_R)(\bar{e}_L\gamma_\mu\nu_{\mu L})$	$^{\mathrm{C}}$
CSR_buenumu	$-rac{4\check{G}_F}{\sqrt{2}}V_{ub}(\bar{u}_Lb_R)(\bar{e}_R u_{\mu L})$	$^{\mathrm{C}}$
CSL_buenumu	$-rac{4\widetilde{G_F}}{\sqrt{2}}V_{ub}(\bar{u}_Rb_L)(\bar{e}_R u_{\mu L})$	$^{\mathrm{C}}$
CT_buenumu	$-rac{4\check{G}_F}{\sqrt{2}}V_{ub}(\bar{u}_R\sigma^{\mu u}b_L)(\bar{e}_R\sigma_{\mu u} u_{\mu L})$	$^{\mathrm{C}}$
CVL_buenutau	$-rac{4\check{G}_F}{\sqrt{2}}V_{ub}(\bar{u}_L\gamma^\mu b_L)(\bar{e}_L\gamma_\mu u_{ au L})$	$^{\mathrm{C}}$
CVR_buenutau	$-\frac{4\tilde{G}_F}{\sqrt{2}}V_{ub}(\bar{u}_R\gamma^\mu b_R)(\bar{e}_L\gamma_\mu\nu_{\tau L})$	$^{\mathrm{C}}$
CSR_buenutau	$-\frac{4\tilde{G}_{F}^{2}}{\sqrt{2}}V_{ub}(\bar{u}_{L}b_{R})(\bar{e}_{R} u_{ au L})$	$^{\mathrm{C}}$
CSL_buenutau	$-rac{4\overset{\circ}{Q_{F}^{2}}}{\sqrt{2}}V_{ub}(ar{u}_{R}b_{L})(ar{e}_{R} u_{ au L})$	$^{\mathrm{C}}$
CT_buenutau	$-rac{4\widetilde{\zeta_F}}{\sqrt{2}}V_{ub}(ar{u}_R\sigma^{\mu u}b_L)(ar{e}_R\sigma_{\mu u} u_{ au L})$	C

usenu

WC name	Operator	Type
CVL_suenue	$-\frac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_L\gamma^{\mu}s_L)(\bar{e}_L\gamma_{\mu}\nu_{eL})$	C
CVR_suenue	$-rac{4ar{G}_F}{\sqrt{2}}V_{us}(ar{u}_R\gamma^\mu s_R)(ar{e}_L\gamma_\mu u_{eL})$	$^{\mathrm{C}}$
CSR_suenue	$-rac{4G_F}{\sqrt{2}}V_{us}(ar{u}_L s_R)(ar{e}_R u_{eL})$	$^{\mathrm{C}}$
CSL_suenue	$-rac{4ar{G}_F}{\sqrt{2}}V_{us}(ar{u}_Rs_L)(ar{e}_R u_{eL})$	$^{\mathrm{C}}$
CT_suenue	$-rac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_R\sigma^{\mu u}s_L)(\bar{e}_R\sigma_{\mu u} u_{eL})$	\mathbf{C}
CVL_suenumu	$-rac{4ar{G}_F}{\sqrt{2}}V_{us}(ar{u}_L\gamma^\mu s_L)(ar{e}_L\gamma_\mu u_{\mu L})$	\mathbf{C}
CVR_suenumu	$-rac{4ar{G}_F}{\sqrt{2}}V_{us}(ar{u}_R\gamma^\mu s_R)(ar{e}_L\gamma_\mu u_{\mu L})$	\mathbf{C}
CSR_suenumu	$-rac{4ar{G}_F}{\sqrt{2}}V_{us}(ar{u}_L s_R)(ar{e}_R u_{\mu L})$	\mathbf{C}
CSL_suenumu	$-rac{4\widetilde{G_F}}{\sqrt{2}}V_{us}(\bar{u}_Rs_L)(\bar{e}_R u_{\mu L})$	\mathbf{C}
CT_suenumu	$-\frac{4\overleftarrow{\zeta_F}}{\sqrt{2}}V_{us}(\bar{u}_R\sigma^{\mu\nu}s_L)(\bar{e}_R\sigma_{\mu\nu}\nu_{\mu L})$	\mathbf{C}

WC name	Operator	Type
CVL_suenutau	$-rac{4G_F}{\sqrt{2}}V_{us}(ar{u}_L\gamma^\mu s_L)(ar{e}_L\gamma_\mu u_{ au L})$	\overline{C}
CVR_suenutau	$-rac{4G_F}{\sqrt{2}}V_{us}(ar{u}_L\gamma^{\mu}s_L)(ar{e}_L\gamma_{\mu} u_{ au L}) \ -rac{4G_F}{\sqrt{2}}V_{us}(ar{u}_R\gamma^{\mu}s_R)(ar{e}_L\gamma_{\mu} u_{ au L})$	\mathbf{C}
CSR_suenutau	$-\frac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_L s_R)(\bar{e}_R \nu_{\tau L})$	\mathbf{C}
CSL_suenutau	$-rac{4ar{G_F}}{\sqrt{2}}V_{us}(ar{u}_Rs_L)(ar{e}_R u_{ au L})$	\mathbf{C}
CT_suenutau	$-rac{4G_F}{4G_F}V_{us}(ar{u}_Ls_R)(ar{e}_R u_{ au L}) \ -rac{4G_F}{\sqrt{2}}V_{us}(ar{u}_Rs_L)(ar{e}_R u_{ au L}) \ -rac{4G_F}{\sqrt{2}}V_{us}(ar{u}_Rs_L)(ar{e}_R\sigma_{\mu u} u_{ au L})$	C

${\tt cbmunu}$

WC name	Operator	Type
CVL_bcmunue	$-\frac{4G_F}{\sqrt{2}}V_{cb}(\bar{c}_L\gamma^{\mu}b_L)(\bar{\mu}_L\gamma_{\mu}\nu_{eL})$	C
CVR_bcmunue	$-rac{4ar{G_F}}{\sqrt{2}}V_{cb}(ar{c}_R\gamma^\mu b_R)(ar{\mu}_L\gamma_\mu u_{eL})$	\mathbf{C}
CSR_bcmunue	$-\frac{4G_F}{\sqrt{2}}V_{cb}(\bar{c}_L b_R)(\bar{\mu}_R \nu_{eL})$	\mathbf{C}
CSL_bcmunue	$-\frac{4G_F}{\sqrt{2}}V_{cb}(\bar{c}_Rb_L)(\bar{\mu}_R\nu_{eL})$	\mathbf{C}
CT_bcmunue	$-rac{4ar{G_F}}{\sqrt{2}}V_{cb}(ar{c}_R\sigma^{\mu u}b_L)(ar{\mu}_R\sigma_{\mu u} u_{eL})$	\mathbf{C}
CVL_bcmunumu	$-rac{4ar{G_F}}{\sqrt{2}}V_{cb}(ar{c}_L\gamma^\mu b_L)(ar{\mu}_L\gamma_\mu u_{\mu L})$	\mathbf{C}
CVR_bcmunumu	$-rac{4ar{G_F}}{\sqrt{2}}V_{cb}(ar{c}_R\gamma^\mu b_R)(ar{\mu}_L\gamma_\mu u_{\mu L})$	\mathbf{C}
CSR_bcmunumu	$-\frac{4G_F}{\sqrt{2}}V_{cb}(\bar{c}_L b_R)(\bar{\mu}_R \nu_{\mu L})$	\mathbf{C}
CSL_bcmunumu	$-\frac{4G_F}{\sqrt{2}}V_{cb}(\bar{c}_Rb_L)(\bar{\mu}_R u_{\mu L})$	\mathbf{C}
CT_bcmunumu	$-rac{4G_F}{\sqrt{2}}V_{cb}(ar{c}_R\sigma^{\mu u}b_L)(ar{\mu}_R\sigma_{\mu u} u_{\mu L})$	\mathbf{C}
CVL_bcmunutau	$-rac{4\widetilde{G}_F}{\sqrt{2}}V_{cb}(ar{c}_L\gamma^\mu b_L)(ar{\mu}_L\gamma_\mu u_{ au L})$	\mathbf{C}
CVR_bcmunutau	$-rac{4\widetilde{G}_F^2}{\sqrt{2}}V_{cb}(\bar{c}_R\gamma^\mu b_R)(\bar{\mu}_L\gamma_\mu u_{\tau L})$	\mathbf{C}
CSR_bcmunutau	$-rac{4G_F^2}{\sqrt{2}}V_{cb}(ar{c}_Lb_R)(ar{\mu}_R u_{ au L})$	\mathbf{C}
CSL_bcmunutau	$-rac{4G_F^c}{\sqrt{2}}V_{cb}(ar{c}_Rb_L)(ar{\mu}_R u_{ au L})$	\mathbf{C}
CT_bcmunutau	$-rac{4\overset{\circ}{G_F}}{\sqrt{2}}V_{cb}(ar{c}_R\sigma^{\mu u}b_L)(ar{\mu}_R\sigma_{\mu u} u_{ au L})$	\mathbf{C}

${\tt ubmunu}$

WC name	Operator	Type
CVL_bumunue	$-rac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_L\gamma^\mu b_L)(\bar{\mu}_L\gamma_\mu u_{eL})$	C
CVR_bumunue	$-\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_R\gamma^{\mu}b_R)(\bar{\mu}_L\gamma_{\mu}\nu_{eL})$	\mathbf{C}
CSR_bumunue	$-\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_Lb_R)(\bar{\mu}_R\nu_{eL})$	\mathbf{C}
CSL_bumunue	$-\frac{4G_F}{G}V_{ub}(\bar{\mu}_B b_I)(\bar{\mu}_B \nu_{aI})$	\mathbf{C}
CT_bumunue	$-\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_R\sigma^{\mu\nu}b_L)(\bar{\mu}_R\sigma_{\mu\nu}\nu_{eL})$	\mathbf{C}
CVL_bumunumu	$-rac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_L\gamma^\mu b_L)(\bar{\mu}_L\gamma_\mu u_{\mu L})$	\mathbf{C}
CVR_bumunumu	$-\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_R\sigma^{\mu\nu}b_L)(\bar{\mu}_R\sigma_{\mu\nu}\nu_{eL}) \\ -\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_L\gamma^{\mu}b_L)(\bar{\mu}_L\gamma_{\mu}\nu_{\mu L}) \\ -\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_R\gamma^{\mu}b_R)(\bar{\mu}_L\gamma_{\mu}\nu_{\mu L})$	\mathbf{C}

WC name	Operator	Type
CSR_bumunumu	$-\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_L b_R)(\bar{\mu}_R \nu_{\mu L})$	С
CSL_bumunumu	$-\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_L b_R)(\bar{\mu}_R \nu_{\mu L}) -\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_R b_L)(\bar{\mu}_R \nu_{\mu L})$	\mathbf{C}
CT_bumunumu	$-\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_R\sigma^{\mu\nu}b_L)(\bar{\mu}_R\sigma_{\mu\nu}\nu_{\mu L})$	\mathbf{C}
CVL_bumunutau	$-rac{4ar{G_F}}{\sqrt{2}}V_{ub}(ar{u}_L\gamma^\mu b_L)(ar{\mu}_L\gamma_\mu u_{ au L})$	\mathbf{C}
CVR_bumunutau	$-\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_R\gamma^{\mu}b_R)(\bar{\mu}_L\gamma_{\mu}\nu_{\tau L})$	\mathbf{C}
CSR_bumunutau	$-\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_Lb_R)(\bar{\mu}_R\nu_{\tau L})$	\mathbf{C}
CSL_bumunutau	$-rac{4G_F}{\sqrt{2}}V_{ub}(ar{u}_Rb_L)(ar{\mu}_R u_{ au L})$	\mathbf{C}
CT_bumunutau	$-\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_R\sigma^{\mu\nu}b_L)(\bar{\mu}_R\sigma_{\mu\nu}\nu_{\tau L})$	С

usmunu

WC name	Operator	Type
CVL_sumunue	$-\frac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_L\gamma^{\mu}s_L)(\bar{\mu}_L\gamma_{\mu}\nu_{eL})$	C
CVR_sumunue	$-rac{4rac{G_F}{\sqrt{2}}}{\sqrt{2}}V_{us}(ar{u}_R\gamma^\mu s_R)(ar{\mu}_L\gamma_\mu u_{eL})$	\mathbf{C}
CSR_sumunue	$-rac{4\widetilde{G}_F^c}{\sqrt{2}}V_{us}(ar{u}_L s_R)(ar{\mu}_R u_{eL})$	\mathbf{C}
CSL_sumunue	$-rac{4\widetilde{G_F}}{\sqrt{2}}V_{us}(\bar{u}_Rs_L)(\bar{\mu}_R u_{eL})$	\mathbf{C}
CT_sumunue	$-rac{4rac{G_F}{\sqrt{2}}}{\sqrt{2}}V_{us}(ar{u}_R\sigma^{\mu u}s_L)(ar{\mu}_R\sigma_{\mu u} u_{eL})$	\mathbf{C}
CVL_sumunumu	$-rac{4\widetilde{G_F}}{\sqrt{2}}V_{us}(ar{u}_L\gamma^\mu s_L)(ar{\mu}_L\gamma_\mu u_{\mu L})$	\mathbf{C}
CVR_sumunumu	$-rac{4rac{G_F}}{\sqrt{2}}V_{us}(ar{u}_R\gamma^\mu s_R)(ar{\mu}_L\gamma_\mu u_{\mu L})$	\mathbf{C}
CSR_sumunumu	$-rac{4\widetilde{G_F}}{\sqrt{2}}V_{us}(\bar{u}_L s_R)(\bar{\mu}_R u_{\mu L})$	\mathbf{C}
CSL_sumunumu	$-rac{4\widetilde{G_F}}{\sqrt{2}}V_{us}(ar{u}_Rs_L)(ar{\mu}_R u_{\mu L})$	\mathbf{C}
CT_sumunumu	$-rac{4rac{G_F}{\sqrt{2}}}{\sqrt{2}}V_{us}(ar{u}_R\sigma^{\mu u}s_L)(ar{\mu}_R\sigma_{\mu u} u_{\mu L})$	\mathbf{C}
CVL_sumunutau	$-rac{4\widetilde{G_F}}{\sqrt{2}}V_{us}(ar{u}_L\gamma^\mu s_L)(ar{\mu}_L\gamma_\mu u_{ au L})$	\mathbf{C}
CVR_sumunutau	$-rac{4\widetilde{G_F}}{\sqrt{2}}V_{us}(ar{u}_R\gamma^\mu s_R)(ar{\mu}_L\gamma_\mu u_{ au L})$	\mathbf{C}
CSR_sumunutau	$-rac{4\overset{\sim}{G_F}}{\sqrt{2}}V_{us}(ar{u}_Ls_R)(ar{\mu}_R u_{ au L})$	\mathbf{C}
CSL_sumunutau	$-rac{4\widetilde{G}_F^2}{\sqrt{2}}V_{us}(ar{u}_Rs_L)(ar{\mu}_R u_{ au L})$	\mathbf{C}
CT_sumunutau	$-rac{4\ddot{G}_F^2}{\sqrt{2}}V_{us}(\bar{u}_R\sigma^{\mu\nu}s_L)(\bar{\mu}_R\sigma_{\mu\nu} u_{\tau L})$	\mathbf{C}

cbtaunu

WC name	Operator	Type
CVL_bctaunue	$\begin{split} &-\frac{4G_F}{\sqrt{2}}V_{cb}(\bar{c}_L\gamma^{\mu}b_L)(\bar{\tau}_L\gamma_{\mu}\nu_{eL}) \\ &-\frac{4G_F}{\sqrt{2}}V_{cb}(\bar{c}_R\gamma^{\mu}b_R)(\bar{\tau}_L\gamma_{\mu}\nu_{eL}) \\ &-\frac{4G_F}{\sqrt{2}}V_{cb}(\bar{c}_Lb_R)(\bar{\tau}_R\nu_{eL}) \\ &-\frac{4G_F}{\sqrt{2}}V_{cb}(\bar{c}_Rb_L)(\bar{\tau}_R\nu_{eL}) \end{split}$	С
CVR_bctaunue	$-rac{4ar{G_F}}{\sqrt{2}}V_{cb}(ar{c}_R\gamma^\mu b_R)(ar{ au}_L\gamma_\mu u_{eL})$	\mathbf{C}
CSR_bctaunue	$-rac{4ar{G_F}}{\sqrt{2}}V_{cb}(ar{c}_Lb_R)(ar{ au}_R u_{eL})$	\mathbf{C}
CSL_bctaunue	$-\frac{4G_F}{\sqrt{2}}V_{cb}(\bar{c}_Rb_L)(\bar{\tau}_R u_{eL})$	\mathbf{C}

WC name	Operator	Type
CT_bctaunue	$-\frac{4G_F}{\sqrt{2}}V_{cb}(\bar{c}_R\sigma^{\mu\nu}b_L)(\bar{\tau}_R\sigma_{\mu\nu}\nu_{eL})$	C
CVL_bctaunumu	$-rac{4G_F}{\sqrt{2}}V_{cb}(ar{c}_L\gamma^\mu b_L)(ar{ au}_L\gamma_\mu u_{\mu L})$	$^{\mathrm{C}}$
CVR_bctaunumu	$-\frac{4G_F}{\sqrt{2}}V_{cb}(\bar{c}_R\gamma^{\mu}b_R)(\bar{\tau}_L\gamma_{\mu}\nu_{\mu L})$	$^{\mathrm{C}}$
CSR_bctaunumu	$-\frac{4G_F}{\sqrt{2}}V_{cb}(\bar{c}_L b_R)(\bar{\tau}_R \nu_{\mu L})$	$^{\mathrm{C}}$
CSL_bctaunumu	$-\frac{4G_F}{\sqrt{2}}V_{cb}(\bar{c}_Rb_L)(\bar{\tau}_R\nu_{\mu L})$	$^{\mathrm{C}}$
CT_bctaunumu	$-\frac{4G_F}{\sqrt{2}}V_{cb}(\bar{c}_R\sigma^{\mu\nu}b_L)(\bar{\tau}_R\sigma_{\mu\nu}\nu_{\mu L})$	\mathbf{C}
CVL_bctaunutau	$-rac{4G_F}{\sqrt{2}}V_{cb}(\bar{c}_L\gamma^\mu b_L)(\bar{ au}_L\gamma_\mu u_{ au L})$	\mathbf{C}
CVR_bctaunutau	$-rac{4G_F}{\sqrt{2}}V_{cb}(ar{c}_R\gamma^\mu b_R)(ar{ au}_L\gamma_\mu u_{ au L})$	$^{\mathrm{C}}$
CSR_bctaunutau	$-\frac{4G_F}{\sqrt{2}}V_{cb}(\bar{c}_L b_R)(\bar{\tau}_R \nu_{\tau L})$	$^{\mathrm{C}}$
CSL_bctaunutau	$-rac{4 ilde{G_F}}{\sqrt{2}}V_{cb}(ar{c}_Rb_L)(ar{ au}_R u_{ au L})$	\mathbf{C}
CT_bctaunutau	$-\frac{4\tilde{G}_F}{\sqrt{2}}V_{cb}(\bar{c}_R\sigma^{\mu\nu}b_L)(\bar{\tau}_R\sigma_{\mu\nu}\nu_{\tau L})$	С

ubtaunu

WC name	Operator	Type
CVL_butaunue	$-\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_L\gamma^{\mu}b_L)(\bar{\tau}_L\gamma_{\mu}\nu_{eL})$	C
CVR_butaunue	$-rac{4\widetilde{G}_F^2}{\sqrt{2}}V_{ub}(ar{u}_R\gamma^\mu b_R)(ar{ au}_L\gamma_\mu u_{eL})$	\mathbf{C}
CSR_butaunue	$-\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_Lb_R)(\bar{\tau}_R\nu_{eL})$	$^{\mathrm{C}}$
CSL_butaunue	$-\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_Rb_L)(\bar{\tau}_R\nu_{eL})$	\mathbf{C}
CT_butaunue	$-\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_R\sigma^{\mu\nu}b_L)(\bar{\tau}_R\sigma_{\mu\nu}\nu_{eL})$	\mathbf{C}
CVL_butaunumu	$-rac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_L\gamma^\mu b_L)(\bar{ au}_L\gamma_\mu u_{\mu L})$	\mathbf{C}
CVR_butaunumu	$-\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_R\gamma^\mu b_R)(\bar{\tau}_L\gamma_\mu\nu_{\mu L})$	$^{\mathrm{C}}$
CSR_butaunumu	$-\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_Lb_R)(\bar{\tau}_R\nu_{\mu L})$	$^{\mathrm{C}}$
CSL_butaunumu	$-\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_Rb_L)(\bar{\tau}_R u_{\mu L})$	$^{\mathrm{C}}$
CT_butaunumu	$-\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_R\sigma^{\mu\nu}b_L)(\bar{\tau}_R\sigma_{\mu\nu}\nu_{\mu L})$	$^{\mathrm{C}}$
CVL_butaunutau	$-\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_L\gamma^{\mu}b_L)(\bar{\tau}_L\gamma_{\mu}\nu_{\tau L})$	$^{\mathrm{C}}$
CVR_butaunutau	$-\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_R\gamma^\mu b_R)(\bar{\tau}_L\gamma_\mu\nu_{\tau L})$	$^{\mathrm{C}}$
CSR_butaunutau	$-\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_Lb_R)(\bar{\tau}_R\nu_{\tau L})$	$^{\mathrm{C}}$
CSL_butaunutau	$-\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_Rb_L)(\bar{\tau}_R\nu_{\tau L})$	$^{\mathrm{C}}$
CT_butaunutau	$-rac{4 \overleftarrow{G_F}}{\sqrt{2}} V_{ub} (ar{u}_R \sigma^{\mu u} b_L) (ar{ au}_R \sigma_{\mu u} u_{ au L})$	$^{\mathrm{C}}$

ustaunu

WC name	Operator	Type
CVL_sutaunue	$-rac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_L\gamma^\mu s_L)(\bar{ au}_L\gamma_\mu u_{eL})$	С

WC name	Operator	Type
CVR_sutaunue	$-\frac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_R\gamma^{\mu}s_R)(\bar{\tau}_L\gamma_{\mu}\nu_{eL})$	C
CSR_sutaunue	$-\frac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_L s_R)(\bar{\tau}_R \nu_{eL})$	\mathbf{C}
CSL_sutaunue	$-\frac{4G_F^2}{\sqrt{2}}V_{us}(\bar{u}_R s_L)(\bar{\tau}_R \nu_{eL})$	\mathbf{C}
CT_sutaunue	$-\frac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_R\sigma^{\mu\nu}s_L)(\bar{\tau}_R\sigma_{\mu\nu}\nu_{eL})$	\mathbf{C}
CVL_sutaunumu	$-rac{4G_F}{\sqrt{2}}V_{us}(ar{u}_L\gamma^\mu s_L)(ar{ au}_L\gamma_\mu u_{\mu L})$	\mathbf{C}
CVR_sutaunumu	$-rac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_R\gamma^\mu s_R)(\bar{ au}_L\gamma_\mu u_{\mu L})$	\mathbf{C}
CSR_sutaunumu	$-\frac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_L s_R)(\bar{\tau}_R \nu_{\mu L})$	\mathbf{C}
CSL_sutaunumu	$-rac{4G_F}{\sqrt{2}}V_{us}(ar{u}_Rs_L)(ar{ au}_R u_{\mu L})$	\mathbf{C}
CT_sutaunumu	$-rac{4G_F}{\sqrt{2}}V_{us}(ar{u}_R\sigma^{\mu u}s_L)(ar{ au}_R\sigma_{\mu u} u_{\mu L})$	$^{\mathrm{C}}$
$\mathtt{CVL_sutaunutau}$	$-rac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_L\gamma^\mu s_L)(\bar{ au}_L\gamma_\mu u_{ au L})$	$^{\mathrm{C}}$
CVR_sutaunutau	$-\frac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_R\gamma^\mu s_R)(\bar{\tau}_L\gamma_\mu\nu_{\tau L})$	\mathbf{C}
CSR_sutaunutau	$-\frac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_L s_R)(\bar{\tau}_R \nu_{\tau L})$	\mathbf{C}
CSL_sutaunutau	$-\frac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_Rs_L)(\bar{\tau}_R\nu_{\tau L})$	\mathbf{C}
CT_sutaunutau	$-\frac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_R\sigma^{\mu\nu}s_L)(\bar{\tau}_R\sigma_{\mu\nu}\nu_{\tau L})$	C