# Basis flavio (EFT WET-4)

# Sectors

The effective Lagrangian is defined as

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

sdsd

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

cucu

WC name	Operator	Type
CVLL_ucuc	$(\bar{c}_L \gamma^\mu u_L)(\bar{c}_L \gamma_\mu u_L)$	С
CVRR_ucuc	$(\bar{c}_R \gamma^\mu u_R)(\bar{c}_R \gamma_\mu u_R)$	$\mathbf{C}$
CSLL_ucuc	$(\bar{c}_R u_L)(\bar{c}_R u_L)$	$\mathbf{C}$
CSRR_ucuc	$(\bar{c}_L u_R)(\bar{c}_L u_R)$	$\mathbf{C}$
CTLL_ucuc	$(\bar{c}_R \sigma^{\mu\nu} u_L)(\bar{c}_R \sigma_{\mu\nu} u_L)$	$\mathbf{C}$
CTRR_ucuc	$(\bar{c}_L \sigma^{\mu\nu} u_R)(\bar{c}_L \sigma_{\mu\nu} u_R)$	$\mathbf{C}$
CVLR_ucuc	$(\bar{c}_L \gamma^\mu u_L)(\bar{c}_R \gamma_\mu u_R)$	$\mathbf{C}$
CSLR_ucuc	$(\bar{c}_R u_L)(\bar{c}_L u_R)$	$\mathbf{C}$

 $\operatorname{sd}$ 

WC name	Operator	Type
C9_sdee	$rac{4G_F}{\sqrt{2}} V_{ts} V_{td}^* rac{e^2}{16\pi^2} (ar{d}_L \gamma^\mu s_L) (ar{e} \gamma_\mu e)$	$^{\mathrm{C}}$
C9p_sdee	$rac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*rac{e^2}{16\pi^2}(ar{d}_R\gamma^{\mu}s_R)(ar{e}\gamma_{\mu}e)$	$\mathbf{C}$
C10_sdee	$rac{4ar{G_F}}{\sqrt{2}}V_{ts}V_{td}^*rac{e^2}{16\pi^2}(ar{d}_L\gamma^{\mu}s_L)(ar{e}\gamma_{\mu}\gamma_5 e)$	$\mathbf{C}$

C name	Operator	Type
Op_sdee	$rac{4G_F}{\sqrt{2}} V_{ts} V_{td}^* rac{e^2}{16\pi^2} (ar{d}_R \gamma^\mu s_R) (ar{e} \gamma_\mu \gamma_5 e)$	C
sdee	$rac{4ar{Q}_{F}^{2}}{\sqrt{2}}V_{ts}V_{td}^{*}rac{e^{2}}{16\pi^{2}}m_{s}(ar{d}_{L}s_{R})(ar{e}e)$	$\mathbf{C}$
_sdee	$\frac{4V_{L}^{2}}{\sqrt{2}}V_{ts}V_{td}^{*}\frac{e^{2}}{16\pi^{2}}m_{s}(\bar{d}_{R}s_{L})(\bar{e}e)$	$\mathbf{C}$
sdee	$\frac{4V_{L_{s}}^{2}}{\sqrt{2}}V_{ts}V_{td}^{*}\frac{e^{2}}{16\pi^{2}}m_{s}(\bar{d}_{L}s_{R})(\bar{e}\gamma_{5}e)$	$\mathbf{C}$
_sdee	$\frac{4Q_F^2}{\sqrt{2}}V_{ts}V_{td}^*\frac{e^2}{16\pi^2}m_s(\bar{d}_Rs_L)(\bar{e}\gamma_5e)$	$\mathbf{C}$
sdmumu	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_L\gamma^{\mu}s_L)(\bar{\mu}\gamma_{\mu}\mu)$	$\mathbf{C}$
o_sdmumu	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^* \frac{e^2}{16\pi^2}(\bar{d}_R\gamma^{\mu}s_R)(\bar{\mu}\gamma_{\mu}\mu)$	$\mathbf{C}$
O_sdmumu	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_L\gamma^{\mu}s_L)(\bar{\mu}\gamma_{\mu}\gamma_5\mu)$	$\mathbf{C}$
Op_sdmumu	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_R\gamma^{\mu}s_R)(\bar{\mu}\gamma_{\mu}\gamma_5\mu)$	$\mathbf{C}$
sdmumu	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*\frac{e^2}{16\pi^2}m_s(\bar{d}_L s_R)(\bar{\mu}\mu)$	$\mathbf{C}$
_sdmumu	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*\frac{e^2}{16\pi^2}m_s(\bar{d}_Rs_L)(\bar{\mu}\mu)$	$\mathbf{C}$
sdmumu	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*\frac{e^2}{16\pi^2}m_s(\bar{d}_L s_R)(\bar{\mu}\gamma_5\mu)$	$\mathbf{C}$
_sdmumu	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*\frac{e^2}{16\pi^2}m_s(\bar{d}_Rs_L)(\bar{\mu}\gamma_5\mu)$	$\mathbf{C}$
sdtautau	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^* \frac{e^2}{16\pi^2}(\bar{d}_L\gamma^{\mu}s_L)(\bar{\tau}\gamma_{\mu}\tau)$	$\mathbf{C}$
_sdtautau	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_R\gamma^{\mu}s_R)(\bar{\tau}\gamma_{\mu}\tau)$	$\mathbf{C}$
sdtautau	$rac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*rac{e^2}{16\pi^2}(ar{d}_L\gamma^\mu s_L)(ar{ au}\gamma_\mu\gamma_5 au)$	$\mathbf{C}$
p_sdtautau	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_R\gamma^\mu s_R)(\bar{\tau}\gamma_\mu\gamma_5\tau)$	$\mathbf{C}$
sdtautau	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*\frac{e^2}{16\pi^2}m_s(\bar{d}_L s_R)(\bar{\tau}\tau)$	$\mathbf{C}$
_sdtautau	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^* \frac{e^2}{16\pi^2}m_s(\bar{d}_R s_L)(\bar{ au} au)$	$\mathbf{C}$
sdtautau	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^* \frac{e^2}{16\pi^2}m_s(\bar{d}_L s_R)(\bar{\tau}\gamma_5 \tau)$	$\mathbf{C}$
_sdtautau	$\frac{\sqrt{6}F}{\sqrt{2}}V_{ts}V_{td}^*\frac{e^2}{16\pi^2}m_s(\bar{d}_Rs_L)(\bar{\tau}\gamma_5\tau)$	$\mathbf{C}$
sd	$\frac{4G_F^2}{\sqrt{2}}V_{ts}V_{td}^* \frac{e}{16\pi^2} m_s(\bar{d}_L\sigma^{\mu\nu}s_R)F_{\mu\nu}$	$\mathbf{C}$
_sd	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*\frac{e}{16\pi^2}m_s(\bar{d}_R\sigma^{\mu\nu}s_L)F_{\mu\nu}$	$\mathbf{C}$
sd	$\frac{\sqrt{2}}{\sqrt{2}}V_{ts}V_{td}^*\frac{g_s}{16\pi^2}m_s(\bar{d_L}\sigma^{\mu\nu}T^as_R)G_{\mu\nu}^a$	$\mathbf{C}$
_sd	$4G_F V V^* g_s m (d_{\tau} \sigma^{\mu\nu} T^a e_{\tau}) C^a$	$^{\mathrm{C}}$
L_sdss	$\frac{\sqrt{2}}{\sqrt{2}}V_{ts}V_{td}\frac{1}{16\pi^2}m_s(a_R\sigma^{-1}-S_L)G_{\mu\nu}$ $\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*(\bar{d}_L\gamma^{\mu}s_L)(\bar{s}_L\gamma_{\mu}s_L)$	C
R_sdss	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*(\bar{d}_L\gamma^\mu s_L)(\bar{s}_R\gamma_\mu s_R)$	С
L_sdss	$\frac{2G_F}{\sqrt{2}}V_{ts}V_{td}^*(d_R\gamma^\mu s_R)(s_L\gamma_\mu s_L)$	С
R_sdss	$\frac{\sqrt{2}}{\sqrt{2}}V_{ts}V_{td}^*(d_R\gamma^\mu s_R)(s_R\gamma_\mu s_R)$	С
L_sdss R_sdss	$\frac{\sqrt{2}}{\sqrt{2}} v_{ts} v_{td} (a_R s_L) (s_R s_L)$ $4G_F V_{\bullet} V^* (\bar{d}_{R,G_{\bullet}}) (\bar{s}_{R,G_{\bullet}})$	C C
_sass _sdss	$\frac{\sqrt{2}}{\sqrt{2}} v_{ts} v_{td} (u_{R} \circ L) (\circ L \circ R)$ $\frac{4G_F}{2} V_{ts} V_{ts}^* (\bar{d}_L s_R) (\bar{s}_R s_L)$	C
L_suss R_sdss	$\begin{array}{l} \frac{\sqrt{2}}{\sqrt{2}} V_{ts} V_{td} (d_L \gamma^* s_L) (s_R \gamma_\mu s_R) \\ \frac{4G_F}{2} V_{ts} V_{td}^* (\bar{d}_R \gamma^\mu s_R) (\bar{s}_L \gamma_\mu s_L) \\ \frac{4G_F}{2} V_{ts} V_{td}^* (\bar{d}_R \gamma^\mu s_R) (\bar{s}_R \gamma_\mu s_R) \\ \frac{4G_F}{2} V_{ts} V_{td}^* (\bar{d}_R s_L) (\bar{s}_R s_L) \\ \frac{4G_F}{2} V_{ts} V_{td}^* (\bar{d}_R s_L) (\bar{s}_L s_R) \\ \frac{4G_F}{2} V_{ts} V_{td}^* (\bar{d}_L s_R) (\bar{s}_R s_L) \\ \frac{4G_F}{2} V_{ts} V_{td}^* (\bar{d}_L s_R) (\bar{s}_L s_R) \\ \frac{4G_F}{2} V_{ts} V_{td}^* (\bar{d}_L s_R) (\bar{s}_L s_R) \\ \frac{4G_F}{2} V_{ts} V_{td}^* (\bar{d}_R \sigma^{\mu\nu} s_L) (\bar{s}_R \sigma_{\mu\nu} s_L) \\ \frac{4G_F}{2} V_{ts} V_{td}^* (\bar{d}_L \sigma^{\mu\nu} s_R) (\bar{s}_L \sigma_{\mu\nu} s_R) \end{array}$	C
_sdss _sdss	$\sqrt{2}$ $ts \cdot td \stackrel{(\omega_L \cup R_I)}{(\overline{d}_R \sigma^{\mu\nu} s_L)} (\overline{s}_R \sigma_{} s_I)$	C
R_sdss	$\frac{\sqrt{2}}{4G_F}V_{\bullet}V_{\bullet}^*(\bar{d}_I\sigma^{\mu\nu}s_P)(\bar{s}_I\sigma_{\bullet\bullet}s_P)$	C

WC name	Operator	Type
CVLL_sddd	$rac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*(ar{d}_L\gamma^\mu s_L)(ar{d}_L\gamma_\mu d_L)$	C
CVLR_sddd	$rac{4ar{G_F}}{\sqrt{2}}V_{ts}V_{td}^*(ar{d}_L\gamma^\mu s_L)(ar{d}_R\gamma_\mu d_R)$	$\mathbf{C}$
CVRL_sddd	$rac{4ar{G_F}}{\sqrt{2}}V_{ts}V_{td}^*(ar{d}_R\gamma^\mu s_R)(ar{d}_L\gamma_\mu d_L)$	$\mathbf{C}$
CVRR_sddd	$rac{4ar{G_F}}{\sqrt{2}}V_{ts}V_{td}^*(ar{d}_R\gamma^\mu s_R)(ar{d}_R\gamma_\mu d_R)$	$^{\mathrm{C}}$
CSLL_sddd	$\frac{4\ddot{G}_{F}}{\sqrt{2}}V_{ts}V_{td}^{*}(\bar{d}_{R}s_{L})(\bar{d}_{R}d_{L})$	$^{\mathrm{C}}$
CSLR_sddd	$rac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*(ar{d}_Rs_L)(ar{d}_Ld_R)$	$\mathbf{C}$
CSRL_sddd	$rac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*(ar{d}_Ls_R)(ar{d}_Rd_L)$	$\mathbf{C}$
CSRR_sddd	$rac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*(ar{d}_L s_R)(ar{d}_L d_R)$	$^{\mathrm{C}}$
CTLL_sddd	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*(\bar{d}_R\sigma^{\mu\nu}s_L)(\bar{d}_R\sigma_{\mu\nu}d_L)$	$^{\mathrm{C}}$
CTRR_sddd	$\frac{4\ddot{G}_F}{\sqrt{2}}V_{ts}V_{td}^*(\bar{d}_L\sigma^{\mu\nu}s_R)(\bar{d}_L\sigma_{\mu\nu}d_R)$	$\mathbf{C}$
CVLL_sduu	$rac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*(ar{d}_L\gamma^\mu s_L)(ar{u}_L\gamma_\mu u_L)$	$\mathbf{C}$
CVLR_sduu	$rac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*(ar{d}_L\gamma^\mu s_L)(ar{u}_R\gamma_\mu u_R)$	$\mathbf{C}$
CVRL_sduu	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*(\bar{d}_R\gamma^\mu s_R)(\bar{u}_L\gamma_\mu u_L)$	$\mathbf{C}$
CVRR_sduu	$rac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*(ar{d}_R\gamma^\mu s_R)(ar{u}_R\gamma_\mu u_R)$	$\mathbf{C}$
CSLL_sduu	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*(\bar{d}_R s_L)(\bar{u}_R u_L)$	$\mathbf{C}$
CSLR_sduu	$rac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*(ar{d}_Rs_L)(ar{u}_Lu_R)$	$\mathbf{C}$
CSRL_sduu	$rac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*(ar{d}_Ls_R)(ar{u}_Ru_L)$	$\mathbf{C}$
CSRR_sduu	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*(\bar{d}_Ls_R)(\bar{u}_Lu_R)$	$\mathbf{C}$
CTLL_sduu	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*(d_R\sigma^{\mu\nu}s_L)(\bar{u}_R\sigma_{\mu\nu}u_L)$	$\mathbf{C}$
CTRR_sduu	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*(\bar{d}_L\sigma^{\mu\nu}s_R)(\bar{u}_L\sigma_{\mu\nu}u_R)$	$^{\mathrm{C}}$
CVLLt_sduu	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*(\bar{d}_L^\alpha\gamma^\mu s_L^\beta)(\bar{u}_L^\beta\gamma_\mu u_L^\alpha)$	$\mathbf{C}$
CVLRt_sduu	$\frac{4\dot{G}_F}{\sqrt{2}}V_{ts}V_{td}^*(\bar{d}_L^{\alpha}\gamma^{\mu}s_L^{\beta})(\bar{u}_R^{\beta}\gamma_{\mu}u_R^{\alpha})$	$^{\mathrm{C}}$
CVRLt_sduu	$rac{4ar{G}_F}{\sqrt{2}}V_{ts}V_{td}^*(ar{d}_R^lpha\gamma^\mu s_R^eta)(ar{u}_L^eta\gamma_\mu u_L^lpha)$	$^{\mathrm{C}}$
CVRRt_sduu	$rac{4\dot{G}_F}{\sqrt{2}}V_{ts}V_{td}^*(ar{d}_R^lpha\gamma^\mu s_R^eta)(ar{u}_R^eta\gamma_\mu u_R^lpha)$	$\mathbf{C}$
CSLLt_sduu	$rac{4ar{G}_F}{\sqrt{2}}V_{ts}V_{td}^*(ar{d}_R^lpha s_L^eta)(ar{u}_R^eta u_L^lpha)$	$\mathbf{C}$
CSLRt_sduu	$rac{4ar{G}_F}{\sqrt{2}}V_{ts}V_{td}^*(ar{d}_R^lpha s_L^eta)(ar{u}_L^eta u_R^lpha)$	$\mathbf{C}$
CSRLt_sduu	$rac{4G_F^2}{\sqrt{2}}V_{ts}V_{td}^*(ar{d}_L^lpha s_R^eta)(ar{u}_R^eta u_L^lpha)$	$\mathbf{C}$
CSRRt_sduu	$rac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*(ar{d}_L^lpha s_R^eta)(ar{u}_L^eta u_R^lpha)$	$^{\mathrm{C}}$
CTLLt_sduu	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*(\bar{d}_B^{lpha}\sigma^{\mu u}s_I^{eta})(\bar{u}_B^{eta}\sigma_{\mu u}u_I^{lpha})$	$\mathbf{C}$
CTRRt_sduu	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*(\bar{d}_I^{lpha}\sigma^{\mu u}s_B^{eta})(\bar{u}_I^{eta}\sigma_{\mu u}u_B^{lpha})$	$^{\mathrm{C}}$
CVLL_sdcc	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*(\bar{d}_L\gamma^\mu s_L)(\bar{c}_L\gamma_\mu c_L)$	$^{\mathrm{C}}$
CVLR_sdcc	$ \frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*(\bar{d}_L^{\alpha}\sigma^{\mu\nu}s_R^{\beta})(\bar{u}_L^{\beta}\sigma_{\mu\nu}u_R^{\alpha}) \\ \frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*(\bar{d}_L\gamma^{\mu}s_L)(\bar{c}_L\gamma_{\mu}c_L) \\ \frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*(\bar{d}_L\gamma^{\mu}s_L)(\bar{c}_R\gamma_{\mu}c_R) \\ \frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*(\bar{d}_R\gamma^{\mu}s_R)(\bar{c}_L\gamma_{\mu}c_L) \\ \frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*(\bar{d}_R\gamma^{\mu}s_R)(\bar{c}_R\gamma_{\mu}c_R) \\ \frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*(\bar{d}_R\gamma^{\mu}s_R)(\bar{c}_Rc_L) \\ \frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*(\bar{d}_Rs_L)(\bar{c}_Rc_L) \\ \frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*(\bar{d}_Rs_L)(\bar{c}_Rc_L) $	$\mathbf{C}$
CVRL_sdcc	$rac{4G_F^2}{\sqrt{2}}V_{ts}V_{td}^*(ar{d}_R\gamma^\mu s_R)(ar{c}_L\gamma_\mu c_L)$	$^{\mathrm{C}}$
CVRR_sdcc	$rac{4\ddot{G}_F}{\sqrt{2}}V_{ts}V_{td}^*(ar{d}_R\gamma^\mu s_R)(ar{c}_R\gamma_\mu c_R)$	$\mathbf{C}$
CSLL_sdcc	$rac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*(ar{d}_Rs_L)(ar{c}_Rc_L)$	$\mathbf{C}$
CSLR_sdcc	$rac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*(ar{d}_Rs_L)(ar{c}_Lc_R)$	$^{\mathrm{C}}$

WC name	Operator	Type
CSRL_sdcc	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*(\bar{d}_Ls_R)(\bar{c}_Rc_L)$	
CSRR_sdcc	$rac{4ar{G_F}}{\sqrt{2}}V_{ts}V_{td}^*(ar{d}_L s_R)(ar{c}_L c_R)$	$\mathbf{C}$
CTLL_sdcc	$rac{4 \overleftarrow{G_F}}{\sqrt{2}} V_{ts} V_{td}^* (ar{d}_R \sigma^{\mu  u} s_L) (ar{c}_R \sigma_{\mu  u} c_L)$	$\mathbf{C}$
CTRR_sdcc	$rac{4 ar{G_F}}{\sqrt{2}} V_{ts} V_{td}^* (ar{d}_L \sigma^{\mu  u} s_R) (ar{c}_L \sigma_{\mu  u} c_R)$	$\mathbf{C}$
CVLLt_sdcc	$rac{4 \overleftarrow{G_F}}{\sqrt{2}} V_{ts} V_{td}^* (ar{d}_L^lpha \gamma^\mu s_L^eta) (ar{c}_L^eta \gamma_\mu c_L^lpha)$	$\mathbf{C}$
CVLRt_sdcc	$\frac{4 \overline{G_F}}{\sqrt{2}} V_{ts} V_{td}^* (\bar{d}_L^{lpha} \gamma^{\mu} s_L^{eta}) (\bar{c}_R^{eta} \gamma_{\mu} c_R^{lpha})$	$\mathbf{C}$
CVRLt_sdcc	$rac{4ar{Q_F}}{\sqrt{2}}V_{ts}V_{td}^*(ar{d}_R^lpha\gamma^\mu s_R^eta)(ar{c}_L^eta\gamma_\mu c_L^lpha)$	$\mathbf{C}$
CVRRt_sdcc	$rac{4ar{Q}_F^2}{\sqrt{2}}V_{ts}V_{td}^*(ar{d}_R^lpha\gamma^\mu s_R^eta)(ar{c}_R^eta\gamma_\mu c_R^lpha)$	$\mathbf{C}$
CSLLt_sdcc	$rac{4ec{G}_F^{\Gamma}}{\sqrt{2}}V_{ts}V_{td}^*(ar{d}_R^{lpha}s_L^{eta})(ar{c}_R^{eta}c_L^{lpha})$	$\mathbf{C}$
CSLRt_sdcc	$rac{4ec{G_F}}{\sqrt{2}}V_{ts}V_{td}^*(ar{d}_R^lpha s_L^eta)(ar{c}_L^eta c_R^lpha)$	$\mathbf{C}$
CSRLt_sdcc	$rac{4ec{G}_F^2}{\sqrt{2}}V_{ts}V_{td}^*(ar{d}_L^lpha s_R^eta)(ar{c}_R^eta c_L^lpha)$	$\mathbf{C}$
CSRRt_sdcc	$rac{4ar{Q_F}}{\sqrt{2}}V_{ts}V_{td}^*(ar{d}_L^lpha s_R^eta)(ar{c}_L^eta c_R^lpha)$	$\mathbf{C}$
CTLLt_sdcc	$rac{4ec{G}_F^{\Gamma}}{\sqrt{2}}V_{ts}V_{td}^*(ar{d}_R^{lpha}\sigma^{\mu u}s_L^{eta})(ar{c}_R^{eta}\sigma_{\mu u}c_L^{lpha})$	$\mathbf{C}$
CTRRt_sdcc	$\frac{4\overset{\alpha}{G}_{F}}{\sqrt{2}}V_{ts}V_{td}^{*}(\bar{d}_{L}^{\alpha}\sigma^{\mu\nu}s_{R}^{\beta})(\bar{c}_{L}^{\beta}\sigma_{\mu\nu}c_{R}^{\alpha})$	C

## sdnunu

WC name	Operator	Type
CL_sdnuenue	$\frac{4G_F}{\sqrt{2}}V_{td}V_{ts}^* \frac{e^2}{16\pi^2}(\bar{s}_L\gamma^{\mu}d_L)(\bar{\nu}_e\gamma_{\mu}(1-\gamma_5)\nu_e)$	C
CL_sdnumunumu	$\frac{4G_F}{\sqrt{2}}V_{td}V_{ts}^*\frac{e^2}{16\pi^2}(\bar{s}_L\gamma^\mu d_L)(\bar{\nu}_\mu\gamma_\mu(1-\gamma_5)\nu_\mu)$	$\mathbf{C}$
CL_sdnutaunutau	$\frac{4G_F}{\sqrt{2}}V_{td}V_{ts}^*\frac{e^2}{16\pi^2}(\bar{s}_L\gamma^{\mu}d_L)(\bar{\nu}_{\tau}\gamma_{\mu}(1-\gamma_5)\nu_{\tau})$	$\mathbf{C}$
CL_sdnuenumu	$\frac{4G_F}{\sqrt{2}}V_{td}V_{ts}^*\frac{e^2}{16\pi^2}(\bar{s}_L\gamma^{\mu}d_L)(\bar{\nu}_{\mu}\gamma_{\mu}(1-\gamma_5)\nu_e)$	$\mathbf{C}$
CL_sdnumunue	$\frac{4G_F}{\sqrt{2}}V_{td}V_{ts}^*\frac{e^2}{16\pi^2}(\bar{s}_L\gamma^{\mu}d_L)(\bar{\nu}_e\gamma_{\mu}(1-\gamma_5)\nu_{\mu})$	$\mathbf{C}$
${\tt CL\_sdnumunutau}$	$\frac{4\dot{G}_F}{\sqrt{2}}V_{td}V_{ts}^*\frac{e^2}{16\pi^2}(\bar{s}_L\gamma^{\mu}d_L)(\bar{\nu}_{\tau}\gamma_{\mu}(1-\gamma_5)\nu_{\mu})$	$\mathbf{C}$
${\tt CL\_sdnutaunumu}$	$\frac{4G_F}{\sqrt{2}}V_{td}V_{ts}^*\frac{e^2}{16\pi^2}(\bar{s}_L\gamma^{\mu}d_L)(\bar{\nu}_{\mu}\gamma_{\mu}(1-\gamma_5)\nu_{\tau})$	$\mathbf{C}$
CL_sdnuenutau	$\frac{4G_F}{\sqrt{2}}V_{td}V_{ts}^*\frac{e^2}{16\pi^2}(\bar{s}_L\gamma^{\mu}d_L)(\bar{\nu}_{\tau}\gamma_{\mu}(1-\gamma_5)\nu_e)$	$\mathbf{C}$
CL_sdnutaunue	$\frac{4\dot{G}_F}{\sqrt{2}}V_{td}V_{ts}^*\frac{e^2}{16\pi^2}(\bar{s}_L\gamma^{\mu}d_L)(\bar{\nu}_e\gamma_{\mu}(1-\gamma_5)\nu_{\tau})$	$\mathbf{C}$
CR_sdnuenue	$\frac{4\dot{G}_F}{\sqrt{2}}V_{td}V_{ts}^*\frac{e^2}{16\pi^2}(\bar{s}_R\gamma^{\mu}d_R)(\bar{\nu}_e\gamma_{\mu}(1-\gamma_5)\nu_e)$	$\mathbf{C}$
$CR\_sdnumunumu$	$\frac{4G_F}{\sqrt{2}}V_{td}V_{ts}^*\frac{e^2}{16\pi^2}(\bar{s}_R\gamma^{\mu}d_R)(\bar{\nu}_{\mu}\gamma_{\mu}(1-\gamma_5)\nu_{\mu})$	$\mathbf{C}$
CR_sdnutaunutau	$\frac{4G_F}{\sqrt{2}}V_{td}V_{ts}^*\frac{e^2}{16\pi^2}(\bar{s}_R\gamma^{\mu}d_R)(\bar{\nu}_{\tau}\gamma_{\mu}(1-\gamma_5)\nu_{\tau})$	$\mathbf{C}$
CR_sdnuenumu	$\frac{4\dot{G}_F}{\sqrt{2}}V_{td}V_{ts}^*\frac{e^2}{16\pi^2}(\bar{s}_R\gamma^{\mu}d_R)(\bar{\nu}_{\mu}\gamma_{\mu}(1-\gamma_5)\nu_e)$	$\mathbf{C}$
CR_sdnumunue	$\frac{4G_F}{\sqrt{2}}V_{td}V_{ts}^*\frac{e^2}{16\pi^2}(\bar{s}_R\gamma^{\mu}d_R)(\bar{\nu}_e\gamma_{\mu}(1-\gamma_5)\nu_{\mu})$	$\mathbf{C}$
CR_sdnumunutau	$\frac{4G_F}{\sqrt{2}}V_{td}V_{ts}^*\frac{e^2}{16\pi^2}(\bar{s}_R\gamma^{\mu}d_R)(\bar{\nu}_{\tau}\gamma_{\mu}(1-\gamma_5)\nu_{\mu})$	$\mathbf{C}$
CR_sdnutaunumu	$rac{4G_F}{\sqrt{2}}V_{td}V_{ts}^*rac{e^2}{16\pi^2}(ar{s}_R\gamma^\mu d_R)(ar{ u}_\mu\gamma_\mu(1-\gamma_5) u_ au)$	$\mathbf{C}$
	-	

WC name	Operator	Type
CR_sdnuenutau	$\frac{4G_F}{\sqrt{2}}V_{td}V_{ts}^*\frac{e^2}{16\pi^2}(\bar{s}_R\gamma^{\mu}d_R)(\bar{\nu}_{\tau}\gamma_{\mu}(1-\gamma_5)\nu_e)$	С
CR_sdnutaunue	$\frac{4G_F}{\sqrt{2}} V_{td} V_{ts}^* \frac{e^2}{16\pi^2} (\bar{s}_R \gamma^{\mu} d_R) (\bar{\nu}_e \gamma_{\mu} (1 - \gamma_5) \nu_{\tau})$	С

## sdemu

WC name	Operator	Type
C9_sdemu	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_L\gamma^{\mu}s_L)(\bar{\mu}\gamma_{\mu}e)$	С
C9p_sdemu	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_R\gamma^{\mu}s_R)(\bar{\mu}\gamma_{\mu}e)$	$^{\mathrm{C}}$
C10_sdemu	$rac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*rac{e^2}{16\pi^2}(ar{d}_L\gamma^{\mu}s_L)(ar{\mu}\gamma_{\mu}\gamma_5 e)$	$\mathbf{C}$
C10p_sdemu	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_R\gamma^{\mu}s_R)(\bar{\mu}\gamma_{\mu}\gamma_5 e)$	$\mathbf{C}$
CS_sdemu	$\frac{4\dot{G}_F}{\sqrt{2}}V_{ts}V_{td}^*\frac{e^2}{16\pi^2}m_s(\bar{d}_L s_R)(\bar{\mu}e)$	$\mathbf{C}$
CSp_sdemu	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*\frac{e^2}{16\pi^2}m_s(\bar{d}_Rs_L)(\bar{\mu}e)$	$\mathbf{C}$
CP_sdemu	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*\frac{e^2}{16\pi^2}m_s(\bar{d}_L s_R)(\bar{\mu}\gamma_5 e)$	$\mathbf{C}$
CPp_sdemu	$\frac{4\dot{G}_F}{\sqrt{2}}V_{ts}V_{td}^*\frac{e^2}{16\pi^2}m_s(\bar{d}_Rs_L)(\bar{\mu}\gamma_5e)$	$\mathbf{C}$

## sdmue

WC name	Operator	Type
C9_sdmue	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_L\gamma^{\mu}s_L)(\bar{e}\gamma_{\mu}\mu)$	C
C9p_sdmue	$rac{4\dot{G}_F}{\sqrt{2}}V_{ts}V_{td}^*rac{e^2}{16\pi^2}(ar{d}_R\gamma^{\mu}s_R)(ar{e}\gamma_{\mu}\mu)$	$^{\mathrm{C}}$
C10_sdmue	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^* \frac{e^2}{16\pi^2}(\bar{d}_L\gamma^{\mu}s_L)(\bar{e}\gamma_{\mu}\gamma_5\mu)$	$\mathbf{C}$
C10p_sdmue	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^* \frac{e^2}{16\pi^2}(\bar{d}_R\gamma^{\mu}s_R)(\bar{e}\gamma_{\mu}\gamma_5\mu)$	$^{\mathrm{C}}$
CS_sdmue	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*\frac{e^2}{16\pi^2}m_s(\bar{d}_L s_R)(\bar{e}\mu)$	$\mathbf{C}$
CSp_sdmue	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*\frac{e^2}{16\pi^2}m_s(\bar{d}_Rs_L)(\bar{e}\mu)$	$\mathbf{C}$
CP_sdmue	$rac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*rac{e^2}{16\pi^2}m_s(ar{d}_L s_R)(ar{e}\gamma_5\mu)$	$^{\mathrm{C}}$
CPp_sdmue	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*\frac{e^2}{16\pi^2}m_s(\bar{d}_Rs_L)(\bar{e}\gamma_5\mu)$	C

#### sdetau

WC name	Operator	Type
C9_sdetau	$rac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*rac{e^2}{16\pi^2}(ar{d}_L\gamma^\mu s_L)(ar{ au}\gamma_\mu e)$	С
C9p_sdetau	$\frac{4\ddot{G}_F}{\sqrt{2}}V_{ts}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_R\gamma^\mu s_R)(\bar{\tau}\gamma_\mu e)$	$\mathbf{C}$

WC name	Operator	Type
C10_sdetau	$rac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*rac{e^2}{16\pi^2}(ar{d}_L\gamma^{\mu}s_L)(ar{ au}\gamma_{\mu}\gamma_5 e)$	C
C10p_sdetau	$rac{4 G_F}{\sqrt{2}} V_{ts} V_{td}^* rac{e^2}{16 \pi^2} (ar{d}_R \gamma^\mu s_R) (ar{ au} \gamma_\mu \gamma_5 e)$	$\mathbf{C}$
CS_sdetau	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*\frac{e^2}{16\pi^2}m_s(\bar{d}_L s_R)(\bar{\tau}e)$	$^{\mathrm{C}}$
CSp_sdetau	$\frac{4\dot{G}_F}{\sqrt{2}}V_{ts}V_{td}^*\frac{e^2}{16\pi^2}m_s(\bar{d}_Rs_L)(\bar{\tau}e)$	$^{\mathrm{C}}$
CP_sdetau	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*\frac{e^2}{16\pi^2}m_s(\bar{d}_L s_R)(\bar{\tau}\gamma_5 e)$	$^{\mathrm{C}}$
CPp_sdetau	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*\frac{e^2}{16\pi^2}m_s(\bar{d}_R s_L)(\bar{\tau}\gamma_5 e)$	С

# sdtaue

WC name	Operator	Type
C9_sdtaue	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^* \frac{e^2}{16\pi^2}(\bar{d}_L\gamma^{\mu}s_L)(\bar{e}\gamma_{\mu}\tau)$	C
C9p_sdtaue	$rac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*rac{e^2}{16\pi^2}(ar{d}_R\gamma^{\mu}s_R)(ar{e}\gamma_{\mu} au)$	$^{\mathrm{C}}$
C10_sdtaue	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_L\gamma^{\mu}s_L)(\bar{e}\gamma_{\mu}\gamma_5\tau)$	$^{\mathrm{C}}$
C10p_sdtaue	$rac{4\dot{G}_{F}}{\sqrt{2}}V_{ts}V_{td}^{*}rac{e^{2}}{16\pi^{2}}(ar{d}_{R}\gamma^{\mu}s_{R})(ar{e}\gamma_{\mu}\gamma_{5} au)$	$\mathbf{C}$
CS_sdtaue	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*\frac{e^2}{16\pi^2}m_s(\bar{d}_L s_R)(\bar{e} au)$	$^{\mathrm{C}}$
CSp_sdtaue	$rac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*rac{e^2}{16\pi^2}m_s(ar{d}_R s_L)(ar{e} au)$	$\mathbf{C}$
CP_sdtaue	$\frac{4\dot{G}_F}{\sqrt{2}}V_{ts}V_{td}^*\frac{e^2}{16\pi^2}m_s(\bar{d}_L s_R)(\bar{e}\gamma_5  au)$	$\mathbf{C}$
CPp_sdtaue	$\frac{4\dot{G}_F}{\sqrt{2}}V_{ts}V_{td}^*\frac{e^2}{16\pi^2}m_s(\bar{d}_Rs_L)(\bar{e}\gamma_5\tau)$	$\mathbf{C}$

## sdmutau

WC name	Operator	Type
C9_sdmutau	$rac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*rac{e^2}{16\pi^2}(ar{d}_L\gamma^{\mu}s_L)(ar{ au}\gamma_{\mu}\mu)$	$\mathbf{C}$
C9p_sdmutau	$rac{4 V_{G_F}^{-}}{\sqrt{2}} V_{ts} V_{td}^* rac{e^2}{16 \pi^2} (ar{d}_R \gamma^{\mu} s_R) (ar{ au} \gamma_{\mu} \mu)$	$^{\mathrm{C}}$
C10_sdmutau	$rac{4 V_F}{\sqrt{2}} V_{ts} V_{td}^* rac{e^2}{16 \pi^2} (ar{d}_L \gamma^\mu s_L) (ar{ au} \gamma_\mu \gamma_5 \mu)$	$\mathbf{C}$
C10p_sdmutau	$rac{4 \overline{G_F}}{\sqrt{2}} V_{ts} V_{td}^* rac{e^2}{16\pi^2} (ar{d}_R \gamma^\mu s_R) (ar{ au} \gamma_\mu \gamma_5 \mu)$	$^{\mathrm{C}}$
CS_sdmutau	$\frac{4\dot{G}_{F}}{\sqrt{2}}V_{ts}V_{td}^{*}\frac{e^{2}}{16\pi^{2}}m_{s}(\bar{d}_{L}s_{R})(\bar{\tau}\mu)$	$^{\mathrm{C}}$
CSp_sdmutau	$\frac{4\dot{G}_F}{\sqrt{2}}V_{ts}V_{td}^*\frac{e^2}{16\pi^2}m_s(\bar{d}_Rs_L)(\bar{\tau}\mu)$	$\mathbf{C}$
CP_sdmutau	$rac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*rac{e^2}{16\pi^2}m_s(\bar{d}_L s_R)(\bar{ au}\gamma_5\mu)$	$^{\mathrm{C}}$
CPp_sdmutau	$\frac{4\dot{G}_F}{\sqrt{2}}V_{ts}V_{td}^*\frac{e^2}{16\pi^2}m_s(\bar{d}_R s_L)(\bar{\tau}\gamma_5\mu)$	$\mathbf{C}$

## sdtaumu

WC name	Operator	Type
C9_sdtaumu	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_L\gamma^{\mu}s_L)(\bar{\mu}\gamma_{\mu}\tau)$	С
C9p_sdtaumu	$rac{4Q_F^2}{\sqrt{2}}V_{ts}V_{td}^*rac{e^2}{16\pi^2}(ar{d}_R\gamma^{\mu}s_R)(ar{\mu}\gamma_{\mu} au)$	$\mathbf{C}$
C10_sdtaumu	$rac{4 G_F}{\sqrt{2}} V_{ts} V_{td}^* rac{e^2}{16 \pi^2} (ar{d}_L \gamma^\mu s_L) (ar{\mu} \gamma_\mu \gamma_5  au)$	$^{\mathrm{C}}$
C10p_sdtaumu	$rac{4 { m G}_F}{\sqrt{2}} V_{ts} V_{td}^* rac{e^2}{16 \pi^2} (ar{d}_R \gamma^\mu s_R) (ar{\mu} \gamma_\mu \gamma_5  au)$	$\mathbf{C}$
CS_sdtaumu	$rac{4 G_F}{\sqrt{2}} V_{ts} V_{td}^* rac{e^2}{16 \pi^2} m_s(ar{d}_L s_R) (ar{\mu}  au)$	$^{\mathrm{C}}$
CSp_sdtaumu	$rac{4 G_F}{\sqrt{2}} V_{ts} V_{td}^* rac{e^2}{16 \pi^2} m_s(ar{d}_R s_L) (ar{\mu}  au)$	$^{\mathrm{C}}$
CP_sdtaumu	$rac{4 { m G}_F}{\sqrt{2}} V_{ts} V_{td}^* rac{e^2}{16 \pi^2} m_s(ar{d}_L s_R) (ar{\mu} \gamma_5  au)$	$\mathbf{C}$
CPp_sdtaumu	$\frac{4V_{GF}}{\sqrt{2}}V_{ts}V_{td}^*\frac{e^2}{16\pi^2}m_s(\bar{d}_R s_L)(\bar{\mu}\gamma_5\tau)$	С

#### 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	$-\frac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_R\gamma^\mu s_R)(\bar{e}_L\gamma_\mu \nu_{eL})$	$^{\mathrm{C}}$
CSR_suenue	$-\frac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_L s_R)(\bar{e}_R \nu_{eL})$	$^{\mathrm{C}}$
CSL_suenue	$-\frac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_R s_L)(\bar{e}_R \nu_{eL})$	$^{\mathrm{C}}$
CT_suenue	$-\frac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_R\sigma^{\mu\nu}s_L)(\bar{e}_R\sigma_{\mu\nu}\nu_{eL})$	$^{\mathrm{C}}$
CVL_suenumu	$-\frac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_L\gamma^\mu s_L)(\bar{e}_L\gamma_\mu\nu_{\mu L})$	$\mathbf{C}$
CVR_suenumu	$-\frac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_R\gamma^{\mu}s_R)(\bar{e}_L\gamma_{\mu}\nu_{\mu L})$	$\mathbf{C}$
CSR_suenumu	$-\frac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_L s_R)(\bar{e}_R \nu_{\mu L})$	$\mathbf{C}$
CSL_suenumu	$-\frac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_R s_L)(\bar{e}_R \nu_{\mu L})$	$\mathbf{C}$
CT_suenumu	$-\frac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_R\sigma^{\mu\nu}s_L)(\bar{e}_R\sigma_{\mu\nu}\nu_{\mu L})$	$\mathbf{C}$
CVL_suenutau	$-\frac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_L\gamma^\mu s_L)(\bar{e}_L\gamma_\mu u_{\tau L})$	$\mathbf{C}$
CVR_suenutau	$-\frac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_R\gamma^\mu s_R)(\bar{e}_L\gamma_\mu\nu_{\tau L})$	$^{\mathrm{C}}$
CSR_suenutau	$-\frac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_L s_R)(\bar{e}_R \nu_{\tau L})$	$^{\mathrm{C}}$
CSL_suenutau	$-\frac{4\tilde{G}_F}{\sqrt{2}}V_{us}(\bar{u}_R s_L)(\bar{e}_R \nu_{\tau L})$	$\mathbf{C}$
CT_suenutau	$-rac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_R\sigma^{\mu u}s_L)(\bar{e}_R\sigma_{\mu u} u_{ au L})$	С

# csenu

WC name	Operator	Type
CVL_scenue	$-\frac{4G_F}{\sqrt{2}}V_{cs}(\bar{c}_L\gamma^\mu s_L)(\bar{e}_L\gamma_\mu  u_{eL})$	С
CVR_scenue	$-\frac{\frac{4G_F}{\sqrt{2}}V_{cs}(\bar{c}_L\gamma^{\mu}s_L)(\bar{e}_L\gamma_{\mu}\nu_{eL})}{-\frac{4G_F}{\sqrt{2}}V_{cs}(\bar{c}_R\gamma^{\mu}s_R)(\bar{e}_L\gamma_{\mu}\nu_{eL})}$	$\mathbf{C}$
CSR_scenue	$-\frac{4G_F}{\sqrt{2}}V_{cs}(\bar{c}_L s_R)(\bar{e}_R \nu_{eL})$	$\mathbf{C}$
CSL_scenue	$-rac{4G_F^2}{\sqrt{2}}V_{cs}(ar{c}_Rs_L)(ar{e}_R u_{eL})$	$\mathbf{C}$

WC name	Operator	Type
CT_scenue	$-\frac{4G_F}{\sqrt{2}}V_{cs}(\bar{c}_R\sigma^{\mu\nu}s_L)(\bar{e}_R\sigma_{\mu\nu}\nu_{eL})$	C
CVL_scenumu	$-rac{4\widetilde{G}_F^c}{\sqrt{2}}V_{cs}(ar{c}_L\gamma^\mu s_L)(ar{e}_L\gamma_\mu u_{\mu L})$	$\mathbf{C}$
CVR_scenumu	$-rac{4rac{G_F}}{\sqrt{2}}V_{cs}(ar{c}_R\gamma^\mu s_R)(ar{e}_L\gamma_\mu u_{\mu L})$	$\mathbf{C}$
CSR_scenumu	$-rac{4rac{G_F}}{\sqrt{2}}V_{cs}(ar{c}_L s_R)(ar{e}_R  u_{\mu L})$	$\mathbf{C}$
CSL_scenumu	$-\frac{4\check{G}_F}{\sqrt{2}}V_{cs}(\bar{c}_Rs_L)(\bar{e}_R\nu_{\mu L})$	$\mathbf{C}$
CT_scenumu	$-rac{4rac{arphi_F}{\sqrt{2}}V_{cs}(ar{c}_R\sigma^{\mu u}s_L)(ar{e}_R\sigma_{\mu u} u_{\mu L})$	$\mathbf{C}$
CVL_scenutau	$-rac{4\check{G}_F}{\sqrt{2}}V_{cs}(\bar{c}_L\gamma^\mu s_L)(\bar{e}_L\gamma_\mu u_{ au L})$	$\mathbf{C}$
CVR_scenutau	$-rac{4rac{arphi_F}{\sqrt{2}}V_{cs}(ar{c}_R\gamma^\mu s_R)(ar{e}_L\gamma_\mu u_{ au L})$	$\mathbf{C}$
CSR_scenutau	$-\frac{4\check{G}_F}{\sqrt{2}}V_{cs}(\bar{c}_L s_R)(\bar{e}_R \nu_{\tau L})$	$\mathbf{C}$
CSL_scenutau	$-rac{4rac{arphi_F}{\sqrt{2}}V_{cs}(ar{c}_Rs_L)(ar{e}_R u_{ au L})$	$\mathbf{C}$
CT_scenutau	$-\frac{4\overleftarrow{G}_F}{\sqrt{2}}V_{cs}(\bar{c}_R\sigma^{\mu\nu}s_L)(\bar{e}_R\sigma_{\mu\nu}\nu_{\tau L})$	С

# cdenu

WC name	Operator	Type
CVL_dcenue	$-\frac{4G_F}{\sqrt{2}}V_{cd}(\bar{c}_L\gamma^\mu d_L)(\bar{e}_L\gamma_\mu\nu_{eL})$	С
CVR_dcenue	$-\frac{4 \tilde{G}_F}{\sqrt{2}} V_{cd}(\bar{c}_R \gamma^\mu d_R) (\bar{e}_L \gamma_\mu \nu_{eL})$	$\mathbf{C}$
CSR_dcenue	$-\frac{4\widetilde{G}_F}{\sqrt{2}}V_{cd}(\bar{c}_Ld_R)(\bar{e}_R\nu_{eL})$	$^{\mathrm{C}}$
CSL_dcenue	$-\frac{4\check{G}_F}{\sqrt{2}}V_{cd}(\bar{c}_Rd_L)(\bar{e}_R\nu_{eL})$	$^{\mathrm{C}}$
CT_dcenue	$-rac{4reve{Q_F}}{\sqrt{2}}V_{cd}(ar{c}_R\sigma^{\mu u}d_L)(ar{e}_R\sigma_{\mu u} u_{eL})$	$^{\mathrm{C}}$
CVL_dcenumu	$-rac{4reve{Q_F}}{\sqrt{2}}V_{cd}(ar{c}_L\gamma^\mu d_L)(ar{e}_L\gamma_\mu u_{\mu L})$	$^{\mathrm{C}}$
CVR_dcenumu	$-rac{4\widetilde{G}_F}{\sqrt{2}}V_{cd}(ar{c}_R\gamma^\mu d_R)(ar{e}_L\gamma_\mu u_{\mu L})$	$^{\mathrm{C}}$
CSR_dcenumu	$-rac{4\overset{\sim}{Q_F}}{\sqrt{2}}V_{cd}(\bar{c}_Ld_R)(\bar{e}_R u_{\mu L})$	$^{\mathrm{C}}$
CSL_dcenumu	$-rac{4\overset{\sim}{Q_F}}{\sqrt{2}}V_{cd}(ar{c}_Rd_L)(ar{e}_R u_{\mu L})$	$^{\mathrm{C}}$
CT_dcenumu	$-rac{4reve{G_F}}{\sqrt{2}}V_{cd}(ar{c}_R\sigma^{\mu u}d_L)(ar{e}_R\sigma_{\mu u} u_{\mu L})$	$^{\mathrm{C}}$
CVL_dcenutau	$-rac{4\widetilde{G}_F^2}{\sqrt{2}}V_{cd}(ar{c}_L\gamma^\mu d_L)(ar{e}_L\gamma_\mu u_{ au L})$	$^{\mathrm{C}}$
CVR_dcenutau	$-\frac{4\tilde{G}_F}{\sqrt{2}}V_{cd}(\bar{c}_R\gamma^\mu d_R)(\bar{e}_L\gamma_\mu u_{\tau L})$	$\mathbf{C}$
CSR_dcenutau	$-\frac{4 \tilde{G}_F}{\sqrt{2}} V_{cd}(\bar{c}_L d_R)(\bar{e}_R \nu_{\tau L})$	$\mathbf{C}$
CSL_dcenutau	$-rac{4\overset{\sim}{Q_F}}{\sqrt{2}}V_{cd}(ar{c}_Rd_L)(ar{e}_R u_{ au L})$	$\mathbf{C}$
CT_dcenutau	$-rac{4\overset{G_F}{V_2}}{\sqrt{2}}V_{cd}(ar{c}_R\sigma^{\mu u}d_L)(ar{e}_R\sigma_{\mu u} u_{ au L})$	$\mathbf{C}$

#### usmunu

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

WC name	Operator	Type
CVR_sumunue	$-\frac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_R\gamma^{\mu}s_R)(\bar{\mu}_L\gamma_{\mu}\nu_{eL})$	C
CSR_sumunue	$-rac{4\overset{\sim}{G_F}}{\sqrt{2}}V_{us}(ar{u}_Ls_R)(ar{\mu}_R u_{eL})$	$\mathbf{C}$
CSL_sumunue	$-\frac{4 G_F^2}{\sqrt{2}} V_{us}(\bar{u}_R s_L)(\bar{\mu}_R \nu_{eL})$	$\mathbf{C}$
CT_sumunue	$-rac{4\overset{\circ}{N_{E}}V_{us}(ar{u}_{R}\sigma^{\mu u}s_{L})(ar{\mu}_{R}\sigma_{\mu u} u_{eL})}{2}$	$\mathbf{C}$
CVL_sumunumu	$-rac{4\overset{\circ}{N_L}}{\sqrt{2}}V_{us}(ar{u}_L\gamma^\mu s_L)(ar{\mu}_L\gamma_\mu u_{\mu L})$	$\mathbf{C}$
CVR_sumunumu	$-rac{4\overset{\sim}{Q_F}}{\sqrt{2}}V_{us}(ar{u}_R\gamma^\mu s_R)(ar{\mu}_L\gamma_\mu u_{\mu L})$	$\mathbf{C}$
CSR_sumunumu	$-rac{4\overset{\circ}{Q_{F}^{2}}}{\sqrt{2}}V_{us}(ar{u}_{L}s_{R})(ar{\mu}_{R} u_{\mu L})$	$\mathbf{C}$
CSL_sumunumu	$-rac{4 V_{GF}^2}{\sqrt{2}} V_{us}(\bar{u}_R s_L)(\bar{\mu}_R  u_{\mu L})$	$\mathbf{C}$
CT_sumunumu	$-rac{4rac{rack{G}_F}{\sqrt{2}}}{\sqrt{2}}V_{us}(ar{u}_R\sigma^{\mu u}s_L)(ar{\mu}_R\sigma_{\mu u} u_{\mu L})$	$\mathbf{C}$
CVL_sumunutau	$-rac{4rac{rack{G}_F}{\sqrt{2}}}{\sqrt{2}}V_{us}(ar{u}_L\gamma^\mu s_L)(ar{\mu}_L\gamma_\mu u_{ au L})$	$\mathbf{C}$
CVR_sumunutau	$-rac{4\overset{\sim}{G_F}}{\sqrt{2}}V_{us}(ar{u}_R\gamma^\mu s_R)(ar{\mu}_L\gamma_\mu u_{ au L})$	$\mathbf{C}$
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	$-rac{4\overset{\sim}{G_F}}{\sqrt{2}}V_{us}(ar{u}_Rs_L)(ar{\mu}_R u_{ au L})$	$\mathbf{C}$
CT_sumunutau	$-rac{4\widetilde{G}_F^2}{\sqrt{2}}V_{us}(ar{u}_R\sigma^{\mu u}s_L)(ar{\mu}_R\sigma_{\mu u} u_{ au L})$	$\mathbf{C}$

#### csmunu

WC name	Operator	Type
CVL_scmunue	$-\frac{4G_F}{\sqrt{2}}V_{cs}(\bar{c}_L\gamma^{\mu}s_L)(\bar{\mu}_L\gamma_{\mu}\nu_{eL})$	C
CVR_scmunue	$-rac{4\check{G}_F^2}{\sqrt{2}}V_{cs}(ar{c}_R\gamma^\mu s_R)(ar{\mu}_L\gamma_\mu u_{eL})$	$^{\mathrm{C}}$
CSR_scmunue	$-rac{4\widetilde{G}_F^2}{\sqrt{2}}V_{cs}(ar{c}_L s_R)(ar{\mu}_R  u_{eL})$	$\mathbf{C}$
CSL_scmunue	$-rac{4ar{Q}_F^T}{\sqrt{2}}V_{cs}(ar{c}_Rs_L)(ar{\mu}_R u_{eL})$	$^{\mathrm{C}}$
CT_scmunue	$-rac{4\check{G}_F}{\sqrt{2}}V_{cs}(ar{c}_R\sigma^{\mu u}s_L)(ar{\mu}_R\sigma_{\mu u} u_{eL})$	$^{\mathrm{C}}$
CVL_scmunumu	$-rac{4\check{G}_F}{\sqrt{2}}V_{cs}(\bar{c}_L\gamma^\mu s_L)(\bar{\mu}_L\gamma_\mu u_{\mu L})$	$^{\mathrm{C}}$
CVR_scmunumu	$-rac{4\check{G}_F}{\sqrt{2}}V_{cs}(ar{c}_R\gamma^\mu s_R)(ar{\mu}_L\gamma_\mu u_{\mu L})$	$^{\mathrm{C}}$
CSR_scmunumu	$-\frac{4\widetilde{G}_F}{\sqrt{2}}V_{cs}(\bar{c}_L s_R)(\bar{\mu}_R \nu_{\mu L})$	$^{\mathrm{C}}$
CSL_scmunumu	$-\frac{4\widetilde{G}_F}{\sqrt{2}}V_{cs}(\bar{c}_Rs_L)(\bar{\mu}_R\nu_{\mu L})$	$^{\mathrm{C}}$
CT_scmunumu	$-rac{4 \widetilde{G}_F}{\sqrt{2}} V_{cs} (ar{c}_R \sigma^{\mu  u} s_L) (ar{\mu}_R \sigma_{\mu  u}  u_{\mu L})$	$^{\mathrm{C}}$
CVL_scmunutau	$-rac{4 \widetilde{G}_F}{\sqrt{2}} V_{cs}(ar{c}_L \gamma^\mu s_L) (ar{\mu}_L \gamma_\mu  u_{ au L})$	$^{\mathrm{C}}$
CVR_scmunutau	$-rac{4 \widetilde{G}_F}{\sqrt{2}} V_{cs} (\bar{c}_R \gamma^\mu s_R) (\bar{\mu}_L \gamma_\mu  u_{\tau L})$	$^{\mathrm{C}}$
CSR_scmunutau	$-\frac{4\widetilde{G}_F}{\sqrt{2}}V_{cs}(\bar{c}_L s_R)(\bar{\mu}_R \nu_{\tau L})$	$^{\mathrm{C}}$
CSL_scmunutau	$-rac{4\widetilde{G}_F^c}{\sqrt{2}}V_{cs}(ar{c}_Rs_L)(ar{\mu}_R u_{ au L})$	$^{\mathrm{C}}$
CT_scmunutau	$-rac{4\overleftarrow{G_F}}{\sqrt{2}}V_{cs}(ar{c}_R\sigma^{\mu u}s_L)(ar{\mu}_R\sigma_{\mu u} u_{ au L})$	$^{\mathrm{C}}$

# ${\tt cdmunu}$

WC name	Operator	Type
CVL_dcmunue	$-\frac{4G_F}{\sqrt{2}}V_{cd}(\bar{c}_L\gamma^\mu d_L)(\bar{\mu}_L\gamma_\mu\nu_{eL})$	C
CVR_dcmunue	$-rac{4ar{Q}_F}{\sqrt{2}}V_{cd}(ar{c}_R\gamma^\mu d_R)(ar{\mu}_L\gamma_\mu u_{eL})$	$\mathbf{C}$
CSR_dcmunue	$-\frac{4 Y_{cd}^2}{\sqrt{2}} V_{cd}(\bar{c}_L d_R) (\bar{\mu}_R \nu_{eL})$	$^{\mathrm{C}}$
CSL_dcmunue	$-rac{4 Y_F^2}{\sqrt{2}} V_{cd}(\bar{c}_R d_L) (\bar{\mu}_R  u_{eL})$	$^{\mathrm{C}}$
CT_dcmunue	$-rac{4rac{rack{G}_F}{\sqrt{2}}}{\sqrt{2}}V_{cd}(ar{c}_R\sigma^{\mu u}d_L)(ar{\mu}_R\sigma_{\mu u} u_{eL})$	$^{\mathrm{C}}$
CVL_dcmunumu	$-rac{4reve{G_F}}{\sqrt{2}}V_{cd}(ar{c}_L\gamma^\mu d_L)(ar{\mu}_L\gamma_\mu u_{\mu L})$	$\mathbf{C}$
CVR_dcmunumu	$-rac{4\widetilde{G}_F^2}{\sqrt{2}}V_{cd}(\bar{c}_R\gamma^\mu d_R)(\bar{\mu}_L\gamma_\mu u_{\mu L})$	$^{\mathrm{C}}$
CSR_dcmunumu	$-rac{4\widetilde{G}_F^2}{\sqrt{2}}V_{cd}(ar{c}_Ld_R)(ar{\mu}_R u_{\mu L})$	$^{\mathrm{C}}$
CSL_dcmunumu	$-\frac{4\overset{\sim}{G_F}}{\sqrt{2}}V_{cd}(\bar{c}_Rd_L)(\bar{\mu}_R\nu_{\mu L})$	$^{\mathrm{C}}$
CT_dcmunumu	$-rac{4\check{G}_F}{\sqrt{2}}V_{cd}(\bar{c}_R\sigma^{\mu u}d_L)(\bar{\mu}_R\sigma_{\mu u} u_{\mu L})$	$^{\mathrm{C}}$
CVL_dcmunutau	$-rac{4ar{\zeta}_F^2}{\sqrt{2}}V_{cd}(ar{c}_L\gamma^\mu d_L)(ar{\mu}_L\gamma_\mu u_{ au L})$	$\mathbf{C}$
CVR_dcmunutau	$-rac{4ar{Q}_F^2}{\sqrt{2}}V_{cd}(ar{c}_R\gamma^\mu d_R)(ar{\mu}_L\gamma_\mu u_{ au L})$	$\mathbf{C}$
CSR_dcmunutau	$-rac{4\overset{\sim}{G_F}}{\sqrt{2}}V_{cd}(\bar{c}_Ld_R)(\bar{\mu}_R u_{ au L})$	$\mathbf{C}$
CSL_dcmunutau	$-rac{4\overset{\sim}{G_F}}{\sqrt{2}}V_{cd}(ar{c}_Rd_L)(ar{\mu}_R u_{ au L})$	$\mathbf{C}$
CT_dcmunutau	$-rac{4\overset{\circ}{G_F}}{\sqrt{2}}V_{cd}(ar{c}_R\sigma^{\mu u}d_L)(ar{\mu}_R\sigma_{\mu u} u_{ au L})$	$\mathbf{C}$

# ${\tt ustaunu}$

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

## cstaunu

WC name	Operator	Type
CVL_sctaunue	$-\frac{4G_F}{\sqrt{2}}V_{cs}(\bar{c}_L\gamma^{\mu}s_L)(\bar{\tau}_L\gamma_{\mu}\nu_{eL})$	C
CVR_sctaunue	$-rac{4\overset{V}{G_F}}{\sqrt{2}}V_{cs}(ar{c}_R\gamma^\mu s_R)(ar{ au}_L\gamma_\mu u_{eL})$	$^{\mathrm{C}}$
CSR_sctaunue	$-\frac{4\widetilde{G}_F}{\sqrt{2}}V_{cs}(\bar{c}_L s_R)(\bar{\tau}_R \nu_{eL})$	$^{\mathrm{C}}$
CSL_sctaunue	$-\frac{4\widetilde{G}_F}{\sqrt{2}}V_{cs}(\bar{c}_Rs_L)(\bar{\tau}_R\nu_{eL})$	$^{\mathrm{C}}$
CT_sctaunue	$-rac{4G_F}{\sqrt{2}}V_{cs}(ar{c}_R\sigma^{\mu u}s_L)(ar{ au}_R\sigma_{\mu u} u_{eL})$	$^{\mathrm{C}}$
CVL_sctaunumu	$-rac{4G_F}{\sqrt{2}}V_{cs}(ar{c}_L\gamma^\mu s_L)(ar{ au}_L\gamma_\mu u_{\mu L})$	$^{\mathrm{C}}$
CVR_sctaunumu	$-rac{4G_F}{\sqrt{2}}V_{cs}(ar{c}_R\gamma^\mu s_R)(ar{ au}_L\gamma_\mu u_{\mu L})$	$^{\mathrm{C}}$
CSR_sctaunumu	$-\frac{4G_F}{\sqrt{2}}V_{cs}(\bar{c}_L s_R)(\bar{\tau}_R \nu_{\mu L})$	$^{\mathrm{C}}$
CSL_sctaunumu	$-\frac{4G_F}{\sqrt{2}}V_{cs}(\bar{c}_Rs_L)(\bar{\tau}_R\nu_{\mu L})$	$^{\mathrm{C}}$
CT_sctaunumu	$-rac{4G_F}{\sqrt{2}}V_{cs}(ar{c}_R\sigma^{\mu u}s_L)(ar{ au}_R\sigma_{\mu u} u_{\mu L})$	$^{\mathrm{C}}$
CVL_sctaunutau	$-\frac{4\widetilde{G}_F}{\sqrt{2}}V_{cs}(\bar{c}_L\gamma^\mu s_L)(\bar{\tau}_L\gamma_\mu  u_{\tau L})$	$^{\mathrm{C}}$
CVR_sctaunutau	$-rac{4\widetilde{G_F}}{\sqrt{2}}V_{cs}(\bar{c}_R\gamma^\mu s_R)(\bar{ au}_L\gamma_\mu u_{ au L})$	$^{\mathrm{C}}$
CSR_sctaunutau	$-rac{4\widetilde{G}_F}{\sqrt{2}}V_{cs}(\bar{c}_L s_R)(\bar{ au}_R  u_{ au L})$	$^{\mathrm{C}}$
CSL_sctaunutau	$-rac{4\overset{\circ}{G_F}}{\sqrt{2}}V_{cs}(ar{c}_Rs_L)(ar{ au}_R u_{ au L})$	$^{\mathrm{C}}$
CT_sctaunutau	$-rac{4\widetilde{G}_F}{\sqrt{2}}V_{cs}(\bar{c}_R\sigma^{\mu u}s_L)(\bar{ au}_R\sigma_{\mu u} u_{ au L})$	С

# ${\tt cdtaunu}$

WC name	Operator	Type
CVL_dctaunue	$-\frac{4G_F}{\sqrt{2}}V_{cd}(\bar{c}_L\gamma^\mu d_L)(\bar{\tau}_L\gamma_\mu\nu_{eL})$	C
CVR_dctaunue	$-rac{4\overleftarrow{G_F}}{\sqrt{2}}V_{cd}(\bar{c}_R\gamma^\mu d_R)(\bar{ au}_L\gamma_\mu u_{eL})$	$\mathbf{C}$
CSR_dctaunue	$-\frac{4\tilde{G}_F}{\sqrt{2}}V_{cd}(\bar{c}_Ld_R)(\bar{\tau}_R\nu_{eL})$	$^{\mathrm{C}}$
CSL_dctaunue	$-\frac{4G_F}{\sqrt{2}}V_{cd}(\bar{c}_Rd_L)(\bar{\tau}_R\nu_{eL})$	$^{\mathrm{C}}$
CT_dctaunue	$-\frac{4G_F}{\sqrt{2}}V_{cd}(\bar{c}_R\sigma^{\mu\nu}d_L)(\bar{\tau}_R\sigma_{\mu\nu}\nu_{eL})$	$^{\mathrm{C}}$
CVL_dctaunumu	$-\frac{4G_F}{\sqrt{2}}V_{cd}(\bar{c}_L\gamma^\mu d_L)(\bar{\tau}_L\gamma_\mu\nu_{\mu L})$	$^{\mathrm{C}}$
CVR_dctaunumu	$-\frac{4\tilde{G}_F}{\sqrt{2}}V_{cd}(\bar{c}_R\gamma^\mu d_R)(\bar{\tau}_L\gamma_\mu\nu_{\mu L})$	$^{\mathrm{C}}$
CSR_dctaunumu	$-\frac{4\tilde{G}_F}{\sqrt{2}}V_{cd}(\bar{c}_Ld_R)(\bar{\tau}_R\nu_{\mu L})$	$^{\mathrm{C}}$
CSL_dctaunumu	$-\frac{4G_F}{\sqrt{2}}V_{cd}(\bar{c}_Rd_L)(\bar{\tau}_R\nu_{\mu L})$	$^{\mathrm{C}}$
CT_dctaunumu	$-rac{4G_F}{\sqrt{2}}V_{cd}(ar{c}_R\sigma^{\mu u}d_L)(ar{ au}_R\sigma_{\mu u} u_{\mu L})$	$^{\mathrm{C}}$
CVL_dctaunutau	$-\frac{4G_F}{\sqrt{2}}V_{cd}(\bar{c}_L\gamma^\mu d_L)(\bar{\tau}_L\gamma_\mu \nu_{\tau L})$	$^{\mathrm{C}}$
CVR_dctaunutau	$-\frac{4G_F}{\sqrt{2}}V_{cd}(\bar{c}_R\gamma^\mu d_R)(\bar{\tau}_L\gamma_\mu\nu_{\tau L})$	$^{\mathrm{C}}$
CSR_dctaunutau	$-\frac{4G_F}{\sqrt{2}}V_{cd}(\bar{c}_Ld_R)(\bar{\tau}_R\nu_{\tau L})$	$^{\mathrm{C}}$
CSL_dctaunutau	$-\frac{4\tilde{G}_F}{\sqrt{2}}V_{cd}(\bar{c}_Rd_L)(\bar{\tau}_R\nu_{\tau L})$	$^{\mathrm{C}}$
CT_dctaunutau	$-\frac{4G_F}{\sqrt{2}}V_{cd}(\bar{c}_R\sigma^{\mu\nu}d_L)(\bar{\tau}_R\sigma_{\mu\nu}\nu_{\tau L})$	С

# udenu

WC name	Operator	Type
CVL_duenue	$-\frac{4G_F}{\sqrt{2}}V_{ud}(\bar{u}_L\gamma^\mu d_L)(\bar{e}_L\gamma_\mu\nu_{eL})$	С
CVR_duenue	$-\frac{4\widetilde{G}_F}{\sqrt{2}}V_{ud}(\bar{u}_R\gamma^\mu d_R)(\bar{e}_L\gamma_\mu\nu_{eL})$	$^{\mathrm{C}}$
CSR_duenue	$-rac{4ar{Q}_F^2}{\sqrt{2}}V_{ud}(ar{u}_Ld_R)(ar{e}_R u_{eL})$	$^{\mathrm{C}}$
CSL_duenue	$-rac{4ar{Q}_F^2}{\sqrt{2}}V_{ud}(ar{u}_Rd_L)(ar{e}_R u_{eL})$	$^{\mathrm{C}}$
CT_duenue	$-rac{4ar{Q}_F}{\sqrt{2}}V_{ud}(ar{u}_R\sigma^{\mu u}d_L)(ar{e}_R\sigma_{\mu u} u_{eL})$	$^{\mathrm{C}}$
CVL_duenumu	$-rac{4ar{Q}_F}{\sqrt{2}}V_{ud}(ar{u}_L\gamma^\mu d_L)(ar{e}_L\gamma_\mu u_{\mu L})$	$^{\mathrm{C}}$
CVR_duenumu	$-rac{4ar{Q}_F}{\sqrt{2}}V_{ud}(ar{u}_R\gamma^\mu d_R)(ar{e}_L\gamma_\mu u_{\mu L})$	$^{\mathrm{C}}$
CSR_duenumu	$-rac{4ar{Q}_F}{\sqrt{2}}V_{ud}(ar{u}_Ld_R)(ar{e}_R u_{\mu L})$	$^{\mathrm{C}}$
CSL_duenumu	$-rac{4ar{Q}_F^2}{\sqrt{2}}V_{ud}(ar{u}_Rd_L)(ar{e}_R u_{\mu L})$	$^{\mathrm{C}}$
CT_duenumu	$-rac{4ar{Q}_F^2}{\sqrt{2}}V_{ud}(ar{u}_R\sigma^{\mu u}d_L)(ar{e}_R\sigma_{\mu u} u_{\mu L})$	$^{\mathrm{C}}$
CVL_duenutau	$-rac{4ar{Q}_F^2}{\sqrt{2}}V_{ud}(ar{u}_L\gamma^\mu d_L)(ar{e}_L\gamma_\mu u_{ au L})$	$^{\mathrm{C}}$
CVR_duenutau	$-rac{4ar{Q}_F^2}{\sqrt{2}}V_{ud}(ar{u}_R\gamma^\mu d_R)(ar{e}_L\gamma_\mu u_{ au L})$	$\mathbf{C}$
CSR_duenutau	$-\frac{4\tilde{G}_F}{\sqrt{2}}V_{ud}(\bar{u}_Ld_R)(\bar{e}_R u_{ au L})$	$\mathbf{C}$
CSL_duenutau	$-rac{4\check{G}_F^c}{\sqrt{2}}V_{ud}(ar{u}_Rd_L)(ar{e}_R u_{ au L})$	$\mathbf{C}$
CT_duenutau	$-rac{4\overset{\circ}{G_E}}{\sqrt{2}}V_{ud}(ar{u}_R\sigma^{\mu u}d_L)(ar{e}_R\sigma_{\mu u} u_{ au L})$	C

# ${\tt udmunu}$

WC name	Operator	Type
CVL_dumunue	$-\frac{4G_F}{\sqrt{2}}V_{ud}(\bar{u}_L\gamma^\mu d_L)(\bar{\mu}_L\gamma_\mu\nu_{eL})$	C
CVR_dumunue	$-rac{4reve{G_F}}{\sqrt{2}}V_{ud}(ar{u}_R\gamma^\mu d_R)(ar{\mu}_L\gamma_\mu u_{eL})$	$\mathbf{C}$
CSR_dumunue	$-\frac{4G_F}{\sqrt{2}}V_{ud}(\bar{u}_Ld_R)(\bar{\mu}_R\nu_{eL})$	$\mathbf{C}$
CSL_dumunue	$-\frac{4G_F}{\sqrt{2}}V_{ud}(\bar{u}_Rd_L)(\bar{\mu}_R\nu_{eL})$	$\mathbf{C}$
CT_dumunue	$-rac{4G_F}{\sqrt{2}}V_{ud}(\bar{u}_R\sigma^{\mu u}d_L)(\bar{\mu}_R\sigma_{\mu u} u_{eL})$	$\mathbf{C}$
$CVL\_dumunumu$	$-rac{4\widetilde{G}_F^c}{\sqrt{2}}V_{ud}(\bar{u}_L\gamma^\mu d_L)(\bar{\mu}_L\gamma_\mu u_{\mu L})$	$\mathbf{C}$
CVR_dumunumu	$-\frac{4G_F}{\sqrt{2}}V_{ud}(\bar{u}_R\gamma^\mu d_R)(\bar{\mu}_L\gamma_\mu\nu_{\mu L})$	$\mathbf{C}$
CSR_dumunumu	$-\frac{4\overset{\circ}{G_F}}{\sqrt{2}}V_{ud}(\bar{u}_Ld_R)(\bar{\mu}_R\nu_{\mu L})$	$\mathbf{C}$
CSL_dumunumu	$-rac{4reve{G_F}}{\sqrt{2}}V_{ud}(ar{u}_Rd_L)(ar{\mu}_R u_{\mu L})$	$\mathbf{C}$
CT_dumunumu	$-rac{4\check{G}_F}{\sqrt{2}}V_{ud}(\bar{u}_R\sigma^{\mu u}d_L)(\bar{\mu}_R\sigma_{\mu u} u_{\mu L})$	$\mathbf{C}$
CVL_dumunutau	$-rac{4\check{G}_F}{\sqrt{2}}V_{ud}(\bar{u}_L\gamma^\mu d_L)(\bar{\mu}_L\gamma_\mu u_{ au L})$	$\mathbf{C}$
CVR_dumunutau	$-\frac{4 \check{G}_F}{\sqrt{2}} V_{ud} (\bar{u}_R \gamma^\mu d_R) (\bar{\mu}_L \gamma_\mu \nu_{\tau L})$	$\mathbf{C}$
CSR_dumunutau	$-\frac{4G_F}{\sqrt{2}}V_{ud}(\bar{u}_Ld_R)(\bar{\mu}_R\nu_{\tau L})$	$\mathbf{C}$
CSL_dumunutau	$-rac{4\widetilde{G}_F^c}{\sqrt{2}}V_{ud}(ar{u}_Rd_L)(ar{\mu}_R u_{ au L})$	$\mathbf{C}$
CT_dumunutau	$-\frac{4\tilde{G}_F}{\sqrt{2}}V_{ud}(\bar{u}_R\sigma^{\mu\nu}d_L)(\bar{\mu}_R\sigma_{\mu\nu}\nu_{\tau L})$	С

# udtaunu

WC name	Operator	Type
CVL_dutaunue	$-\frac{4G_F}{\sqrt{2}}V_{ud}(\bar{u}_L\gamma^\mu d_L)(\bar{\tau}_L\gamma_\mu\nu_{eL})$	C
CVR_dutaunue	$-rac{4\widetilde{G}_F}{\sqrt{2}}V_{ud}(\bar{u}_R\gamma^\mu d_R)(\bar{ au}_L\gamma_\mu u_{eL})$	$\mathbf{C}$
CSR_dutaunue	$-\frac{4G_F}{\sqrt{2}}V_{ud}(\bar{u}_Ld_R)(\bar{\tau}_R\nu_{eL})$	$^{\mathrm{C}}$
CSL_dutaunue	$-\frac{4G_F}{\sqrt{2}}V_{ud}(\bar{u}_Rd_L)(\bar{\tau}_R\nu_{eL})$	$^{\mathrm{C}}$
CT_dutaunue	$-\frac{4G_F}{\sqrt{2}}V_{ud}(\bar{u}_R\sigma^{\mu\nu}d_L)(\bar{\tau}_R\sigma_{\mu\nu}\nu_{eL})$	$^{\mathrm{C}}$
CVL_dutaunumu	$-\frac{4G_F}{\sqrt{2}}V_{ud}(\bar{u}_L\gamma^\mu d_L)(\bar{\tau}_L\gamma_\mu\nu_{\mu L})$	$^{\mathrm{C}}$
CVR_dutaunumu	$-\frac{4G_F}{\sqrt{2}}V_{ud}(\bar{u}_R\gamma^\mu d_R)(\bar{\tau}_L\gamma_\mu\nu_{\mu L})$	$^{\mathrm{C}}$
CSR_dutaunumu	$-\frac{4G_F}{\sqrt{2}}V_{ud}(\bar{u}_Ld_R)(\bar{\tau}_R\nu_{\mu L})$	$^{\mathrm{C}}$
CSL_dutaunumu	$-\frac{4G_F}{\sqrt{2}}V_{ud}(\bar{u}_Rd_L)(\bar{\tau}_R\nu_{\mu L})$	$^{\mathrm{C}}$
CT_dutaunumu	$-\frac{4G_F}{\sqrt{2}}V_{ud}(\bar{u}_R\sigma^{\mu\nu}d_L)(\bar{\tau}_R\sigma_{\mu\nu}\nu_{\mu L})$	$^{\mathrm{C}}$
$\mathtt{CVL\_dutaunutau}$	$-\frac{4G_F}{\sqrt{2}}V_{ud}(\bar{u}_L\gamma^\mu d_L)(\bar{\tau}_L\gamma_\mu\nu_{\tau L})$	$^{\mathrm{C}}$
CVR_dutaunutau	$-\frac{4G_F}{\sqrt{2}}V_{ud}(\bar{u}_R\gamma^\mu d_R)(\bar{\tau}_L\gamma_\mu\nu_{\tau L})$	$^{\mathrm{C}}$
CSR_dutaunutau	$-\frac{4\widetilde{G}_F}{\sqrt{2}}V_{ud}(\bar{u}_Ld_R)(\bar{\tau}_R\nu_{\tau L})$	$\mathbf{C}$
CSL_dutaunutau	$-\frac{4G_F}{\sqrt{2}}V_{ud}(\bar{u}_Rd_L)(\bar{\tau}_R\nu_{\tau L})$	$^{\mathrm{C}}$
CT_dutaunutau	$-rac{4ar{G_F}}{\sqrt{2}}V_{ud}(ar{u}_R\sigma^{\mu u}d_L)(ar{ au}_R\sigma_{\mu u} u_{ au L})$	$^{\mathrm{C}}$

# dF=0

WC name	Operator	Type
CG	$\frac{4G_F}{\sqrt{2}}f^{ABC}G^{A u}_{\mu}G^{B ho}_{ u}G^{C\mu}_{ ho}$	R
CGtilde	$rac{4\widetilde{G}_F}{\sqrt{2}}f^{ABC}\widetilde{G}_{\mu}^{A u}G_{ u}^{B ho}G_{ ho}^{C\mu}$	$\mathbf{R}$
C7_uu	$rac{4 \widetilde{G}_F}{\sqrt{2}} f^{ABC} \widetilde{G}_{\mu}^{A u} G_{ u}^{B ho} G_{ ho}^{C\mu} \ rac{4 G_F}{\sqrt{2}} rac{e}{16\pi^2} m_u ar{u}_L \sigma^{\mu u} u_R F_{\mu u}$	$^{\mathrm{C}}$
C7_cc	$rac{4G_F^2}{\sqrt{2}}rac{e}{16\pi^2}m_car{c}_L\sigma^{\mu u}c_RF_{\mu u}$	$\mathbf{C}$
C7_dd	$rac{4ar{G_F}}{\sqrt{2}}rac{e}{16\pi^2}m_dar{d}_L\sigma^{\mu u}d_RF_{\mu u}$	$^{\mathrm{C}}$
C7_ss	$rac{4reve{G_F}}{\sqrt{2}}rac{e}{16\pi^2}m_sar{s}_L\sigma^{\mu u}s_RF_{\mu u}$	$^{\mathrm{C}}$
C7_ee	$rac{4ar{G_F}}{\sqrt{2}}rac{e}{16\pi^2}m_ear{e}_L\sigma^{\mu u}e_RF_{\mu u}$	$^{\mathrm{C}}$
C7_mumu	$\frac{4G_F}{\sqrt{2}} \frac{e}{16\pi^2} m_\mu \bar{\mu}_L \sigma^{\mu\nu} \mu_R F_{\mu\nu}$	$^{\mathrm{C}}$
C7_tautau	$rac{4ar{G_F}}{\sqrt{2}}rac{e}{16\pi^2}m_ auar{ au}_L\sigma^{\mu u} au_RF_{\mu u}$	$^{\mathrm{C}}$
C8_uu	$\frac{\frac{4G_F}{\sqrt{2}}}{\frac{g_s}{16\pi^2}} m_u \bar{u}_L \sigma^{\mu\nu} T^A u_R G^A_{\mu\nu} \\ \frac{4G_F}{\sqrt{2}} \frac{g_s}{16\pi^2} m_c \bar{c}_L \sigma^{\mu\nu} T^A c_R G^A_{\mu\nu}$	$^{\mathrm{C}}$
C8_cc	$rac{4ar{G_F}}{\sqrt{2}}rac{g_s}{16\pi^2}m_car{c}_L\sigma^{\mu u}T^Ac_RG^{\dot{A}}_{\mu u}$	$^{\mathrm{C}}$
C8_dd	$rac{4G_F}{\sqrt{2}}rac{g_s}{16\pi^2}m_dar{d}_L\sigma^{\mu u}T^Ad_RG^A_{\mu u}$	$^{\mathrm{C}}$
C8_ss	$rac{4  ilde{G_F}}{\sqrt{2}} rac{g_s}{16 \pi^2} m_s ar{s}_L \sigma^{\mu  u} T^A s_R G_{\mu  u}^{A}$	$^{\mathrm{C}}$
CTRR_eeuu	$rac{4ar{G}_F}{\sqrt{2}}(ar{e}_L\sigma^{\mu u}e_R)(ar{u}_L\sigma_{\mu u}u_R)$	$^{\mathrm{C}}$
CTRR_mumuuu	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{\mu}_L\sigma^{\mu\nu}\mu_R)(\bar{u}_L\sigma_{\mu\nu}u_R)$	$^{\mathrm{C}}$

WC name	Operator	Type
CTRR_tautauuu	$rac{4G_F}{\sqrt{2}}(ar{ au}_L\sigma^{\mu u} au_R)(ar{u}_L\sigma_{\mu u}u_R)$	$^{\mathrm{C}}$
CTRR_eedd	$rac{4G_F}{\sqrt{2}}(ar{e}_L\sigma^{\mu u}e_R)(ar{d}_L\sigma_{\mu u}d_R)$	$\mathbf{C}$
CTRR_eess	$rac{4ar{G_F}}{\sqrt{2}}(ar{e}_L\sigma^{\mu u}e_R)(ar{s}_L\sigma_{\mu u}s_R)$	$\mathbf{C}$
CTRR_mumudd	$rac{4ar{G_F}}{\sqrt{2}}(ar{\mu}_L\sigma^{\mu u}\mu_R)(ar{d}_L\sigma_{\mu u}d_R)$	$\mathbf{C}$
CTRR_mumuss	$rac{4ar{G_F}}{\sqrt{2}}(ar{\mu}_L\sigma^{\mu u}\mu_R)(ar{s}_L\sigma_{\mu u}s_R)$	$\mathbf{C}$
CTRR_tautaudd	$rac{4ar{G_F}}{\sqrt{2}}(ar{ au}_L\sigma^{\mu u} au_R)(ar{d}_L\sigma_{\mu u}d_R)$	$\mathbf{C}$
CTRR_tautauss	$rac{4G_F}{\sqrt{2}}(ar{ au}_L\sigma^{\mu u} au_R)(ar{s}_L\sigma_{\mu u}s_R)$	$\mathbf{C}$
CS1RR_uuuu	$\frac{4G_F}{\sqrt{2}}(ar{u}_L u_R)(ar{u}_L u_R)$	$^{\mathrm{C}}$
CS8RR_uuuu	$\frac{4G_F}{\sqrt{2}}(\bar{u}_L T^A u_R)(\bar{u}_L T^A u_R)$	$\mathbf{C}$
CS1RR_uudd	$rac{4G_F}{\sqrt{2}}(ar{u}_L u_R)(ar{d}_L d_R)$	$\mathbf{C}$
CS1RR_uuss	$rac{4G_F}{\sqrt{2}}(ar{u}_L u_R)(ar{s}_L s_R)$	$\mathbf{C}$
CS8RR_uudd	$\frac{4\bar{G}_F}{\sqrt{2}}(\bar{u}_L T^A u_R)(\bar{d}_L T^A d_R)$	$\mathbf{C}$
CS8RR_uuss	$\frac{4\ddot{G}_F}{\sqrt{2}}(\bar{u}_L T^A u_R)(\bar{s}_L T^A s_R)$	$\mathbf{C}$
CS1RR_dddd	$rac{4ar{G_F}}{\sqrt{2}}(ar{d}_L d_R)(ar{d}_L d_R)$	$\mathbf{C}$
CS1RR_ddss	$rac{4G_F}{\sqrt{2}}(ar{d}_L d_R)(ar{s}_L s_R)$	$\mathbf{C}$
CS1RR_dssd	$rac{4G_F}{\sqrt{2}}(ar{d}_L s_R)(ar{s}_L d_R)$	$^{\mathrm{C}}$
CS1RR_ssss	$rac{4G_F}{\sqrt{2}}(ar{s}_L s_R)(ar{s}_L s_R)$	$\mathbf{C}$
CS8RR_dddd	$rac{4ar{G}_F}{\sqrt{2}}(ar{d}_LT^Ad_R)(ar{d}_LT^Ad_R)$	$^{\mathrm{C}}$
CS8RR_ddss	$rac{4G_F}{\sqrt{2}}(ar{d}_L T^A d_R)(ar{s}_L T^A s_R)$	$\mathbf{C}$
CS8RR_dssd	$rac{4G_F}{\sqrt{2}}(ar{d}_L T^A s_R)(ar{s}_L T^A d_R)$	$^{\mathrm{C}}$
CS8RR_ssss	$rac{4G_F}{\sqrt{2}}(ar{s}_L T^A s_R)(ar{s}_L T^A s_R)$	$\mathbf{C}$
CS1RR_uddu	$rac{4G_F}{\sqrt{2}}(ar{u}_L d_R)(ar{d}_L u_R)$	$\mathbf{C}$
CS1RR_ussu	$rac{4G_F}{\sqrt{2}}(ar{u}_L s_R)(ar{s}_L u_R)$	$^{\mathrm{C}}$
CS8RR_uddu	$rac{4G_F}{\sqrt{2}}(ar{u}_L T^A d_R)(ar{d}_L T^A u_R)$	$^{\mathrm{C}}$
CS8RR_ussu	$\frac{4G_F}{\sqrt{2}}(\bar{u}_L T^A s_R)(\bar{s}_L T^A u_R)$	$\mathbf{C}$
CS1RR_cccc	$rac{4G_F}{\sqrt{2}}(ar{c}_L c_R)(ar{c}_L c_R)$	$\mathbf{C}$
CS1RR_ccdd	$rac{4G_F}{\sqrt{2}}(ar{c}_L c_R)(ar{d}_L d_R)$	$\mathbf{C}$
CS1RR_ccss	$rac{4G_F}{\sqrt{2}}(ar{c}_L c_R)(ar{s}_L s_R)$	$\mathbf{C}$
CS1RR_cddc	$rac{4G_F}{\sqrt{2}}(ar{c}_L d_R)(ar{d}_L c_R)$	$^{\mathrm{C}}$
CS1RR_cssc	$rac{4G_F}{\sqrt{2}}(ar{c}_L s_R)(ar{s}_L c_R)$	$\mathbf{C}$
CS1RR_uccu	$rac{4G_F}{\sqrt{2}}(ar{u}_L c_R)(ar{c}_L u_R)$	$\mathbf{C}$
CS1RR_uucc	$rac{4G_F}{\sqrt{2}}(ar{u}_L u_R)(ar{c}_L c_R)$	$^{\mathrm{C}}$
CS8RR_cccc	$rac{4G_F}{\sqrt{2}}(ar{c}_L T^A c_R)(ar{c}_L T^A c_R)$	$^{\mathrm{C}}$
CS8RR_ccdd	$rac{4G_F}{\sqrt{2}}(ar{c}_L T^A c_R)(ar{d}_L T^A d_R)$	$^{\mathrm{C}}$
CS8RR_ccss	$rac{4G_F}{\sqrt{2}}(ar{c}_L T^A c_R)(ar{s}_L T^A s_R)$	$^{\mathrm{C}}$
CS8RR_cddc	$rac{4G_F}{\sqrt{2}}(ar{c}_L T^A d_R)(ar{d}_L T^A c_R)$	$^{\mathrm{C}}$
CS8RR_cssc	$\frac{4G_F}{\sqrt{2}}(\bar{c}_L T^A s_R)(\bar{s}_L T^A c_R)$	$^{\mathrm{C}}$

WC name	Operator	Type
CS8RR_uccu	$\frac{4G_F}{\sqrt{2}}(\bar{u}_L T^A c_R)(\bar{c}_L T^A u_R)$	C
CS8RR_uucc	$\frac{4\tilde{G}_F^2}{\sqrt{2}}(\bar{u}_L T^A u_R)(\bar{c}_L T^A c_R)$	$^{\mathrm{C}}$
CSRL_eecc	$\frac{4\check{G}_F}{\sqrt{2}}(\bar{e}_L e_R)(\bar{c}_R c_L)$	$^{\mathrm{C}}$
CSRL_eedd	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{e}_L e_R)(\bar{d}_R d_L)$	$^{\mathrm{C}}$
CSRL_eess	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{e}_L e_R)(\bar{s}_R s_L)$	$^{\mathrm{C}}$
CSRL_eeuu	$\frac{4\check{G}_F}{\sqrt{2}}(\bar{e}_L e_R)(\bar{u}_R u_L)$	$^{\mathrm{C}}$
CSRL_mumucc	$\frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\mu_R)(\bar{c}_Rc_L)$	$^{\mathrm{C}}$
CSRL_mumudd	$\frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\mu_R)(\bar{d}_Rd_L)$	$^{\mathrm{C}}$
CSRL_mumuss	$\frac{4\ddot{G}_F}{\sqrt{2}}(\bar{\mu}_L\mu_R)(\bar{s}_Rs_L)$	$^{\mathrm{C}}$
CSRL_mumuuu	$\frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\mu_R)(\bar{u}_Ru_L)$	$^{\mathrm{C}}$
CSRL_tautaucc	$\frac{4G_F}{\sqrt{2}}(\bar{\tau}_L\tau_R)(\bar{c}_Rc_L)$	$\mathbf{C}$
CSRL_tautaudd	$\frac{4G_F}{\sqrt{2}}(\bar{\tau}_L\tau_R)(\bar{d}_Rd_L)$	$\mathbf{C}$
CSRL_tautauss	$\frac{4G_F}{\sqrt{2}}(\bar{ au}_L au_R)(\bar{s}_Rs_L)$	$\mathbf{C}$
CSRL_tautauuu	$\frac{4G_F}{\sqrt{2}}(\bar{\tau}_L\tau_R)(\bar{u}_Ru_L)$	$\mathbf{C}$
CSRR_eecc	$\frac{4G_F}{\sqrt{2}}(\bar{e}_L e_R)(\bar{c}_L c_R)$	$\mathbf{C}$
CSRR_eedd	$\frac{4G_F}{\sqrt{2}}(\bar{e}_L e_R)(\bar{d}_L d_R)$	$\mathbf{C}$
CSRR_eeee	$\frac{4G_F}{\sqrt{2}}(\bar{e}_L e_R)(\bar{e}_L e_R)$	$\mathbf{C}$
CSRR_eemumu	$\frac{4G_F}{\sqrt{2}}(\bar{e}_L e_R)(\bar{\mu}_L \mu_R)$	$^{\mathrm{C}}$
CSRR_eess	$\frac{4G_F}{\sqrt{2}}(\bar{e}_L e_R)(\bar{s}_L s_R)$	$\mathbf{C}$
CSRR_eetautau	$\frac{4G_F}{\sqrt{2}}(\bar{e}_L e_R)(\bar{\tau}_L \tau_R)$	$\mathbf{C}$
CSRR_eeuu	$\frac{4G_F}{\sqrt{2}}(\bar{e}_L e_R)(\bar{u}_L u_R)$	$\mathbf{C}$
CSRR_emumue	$\frac{4G_F}{\sqrt{2}}(\bar{e}_L\mu_R)(\bar{\mu}_Le_R)$	$\mathbf{C}$
CSRR_etautaue	$\frac{4G_F}{\sqrt{2}}(\bar{e}_L\tau_R)(\bar{\tau}_Le_R)$	$^{\mathrm{C}}$
CSRR_mumucc	$\frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\mu_R)(\bar{c}_Lc_R)$	$^{\mathrm{C}}$
CSRR_mumudd	$\frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\mu_R)(\bar{d}_Ld_R)$	$^{\mathrm{C}}$
CSRR_mumumumu	$\frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\mu_R)(\bar{\mu}_L\mu_R)$	$\mathbf{C}$
CSRR_mumuss	$\frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\mu_R)(\bar{s}_Ls_R)$	$^{\mathrm{C}}$
CSRR_mumutautau	$\frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\mu_R)(\bar{ au}_L au_R)$	$^{\mathrm{C}}$
CSRR_mumuuu	$\frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\mu_R)(\bar{u}_Lu_R)$	$\mathbf{C}$
CSRR_mutautaumu	$\frac{4G_F}{\sqrt{2}}(\bar{\mu}_L \tau_R)(\bar{\tau}_L \mu_R)$	$^{\mathrm{C}}$
CSRR_tautaucc	$\frac{4G_F}{\sqrt{2}}(\bar{\tau}_L \tau_R)(\bar{c}_L c_R)$	$\mathbf{C}$
CSRR_tautaudd	$\frac{4G_F}{\sqrt{2}}(\bar{ au}_L au_R)(\bar{d}_Ld_R)$	$\mathbf{C}$
CSRR_tautauss	$\frac{4G_F}{\sqrt{2}}(\bar{ au}_L au_R)(\bar{s}_Ls_R)$	$\mathbf{C}$
CSRR_tautautautau		$\mathbf{C}$
CSRR_tautauuu	$\frac{4G_F}{\sqrt{2}}(\bar{\tau}_L \tau_R)(\bar{u}_L u_R)$	$^{\mathrm{C}}$
CTRR_eecc	$\frac{4G_F}{\sqrt{2}}(\bar{e}_L\sigma^{\mu\nu}e_R)(\bar{c}_L\sigma_{\mu\nu}c_R)$	$^{\mathrm{C}}$
CTRR_mumucc	$\frac{\sqrt[4]{G_F}}{\sqrt[4]{2}} (\bar{\tau}_L \tau_R) (\bar{u}_L u_R)$ $\frac{4G_F}{\sqrt[4]{2}} (\bar{e}_L \sigma^{\mu\nu} e_R) (\bar{c}_L \sigma_{\mu\nu} c_R)$ $\frac{\sqrt[4]{G_F}}{\sqrt[4]{2}} (\bar{\mu}_L \sigma^{\mu\nu} \mu_R) (\bar{c}_L \sigma_{\mu\nu} c_R)$	$^{\mathrm{C}}$

WC name	Operator	Type
CTRR_tautaucc	$rac{4G_F}{\sqrt{2}}(ar{ au}_L\sigma^{\mu u} au_R)(ar{c}_L\sigma_{\mu u}c_R)$	$\mathbf{C}$
CV1LL_ccdd	$rac{4G_F}{\sqrt{2}}(ar{c}_L\gamma^\mu c_L)(ar{d}_L\gamma_\mu d_L)$	$\mathbf{R}$
CV1LL_ccss	$rac{4 ar{G}_F}{\sqrt{2}} (ar{c}_L \gamma^\mu c_L) (ar{s}_L \gamma_\mu s_L)$	R
CV1LL_uudd	$rac{4 G_F}{\sqrt{2}} (ar{u}_L \gamma^\mu u_L) (ar{d}_L \gamma_\mu d_L)$	R
CV1LL_uuss	$rac{4G_F}{\sqrt{2}}(ar{u}_L\gamma^\mu u_L)(ar{s}_L\gamma_\mu s_L)$	R
CV1LR_cccc	$rac{4G_F}{\sqrt{2}}(ar{c}_L\gamma^\mu c_L)(ar{c}_R\gamma_\mu c_R)$	R
CV1LR_ccdd	$rac{4G_F}{\sqrt{2}}(ar{c}_L\gamma^\mu c_L)(ar{d}_R\gamma_\mu d_R)$	R
CV1LR_ccss	$rac{4G_F}{\sqrt{2}}(ar{c}_L\gamma^\mu c_L)(ar{s}_R\gamma_\mu s_R)$	R
CV1LR_ccuu	$\frac{4G_F}{\sqrt{2}}(\bar{c}_L\gamma^\mu c_L)(\bar{u}_R\gamma_\mu u_R)$	R
CV1LR_cddc	$rac{4G_F}{\sqrt{2}}(ar{c}_L\gamma^\mu d_L)(ar{d}_R\gamma_\mu c_R)$	$\mathbf{C}$
CV1LR_cssc	$rac{4G_F}{\sqrt{2}}(ar{c}_L\gamma^\mu s_L)(ar{s}_R\gamma_\mu c_R)$	$\mathbf{C}$
CV1LR_ddcc	$rac{4G_F}{\sqrt{2}}(ar{d}_L\gamma^\mu d_L)(ar{c}_R\gamma_\mu c_R)$	R
CV1LR_dddd	$rac{4 G_F}{\sqrt{2}} (ar{d}_L \gamma^\mu d_L) (ar{d}_R \gamma_\mu d_R)$	R
CV1LR_ddss	$rac{4G_F}{\sqrt{2}}(ar{d}_L\gamma^\mu d_L)(ar{s}_R\gamma_\mu s_R)$	R
CV1LR_dduu	$rac{4G_F}{\sqrt{2}}(ar{d}_L\gamma^\mu d_L)(ar{u}_R\gamma_\mu u_R)$	R
CV1LR_dssd	$rac{4G_F}{\sqrt{2}}(ar{d}_L\gamma^\mu s_L)(ar{s}_R\gamma_\mu d_R)$	$\mathbf{C}$
CV1LR_sscc	$rac{4G_F}{\sqrt{2}}(ar{s}_L\gamma^\mu s_L)(ar{c}_R\gamma_\mu c_R)$	R
CV1LR_ssdd	$rac{4G_F}{\sqrt{2}}(ar{s}_L\gamma^\mu s_L)(ar{d}_R\gamma_\mu d_R)$	R
CV1LR_ssss	$rac{4 G_F}{\sqrt{2}} (ar{s}_L \gamma^\mu s_L) (ar{s}_R \gamma_\mu s_R)$	R
CV1LR_ssuu	$\frac{4G_F}{\sqrt{2}}(\bar{s}_L\gamma^\mu s_L)(\bar{u}_R\gamma_\mu u_R)$	R
CV1LR_uccu	$\frac{4G_F}{\sqrt{2}}(\bar{u}_L\gamma^\mu c_L)(\bar{c}_R\gamma_\mu u_R)$	$\mathbf{C}$
CV1LR_uddu	$\frac{4G_F}{\sqrt{2}}(\bar{u}_L\gamma^\mu d_L)(\bar{d}_R\gamma_\mu u_R)$	$\mathbf{C}$
CV1LR_ussu	$\frac{4G_F}{\sqrt{2}}(\bar{u}_L\gamma^\mu s_L)(\bar{s}_R\gamma_\mu u_R)$	$\mathbf{C}$
CV1LR_uucc	$\frac{4 \overleftarrow{G_F}}{\sqrt{2}} (\bar{u}_L \gamma^\mu u_L) (\bar{c}_R \gamma_\mu c_R)$	R
CV1LR_uudd	$\frac{4 \overleftarrow{G_F}}{\sqrt{2}} (\bar{u}_L \gamma^\mu u_L) (\bar{d}_R \gamma_\mu d_R)$	R
CV1LR_uuss	$\frac{4G_F}{\sqrt{2}}(\bar{u}_L\gamma^\mu u_L)(\bar{s}_R\gamma_\mu s_R)$	R
CV1LR_uuuu	$\frac{4 \check{G}_F}{\sqrt{2}} (\bar{u}_L \gamma^\mu u_L) (\bar{u}_R \gamma_\mu u_R)$	R
CV1RR_ccdd	$\frac{4 \overset{.}{G_F}}{\sqrt{2}} (\bar{c}_R \gamma^\mu c_R) (\bar{d}_R \gamma_\mu d_R)$	R
CV1RR_ccss	$\frac{4 \overset{\sim}{G_F}}{\sqrt{2}} (\bar{c}_R \gamma^\mu c_R) (\bar{s}_R \gamma_\mu s_R)$	R
CV1RR_uudd	$\frac{4G_F}{G_F}(\bar{q}_{PQ}\mu_{MP})(\bar{d}_{PQ},d_{P})$	R
CV1RR_uuss	$\frac{4\overleftarrow{G_F}}{\sqrt{2}}(\bar{u}_R\gamma^\mu u_R)(\bar{s}_R\gamma_\mu s_R)$	R
CV8LL_ccdd	$\frac{4G_F}{\sqrt{2}}(\bar{c}_L\gamma^\mu T^A c_L)(\bar{d}_L\gamma_\mu T^A d_L)$	R
CV8LL_ccss	$\frac{4G_F}{\sqrt{2}}(\bar{c}_L\gamma^\mu T^A c_L)(\bar{s}_L\gamma_\mu T^A s_L)$	R
CV8LL_uudd	$\frac{4\check{G}_F}{\sqrt{2}}(\bar{u}_L\gamma^\mu T^A u_L)(\bar{d}_L\gamma_\mu T^A d_L)$	${ m R}$
CV8LL_uuss	$\frac{4\check{G}_F}{\sqrt{2}}(\bar{u}_L\gamma^\mu T^A u_L)(\bar{s}_L\gamma_\mu T^A s_L)$	R
CV8LR_cccc	$\frac{4\check{G}_F}{\sqrt{2}}(\bar{c}_L\gamma^\mu T^Ac_L)(\bar{c}_R\gamma_\mu T^Ac_R)$	${ m R}$
CV8LR_ccdd	$\begin{array}{c} \frac{\sqrt{2}}{\sqrt{2}} \left( \bar{u}_R \gamma^\mu u_R \right) (\bar{s}_R \gamma_\mu s_R) \\ \frac{4G_F}{\sqrt{2}} \left( \bar{c}_L \gamma^\mu T^A c_L \right) (\bar{d}_L \gamma_\mu T^A d_L) \\ \frac{4G_F}{\sqrt{2}} \left( \bar{c}_L \gamma^\mu T^A c_L \right) (\bar{s}_L \gamma_\mu T^A s_L) \\ \frac{4G_F}{\sqrt{2}} \left( \bar{u}_L \gamma^\mu T^A u_L \right) (\bar{d}_L \gamma_\mu T^A d_L) \\ \frac{4G_F}{\sqrt{2}} \left( \bar{u}_L \gamma^\mu T^A u_L \right) (\bar{s}_L \gamma_\mu T^A s_L) \\ \frac{4G_F}{\sqrt{2}} \left( \bar{c}_L \gamma^\mu T^A c_L \right) (\bar{s}_R \gamma_\mu T^A c_R) \\ \frac{4G_F}{\sqrt{2}} \left( \bar{c}_L \gamma^\mu T^A c_L \right) (\bar{d}_R \gamma_\mu T^A d_R) \end{array}$	R
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WC name	Operator	Type
CV8LR_ccss	$\frac{4G_F}{\sqrt{2}}(\bar{c}_L\gamma^\mu T^A c_L)(\bar{s}_R\gamma_\mu T^A s_R)$	R
CV8LR_ccuu	$rac{4ar{G}_F}{\sqrt{2}}(ar{c}_L\gamma^\mu T^A c_L)(ar{u}_R\gamma_\mu T^A u_R)$	R
CV8LR_cddc	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{c}_L\gamma^\mu T^A d_L)(\bar{d}_R\gamma_\mu T^A c_R)$	$\mathbf{C}$
CV8LR_cssc	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{c}_L\gamma^\mu T^A s_L)(\bar{s}_R\gamma_\mu T^A c_R)$	$\mathbf{C}$
CV8LR_ddcc	$\frac{4\tilde{G}_F^2}{\sqrt{2}}(\bar{d}_L\gamma^\mu T^A d_L)(\bar{c}_R\gamma_\mu T^A c_R)$	R
CV8LR_dddd	$\frac{4\check{G}_F}{\sqrt{2}}(\bar{d}_L\gamma^\mu T^A d_L)(\bar{d}_R\gamma_\mu T^A d_R)$	R
CV8LR_ddss	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{d}_L\gamma^{\mu}T^Ad_L)(\bar{s}_R\gamma_{\mu}T^As_R)$	R
CV8LR_dduu	$\frac{4G_F}{\sqrt{2}}(\bar{d}_L\gamma^{\mu}T^Ad_L)(\bar{u}_R\gamma_{\mu}T^Au_R)$	R
CV8LR_dssd	$\frac{4\check{G}_F}{\sqrt{2}}(\bar{d}_L\gamma^\mu T^A s_L)(\bar{s}_R\gamma_\mu T^A d_R)$	$\mathbf{C}$
CV8LR_sscc	$\frac{4\check{G}_F}{\sqrt{2}}(\bar{s}_L\gamma^\mu T^A s_L)(\bar{c}_R\gamma_\mu T^A c_R)$	R
CV8LR_ssdd	$\frac{4G_F}{\sqrt{2}}(\bar{s}_L\gamma^\mu T^A s_L)(\bar{d}_R\gamma_\mu T^A d_R)$	R
CV8LR_ssss	$rac{4ar{G}_F}{\sqrt{2}}(ar{s}_L\gamma^\mu T^A s_L)(ar{s}_R\gamma_\mu T^A s_R)$	R
CV8LR_ssuu	$\frac{4G_F}{\sqrt{2}}(\bar{s}_L\gamma^{\mu}T^As_L)(\bar{u}_R\gamma_{\mu}T^Au_R)$	R
CV8LR_uccu	$\frac{4G_F}{\sqrt{2}}(\bar{u}_L\gamma^{\mu}T^Ac_L)(\bar{c}_R\gamma_{\mu}T^Au_R)$	$^{\mathrm{C}}$
CV8LR_uddu	$\frac{4G_F}{\sqrt{2}}(\bar{u}_L\gamma^{\mu}T^Ad_L)(\bar{d}_R\gamma_{\mu}T^Au_R)$	$^{\mathrm{C}}$
CV8LR_ussu	$\frac{4G_F}{\sqrt{2}}(\bar{u}_L\gamma^{\mu}T^As_L)(\bar{s}_R\gamma_{\mu}T^Au_R)$	$^{\mathrm{C}}$
CV8LR_uucc	$\frac{4G_F}{\sqrt{2}}(\bar{u}_L\gamma^{\mu}T^Au_L)(\bar{c}_R\gamma_{\mu}T^Ac_R)$	R
CV8LR_uudd	$\frac{4G_F}{\sqrt{2}}(\bar{u}_L\gamma^{\mu}T^Au_L)(\bar{d}_R\gamma_{\mu}T^Ad_R)$	R
CV8LR_uuss	$\frac{4G_F}{\sqrt{2}}(\bar{u}_L\gamma^{\mu}T^Au_L)(\bar{s}_R\gamma_{\mu}T^As_R)$	R
CV8LR_uuuu	$\frac{4G_F}{\sqrt{2}}(\bar{u}_L\gamma^{\mu}T^Au_L)(\bar{u}_R\gamma_{\mu}T^Au_R)$	R
CV8RR_ccdd	$\frac{4G_F}{\sqrt{2}}(\bar{c}_R\gamma^\mu T^A c_R)(\bar{d}_R\gamma_\mu T^A d_R)$	R
CV8RR_ccss	$\frac{4G_F}{\sqrt{2}}(\bar{c}_R\gamma^\mu T^A c_R)(\bar{s}_R\gamma_\mu T^A s_R)$	R
CV8RR_uudd	$\frac{4G_F}{\sqrt{2}}(\bar{u}_R\gamma^\mu T^A u_R)(\bar{d}_R\gamma_\mu T^A d_R)$	R
CV8RR_uuss	$\frac{4G_F}{\sqrt{2}}(\bar{u}_R\gamma^{\mu}T^Au_R)(\bar{s}_R\gamma_{\mu}T^As_R)$	R
CVLL_cccc	$\frac{4G_F}{\sqrt{2}}(\bar{c}_L\gamma^\mu c_L)(\bar{c}_L\gamma_\mu c_L)$	R
CVLL_dddd	$rac{4G_F}{\sqrt{2}}(ar{d}_L\gamma^\mu d_L)(ar{d}_L\gamma_\mu d_L)$	R
CVLL_ddss	$rac{4G_F}{\sqrt{2}}(ar{d}_L\gamma^\mu d_L)(ar{s}_L\gamma_\mu s_L)$	R
CVLL_dssd	$\frac{4G_F}{\sqrt{2}}(ar{d}_L\gamma^\mu s_L)(ar{s}_L\gamma_\mu d_L)$	R
CVLL_eecc	$rac{4G_F}{\sqrt{2}}(ar{e}_L\gamma^\mu e_L)(ar{c}_L\gamma_\mu c_L)$	R
CVLL_eedd	$\frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{d}_L\gamma_\mu d_L)$	R
CVLL_eeee	$\frac{{}^{4}\!$	R
CVLL_eemumu	$rac{4G_F}{\sqrt{2}}(ar{e}_L\gamma^\mu e_L)(ar{\mu}_L\gamma_\mu\mu_L)$	R
CVLL_eess	$\frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^{\mu}e_L)(\bar{s}_L\gamma_{\mu}s_L)$	R
CVLL_eetautau	$\frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{ au}_L\gamma_\mu au_L)$	R
CVLL_eeuu	$rac{4G_F}{\sqrt{2}}(ar{e}_L\gamma^\mu e_L)(ar{u}_L\gamma_\mu u_L)$	R
CVLL_mumucc	$\frac{\frac{4G_F^2}{\sqrt{2}}(\bar{e}_L\gamma^{\mu}e_L)(\bar{\tau}_L\gamma_{\mu}\tau_L)}{\frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^{\mu}e_L)(\bar{u}_L\gamma_{\mu}u_L)}$ $\frac{\frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\gamma^{\mu}\mu_L)(\bar{c}_L\gamma_{\mu}c_L)}{\frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\gamma^{\mu}\mu_L)(\bar{d}_L\gamma_{\mu}d_L)}$	R
CVLL_mumudd	$rac{4G_F}{\sqrt{2}}(ar{\mu}_L\gamma^\mu\mu_L)(ar{d}_L\gamma_\mu d_L)$	R

WC name	Operator	Type
CVLL_mumumumu	$\frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\gamma^\mu\mu_L)(\bar{\mu}_L\gamma_\mu\mu_L)$	R
CVLL_mumuss	$\frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\gamma^\mu\mu_L)(\bar{s}_L\gamma_\mu s_L)$	R
${\tt CVLL\_mumutautau}$	$\frac{4\ddot{G}_F}{\sqrt{2}}(\bar{\mu}_L\gamma^\mu\mu_L)(\bar{\tau}_L\gamma_\mu\tau_L)$	R
CVLL_mumuuu	$\frac{4\ddot{G}_F}{\sqrt{2}}(\bar{\mu}_L\gamma^\mu\mu_L)(\bar{u}_L\gamma_\mu u_L)$	${ m R}$
CVLL_ssss	$\frac{4\overset{\circ}{G_F}}{\sqrt{2}}(\bar{s}_L\gamma^{\mu}s_L)(\bar{s}_L\gamma_{\mu}s_L)$	${ m R}$
CVLL_tautaucc	$rac{4 {ar G_F}}{\sqrt{2}} (ar au_L \gamma^\mu  au_L) (ar c_L \gamma_\mu c_L)$	${ m R}$
CVLL_tautaudd	$rac{4 {ar G_F}}{\sqrt{2}} (ar  au_L \gamma^\mu  au_L) (ar d_L \gamma_\mu d_L)$	${ m R}$
CVLL_tautauss	$rac{4G_F}{\sqrt{2}}(ar{ au}_L\gamma^\mu au_L)(ar{s}_L\gamma_\mu s_L)$	${ m R}$
CVLL_tautautautau	$1 \frac{4 G_F}{\sqrt{2}} (ar{ au}_L \gamma^\mu  au_L) (ar{ au}_L \gamma_\mu  au_L)$	R
CVLL_tautauuu	$\frac{4G_F}{\sqrt{2}}(\bar{ au}_L\gamma^\mu au_L)(\bar{u}_L\gamma_\mu u_L)$	R
CVLL_uccu	$\frac{4G_F}{\sqrt{2}}(\bar{u}_L\gamma^\mu c_L)(\bar{c}_L\gamma_\mu u_L)$	R
CVLL_uucc	$\frac{4G_F}{\sqrt{2}}(\bar{u}_L\gamma^\mu u_L)(\bar{c}_L\gamma_\mu c_L)$	R
CVLL_uuuu	$\frac{4G_F}{\sqrt{2}}(\bar{u}_L\gamma^\mu u_L)(\bar{u}_L\gamma_\mu u_L)$	R
CVLR_ccee	$\frac{4G_F}{\sqrt{2}}(\bar{c}_L\gamma^\mu c_L)(\bar{e}_R\gamma_\mu e_R)$	$\mathbf{R}$
CVLR_ccmumu	$\frac{4G_F}{\sqrt{2}}(\bar{c}_L\gamma^\mu c_L)(\bar{\mu}_R\gamma_\mu\mu_R)$	$\mathbf{R}$
CVLR_cctautau	$rac{4G_F}{\sqrt{2}}(ar{c}_L\gamma^\mu c_L)(ar{ au}_R\gamma_\mu au_R)$	$\mathbf{R}$
CVLR_ddee	$\frac{4G_F}{\sqrt{2}}(\bar{d}_L\gamma^\mu d_L)(\bar{e}_R\gamma_\mu e_R)$	R
CVLR_ddmumu	$rac{4G_F}{\sqrt{2}}(ar{d}_L\gamma^\mu d_L)(ar{\mu}_R\gamma_\mu\mu_R)$	R
CVLR_ddtautau	$\frac{4G_F}{\sqrt{2}}(\bar{d}_L\gamma^\mu d_L)(\bar{\tau}_R\gamma_\mu \tau_R)$	R
CVLR_eecc	$rac{4G_F}{\sqrt{2}}(ar{e}_L\gamma^\mu e_L)(ar{c}_R\gamma_\mu c_R)$	R
CVLR_eedd	$\frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^{\mu}e_L)(\bar{d}_R\gamma_{\mu}d_R)$	R
CVLR_eeee	$\frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^{\mu}e_L)(\bar{e}_R\gamma_{\mu}e_R)$	R
CVLR_eemumu	$\frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^{\mu}e_L)(\bar{\mu}_R\gamma_{\mu}\mu_R)$	R
CVLR_eess	$\frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{s}_R\gamma_\mu s_R)$	R
CVLR_eetautau	$\frac{4G_F}{\sqrt{2}}(ar{e}_L\gamma^\mu e_L)(ar{ au}_R\gamma_\mu au_R)$	R
CVLR_eeuu	$\frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^{\mu}e_L)(\bar{u}_R\gamma_{\mu}u_R)$	${ m R}$
CVLR_emumue	$\frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu\mu_L)(\bar{\mu}_R\gamma_\mu e_R)$	$\mathbf{C}$
CVLR_etautaue	$rac{4G_F}{\sqrt{2}}(ar{e}_L\gamma^\mu au_L)(ar{ au}_R\gamma_\mu e_R)$	$\mathbf{C}$
CVLR_mumucc	$\frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\gamma^\mu\mu_L)(\bar{c}_R\gamma_\mu c_R)$	R
CVLR_mumudd	$rac{4G_F}{\sqrt{2}}(ar{\mu}_L\gamma^\mu\mu_L)(ar{d}_R\gamma_\mu d_R)$	$\mathbf{R}$
CVLR_mumuee	$\frac{\frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\gamma^\mu\mu_L)(\bar{e}_R\gamma_\mu e_R)}{\frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\gamma^\mu\mu_L)(\bar{\mu}_R\gamma_\mu\mu_R)}$	$\mathbf{R}$
CVLR_mumumumu	$\frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\gamma^\mu\mu_L)(\bar{\mu}_R\gamma_\mu\mu_R)$	R
CVLR_mumuss	$\frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\gamma^\mu\mu_L)(\bar{s}_R\gamma_\mu s_R)$	R
CVLR_mumutautau	$\frac{4G_{F}}{\sqrt{2}}(\bar{\mu}_{L}\gamma^{\mu}\mu_{L})(\bar{\tau}_{R}\gamma_{\mu}\tau_{R}) \\ \frac{4G_{F}}{\sqrt{2}}(\bar{\mu}_{L}\gamma^{\mu}\mu_{L})(\bar{u}_{R}\gamma_{\mu}u_{R}) \\ \frac{4G_{F}}{\sqrt{2}}(\bar{\mu}_{L}\gamma^{\mu}\tau_{L})(\bar{\tau}_{R}\gamma_{\mu}\mu_{R}) \\ \frac{4G_{F}}{\sqrt{2}}(\bar{s}_{L}\gamma^{\mu}s_{L})(\bar{e}_{R}\gamma_{\mu}e_{R})$	R
CVLR_mumuuu	$\frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\gamma^\mu\mu_L)(\bar{u}_R\gamma_\mu u_R)$	R
CVLR_mutautaumu	$\frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\gamma^\mu au_L)(\bar{ au}_R\gamma_\mu\mu_R)$	$\mathbf{C}$
CVLR_ssee	$\frac{4G_F}{\sqrt{2}}(\bar{s}_L\gamma^\mu s_L)(\bar{e}_R\gamma_\mu e_R)$	R

WC name	Operator	Type
CVLR_ssmumu	$\frac{4G_F}{\sqrt{2}}(\bar{s}_L\gamma^{\mu}s_L)(\bar{\mu}_R\gamma_{\mu}\mu_R)$	R
CVLR_sstautau	$\frac{4G_F}{\sqrt{2}}(\bar{s}_L\gamma^\mu s_L)(\bar{\tau}_R\gamma_\mu \tau_R)$	R
CVLR_tautaucc	$\frac{4G_F}{\sqrt{2}}(\bar{\tau}_L\gamma^\mu\tau_L)(\bar{c}_R\gamma_\mu c_R)$	R
CVLR_tautaudd	$\frac{4G_F}{\sqrt{2}}(\bar{ au}_L\gamma^\mu au_L)(\bar{d}_R\gamma_\mu d_R)$	R
CVLR_tautauee	$\frac{4G_F}{\sqrt{2}}(\bar{\tau}_L\gamma^\mu\tau_L)(\bar{e}_R\gamma_\mu e_R)$	R
CVLR_tautaumumu	$\frac{4G_F}{\sqrt{2}}(\bar{ au}_L\gamma^\mu au_L)(\bar{\mu}_R\gamma_\mu\mu_R)$	R
CVLR_tautauss	$rac{4G_F}{\sqrt{2}}(ar{ au}_L\gamma^\mu au_L)(ar{s}_R\gamma_\mu s_R)$	R
CVLR_tautautautau	$4\frac{4G_F}{\sqrt{2}}(ar{ au}_L\gamma^\mu au_L)(ar{ au}_R\gamma_\mu au_R)$	R
CVLR_tautauuu	$\frac{4G_F}{\sqrt{2}}(\bar{\tau}_L\gamma^\mu\tau_L)(\bar{u}_R\gamma_\mu u_R)$	R
CVLR_uuee	$\frac{4G_F}{\sqrt{2}}(\bar{u}_L\gamma^\mu u_L)(\bar{e}_R\gamma_\mu e_R)$	R
CVLR_uumumu	$\frac{4G_F}{\sqrt{2}}(\bar{u}_L\gamma^\mu u_L)(\bar{\mu}_R\gamma_\mu\mu_R)$	R
CVLR_uutautau	$\frac{4G_F}{\sqrt{2}}(\bar{u}_L\gamma^\mu u_L)(\bar{\tau}_R\gamma_\mu \tau_R)$	R
CVRR_cccc	$rac{4G_F}{\sqrt{2}}(ar{c}_R\gamma^\mu c_R)(ar{c}_R\gamma_\mu c_R)$	R
CVRR_dddd	$\frac{4G_F}{\sqrt{2}}(ar{d}_R\gamma^\mu d_R)(ar{d}_R\gamma_\mu d_R)$	R
CVRR_ddss	$rac{4G_F}{\sqrt{2}}(ar{d}_R\gamma^\mu d_R)(ar{s}_R\gamma_\mu s_R)$	R
CVRR_dssd	$rac{4G_F}{\sqrt{2}}(ar{d}_R\gamma^\mu s_R)(ar{s}_R\gamma_\mu d_R)$	R
CVRR_eecc	$rac{4G_F}{\sqrt{2}}(ar{e}_R\gamma^\mu e_R)(ar{c}_R\gamma_\mu c_R)$	R
CVRR_eedd	$\frac{4G_F}{\sqrt{2}}(\bar{e}_R\gamma^{\mu}e_R)(\bar{d}_R\gamma_{\mu}d_R)$	R
CVRR_eeee	$\frac{4G_F}{\sqrt{2}}(\bar{e}_R\gamma^{\mu}e_R)(\bar{e}_R\gamma_{\mu}e_R)$	R
CVRR_eemumu	$\frac{4G_F}{\sqrt{2}}(\bar{e}_R\gamma^{\mu}e_R)(\bar{\mu}_R\gamma_{\mu}\mu_R)$	R
CVRR_eess	$rac{4G_F}{\sqrt{2}}(ar{e}_R\gamma^\mu e_R)(ar{s}_R\gamma_\mu s_R)$	R
CVRR_eetautau	$rac{4G_F}{\sqrt{2}}(ar{e}_R\gamma^\mu e_R)(ar{ au}_R\gamma_\mu au_R)$	R
CVRR_eeuu	$\frac{4G_F}{\sqrt{2}}(\bar{e}_R\gamma^{\mu}e_R)(\bar{u}_R\gamma_{\mu}u_R)$	R
CVRR_mumucc	$\frac{4G_F}{\sqrt{2}}(\bar{\mu}_R\gamma^\mu\mu_R)(\bar{c}_R\gamma_\mu c_R)$	R
CVRR_mumudd	$rac{4G_F}{\sqrt{2}}(ar{\mu}_R\gamma^\mu\mu_R)(ar{d}_R\gamma_\mu d_R)$	R
CVRR_mumumumu	$\frac{4G_F}{\sqrt{2}}(\bar{\mu}_R\gamma^\mu\mu_R)(\bar{\mu}_R\gamma_\mu\mu_R)$	R
CVRR_mumuss	$\frac{4G_F}{\sqrt{2}}(\bar{\mu}_R\gamma^\mu\mu_R)(\bar{s}_R\gamma_\mu s_R)$	R
CVRR_mumutautau	$\frac{4G_F}{\sqrt{2}}(\bar{\mu}_R\gamma^\mu\mu_R)(\bar{\tau}_R\gamma_\mu\tau_R)$	R
CVRR_mumuuu	$\frac{4G_F}{\sqrt{2}}(\bar{\mu}_R\gamma^\mu\mu_R)(\bar{u}_R\gamma_\mu u_R)$	R
CVRR_ssss	$\frac{4G_F}{\sqrt{2}}(\bar{s}_R\gamma^{\mu}s_R)(\bar{s}_R\gamma_{\mu}s_R)$	R
CVRR_tautaucc	$ \frac{\sqrt{2}}{\sqrt{2}} (\vec{s}_R \uparrow \vec{s}_R) (\vec{s}_R \uparrow_{\mu} \vec{s}_R) \\ \frac{4G_F}{\sqrt{2}} (\vec{\tau}_R \gamma^{\mu} \tau_R) (\vec{c}_R \gamma_{\mu} c_R) \\ \frac{4G_F}{\sqrt{2}} (\vec{\tau}_R \gamma^{\mu} \tau_R) (\vec{s}_R \gamma_{\mu} d_R) \\ \frac{4G_F}{\sqrt{2}} (\vec{\tau}_R \gamma^{\mu} \tau_R) (\vec{s}_R \gamma_{\mu} s_R) \\ \frac{4G_F}{\sqrt{2}} (\vec{\tau}_R \gamma^{\mu} \tau_R) (\vec{\tau}_R \gamma_{\mu} \tau_R) \\ 4G_F (\vec{c}_R \gamma^{\mu} \tau_R) (\vec{c}_R \gamma_{\mu} \tau_R) $	R
CVRR_tautaudd	$\frac{4G_F}{\sqrt{2}}(\bar{ au}_R\gamma^\mu au_R)(d_R\gamma_\mu d_R)$	R
CVRR_tautauss	$\frac{4G_F}{\sqrt{2}}(ar{ au}_R\gamma^\mu au_R)(ar{s}_R\gamma_\mu s_R)$	R
CVRR_tautautautau	$\frac{4G_F}{\sqrt{2}}(\bar{ au}_R\gamma^\mu au_R)(\bar{ au}_R\gamma_\mu au_R)$	R
CVRR_tautauuu	$\frac{4G_F}{\sqrt{2}}(\bar{\tau}_R \gamma^\mu \tau_R)(\bar{u}_R \gamma_\mu u_R) \\ \frac{4G_F}{\sqrt{2}}(\bar{u}_R \gamma^\mu c_R)(\bar{c}_R \gamma_\mu u_R) \\ \frac{4G_F}{\sqrt{2}}(\bar{u}_R \gamma^\mu u_R)(\bar{c}_R \gamma_\mu c_R)$	R
CVRR_uccu	$\frac{4G_F}{\sqrt{2}}(\bar{u}_R\gamma^\mu c_R)(\bar{c}_R\gamma_\mu u_R)$	R
CVRR_uucc	$\frac{4G_F}{\sqrt{2}}(\bar{u}_R\gamma^\mu u_R)(\bar{c}_R\gamma_\mu c_R)$	R

WC name	Operator	Type
CVRR_uuuu	$\frac{4G_F}{\sqrt{2}}(\bar{u}_R\gamma^\mu u_R)(\bar{u}_R\gamma_\mu u_R)$	R

## mue

WC name	Operator	Type
Cgamma_mue	$ar{e}_L \sigma^{\mu u} \mu_R  F_{\mu u}$	C
Cgamma_emu	$ar{\mu}_L \sigma^{\mu  u} e_R F_{\mu  u}$	$\mathbf{C}$
CVLL_eemue	$(ar{e}_L\gamma^\mu e_L)(ar{e}_L\gamma_\mu\mu_L)$	$\mathbf{C}$
CVLL_muemumu	$(ar{e}_L \gamma^\mu \mu_L)(ar{\mu}_L \gamma_\mu \mu_L)$	$\mathbf{C}$
CVLL_muetautau	$(ar{e}_L \gamma^\mu \mu_L) (ar{ au}_L \gamma_\mu  au_L)$	$\mathbf{C}$
CVLL_mueuu	$(ar{e}_L \gamma^\mu \mu_L) (ar{u}_L \gamma_\mu u_L)$	$\mathbf{C}$
CVLL_muecc	$(ar{e}_L \gamma^\mu \mu_L) (ar{c}_L \gamma_\mu c_L)$	$\mathbf{C}$
CVLL_muedd	$(ar{e}_L \gamma^\mu \mu_L) (ar{d}_L \gamma_\mu d_L)$	$\mathbf{C}$
CVLL_muess	$(ar{e}_L \gamma^\mu \mu_L) (ar{s}_L \gamma_\mu s_L)$	$\mathbf{C}$
CVRR_eemue	$(ar{e}_R\gamma^\mu e_R)(ar{e}_R\gamma_\mu\mu_R)$	$\mathbf{C}$
CVRR_muemumu	$(\bar{e}_R \gamma^\mu \mu_R)(\bar{\mu}_R \gamma_\mu \mu_R)$	$^{\mathrm{C}}$
CVRR_muetautau	$(ar{e}_R \gamma^\mu \mu_R) (ar{ au}_R \gamma_\mu  au_R)$	$^{\mathrm{C}}$
CVRR_mueuu	$(\bar{e}_R \gamma^\mu \mu_R)(\bar{u}_R \gamma_\mu u_R)$	$\mathbf{C}$
CVRR_muecc	$(ar{e}_R \gamma^\mu \mu_R) (ar{c}_R \gamma_\mu c_R)$	$\mathbf{C}$
CVRR_muedd	$(ar{e}_R \gamma^\mu \mu_R) (ar{d}_R \gamma_\mu d_R)$	$\mathbf{C}$
CVRR_muess	$(ar{e}_R \gamma^\mu \mu_R) (ar{s}_R \gamma_\mu s_R)$	$^{\mathrm{C}}$
CVLR_eemue	$(ar{e}_L \gamma^\mu e_L) (ar{e}_R \gamma_\mu \mu_R)$	$\mathbf{C}$
CVLR_mueee	$(ar{e}_L\gamma^\mu\mu_L)(ar{e}_R\gamma_\mu e_R)$	$\mathbf{C}$
CVLR_muemumu	$(\bar{e}_L \gamma^\mu \mu_L)(\bar{\mu}_R \gamma_\mu \mu_R)$	$\mathbf{C}$
CVLR_muetautau	$(ar{e}_L \gamma^\mu \mu_L) (ar{ au}_R \gamma_\mu  au_R)$	$\mathbf{C}$
CVLR_tauemutau	$(ar{e}_L \gamma^\mu  au_L) (ar{ au}_R \gamma_\mu \mu_R)$	$\mathbf{C}$
CVLR_mumumue	$(\bar{\mu}_L \gamma^\mu \mu_L)(\bar{e}_R \gamma_\mu \mu_R)$	$\mathbf{C}$
CVLR_taumuetau	$(\bar{\mu}_L \gamma^\mu  au_L)(\bar{ au}_R \gamma_\mu e_R)$	$\mathbf{C}$
CVLR_tautaumue	$(ar au_L\gamma^\mu au_L)(ar e_R\gamma_\mu\mu_R)$	$\mathbf{C}$
CVLR_mueuu	$(ar{e}_L \gamma^\mu \mu_L) (ar{u}_R \gamma_\mu u_R)$	$\mathbf{C}$
CVLR_muecc	$(ar{e}_L \gamma^\mu \mu_L) (ar{c}_R \gamma_\mu c_R)$	$\mathbf{C}$
CVLR_muedd	$(ar{e}_L \gamma^\mu \mu_L) (d_R \gamma_\mu d_R)$	$\mathbf{C}$
CVLR_muess	$(ar{e}_L \gamma^\mu \mu_L) (ar{s}_R \gamma_\mu s_R)$	$\mathbf{C}$
CVLR_uumue	$(\bar{u}_L \gamma^\mu u_L)(\bar{e}_R \gamma_\mu \mu_R)$	$\mathbf{C}$
CVLR_ccmue	$(\bar{c}_L \gamma^\mu c_L)(\bar{e}_R \gamma_\mu \mu_R)$	$\mathbf{C}$
CVLR_ddmue	$(ar{d}_L \gamma^\mu d_L) (ar{e}_R \gamma_\mu \mu_R)$	$\mathbf{C}$
CVLR_ssmue	$(\bar{s}_L \gamma^\mu s_L)(\bar{e}_R \gamma_\mu \mu_R)$	$\mathbf{C}$
CSRL_mueuu	$(ar{e}_L \mu_R)(ar{u}_R u_L)$	$\mathbf{C}$
CSRL_muecc	$(ar{e}_L\mu_R)(ar{c}_Rc_L)$	$\mathbf{C}$
CSRL_emuuu	$(ar{\mu}_L e_R)(ar{u}_R u_L)$	$\mathbf{C}$
CSRL_emucc	$(ar{\mu}_L e_R)(ar{c}_R c_L)$	$\mathbf{C}$
CSRL_muedd	$(ar{e}_L\mu_R)(ar{d}_Rd_L)$	$^{\mathrm{C}}$

WC name	Operator	Type
CSRL_muess	$(\bar{e}_L \mu_R)(\bar{s}_R s_L)$	С
CSRL_emudd	$(ar{\mu}_L e_R)(ar{d}_R d_L)$	$\mathbf{C}$
CSRL_emuss	$(ar{\mu}_L e_R)(ar{s}_R s_L)$	$^{\mathrm{C}}$
CSRR_eemue	$(ar{e}_L e_R)(ar{e}_L \mu_R)$	$^{\mathrm{C}}$
CSRR_eeemu	$(ar{e}_L e_R)(ar{\mu}_L e_R)$	$^{\mathrm{C}}$
CSRR_muemumu	$(ar{e}_L\mu_R)(ar{\mu}_L\mu_R)$	$^{\mathrm{C}}$
CSRR_muetautau	$(ar{e}_L\mu_R)(ar{ au}_L au_R)$	$^{\mathrm{C}}$
CSRR_tauemutau	$(ar{e}_L au_R)(ar{ au}_L\mu_R)$	$^{\mathrm{C}}$
CSRR_emumumu	$(ar{\mu}_L e_R)(ar{\mu}_L \mu_R)$	$^{\mathrm{C}}$
CSRR_emutautau	$(ar{\mu}_L e_R)(ar{ au}_L  au_R)$	$^{\mathrm{C}}$
CSRR_taumuetau	$(ar{\mu}_L au_R)(ar{ au}_Le_R)$	$^{\mathrm{C}}$
CSRR_mueuu	$(ar{e}_L\mu_R)(ar{u}_Lu_R)$	$^{\mathrm{C}}$
CSRR_muecc	$(ar{e}_L\mu_R)(ar{c}_Lc_R)$	$^{\mathrm{C}}$
CSRR_emuuu	$(ar{\mu}_L e_R)(ar{u}_L u_R)$	$^{\mathrm{C}}$
CSRR_emucc	$(ar{\mu}_L e_R)(ar{c}_L c_R)$	C
CTRR_mueuu	$(\bar{e}_L \sigma^{\mu\nu} \mu_R)(\bar{u}_L \sigma_{\mu\nu} u_R)$	$^{\mathrm{C}}$
CTRR_muecc	$(\bar{e}_L \sigma^{\mu\nu} \mu_R)(\bar{c}_L \sigma_{\mu\nu} c_R)$	С
CTRR_emuuu	$(\bar{\mu}_L \sigma^{\mu\nu} e_R)(\bar{u}_L \sigma_{\mu\nu} u_R)$	$^{\mathrm{C}}$
CTRR_emucc	$(ar{\mu}_L \sigma^{\mu  u} e_{ar{R}}) (ar{c}_L \sigma_{\mu  u} c_R)$	С
CSRR_muedd	$(ar{e}_L\mu_R)(d_Ld_R)$	$^{\mathrm{C}}$
CSRR_muess	$(ar{e}_L\mu_R)(ar{s}_Ls_R)$	$^{\mathrm{C}}$
CSRR_emudd	$(ar{\mu}_L e_R)(ar{d}_L d_R)$	$^{\mathrm{C}}$
CSRR_emuss	$(ar{\mu}_L e_R)(ar{s}_L s_R)$	$^{\mathrm{C}}$
CTRR_muedd	$(ar{e}_L\sigma^{\mu u}\mu_R)(ar{d}_L\sigma_{\mu u}d_R)$	$^{\mathrm{C}}$
CTRR_muess	$(ar{e}_L\sigma^{\mu u}\mu_R)(ar{s}_L\sigma_{\mu u}s_R)$	$^{\mathrm{C}}$
CTRR_emudd	$(ar{\mu}_L \sigma^{\mu  u} e_R) (ar{d}_L \sigma_{\mu  u} d_R)$	$^{\mathrm{C}}$
CTRR_emuss	$(\bar{\mu}_L \sigma^{\mu  u} e_R)(\bar{s}_L \sigma_{\mu  u} s_R)$	$^{\mathrm{C}}$

# mutau

WC name	Operator	Type
Cgamma_taumu	$\bar{\mu}_L \sigma^{\mu\nu} \tau_R F_{\mu\nu}$	C
Cgamma_mutau	$ar{ au}_L \sigma^{\mu u} \mu_R  \dot{F}_{\mu u}$	$\mathbf{C}$
CVLL_eetaumu	$(ar{e}_L\gamma^\mu e_L)(\dot{ar{\mu}}_L\gamma_\mu au_L)$	$\mathbf{C}$
CVLL_mumutaumu	$(\bar{\mu}_L \gamma^\mu \mu_L)(\bar{\mu}_L \gamma_\mu \tau_L)$	$\mathbf{C}$
CVLL_taumutautau	$(\bar{\mu}_L \gamma^\mu  au_L)(\bar{ au}_L \gamma_\mu  au_L)$	$\mathbf{C}$
CVLL_taumuuu	$(\bar{\mu}_L \gamma^\mu  au_L)(\bar{u}_L \gamma_\mu u_L)$	$^{\mathrm{C}}$
CVLL_taumucc	$(\bar{\mu}_L \gamma^\mu  au_L)(\bar{c}_L \gamma_\mu c_L)$	$\mathbf{C}$
CVLL_taumudd	$(ar{\mu}_L \gamma^\mu  au_L) (ar{d}_L \gamma_\mu d_L)$	$\mathbf{C}$
CVLL_taumuss	$(\bar{\mu}_L \gamma^\mu  au_L)(\bar{s}_L \gamma_\mu s_L)$	$\mathbf{C}$
CVRR_eetaumu	$(\bar{e}_R \gamma^\mu e_R)(\bar{\mu}_R \gamma_\mu \tau_R)$	$\mathbf{C}$
CVRR_mumutaumu	$(\bar{\mu}_R \gamma^\mu \mu_R)(\bar{\mu}_R \gamma_\mu \tau_R)$	$\mathbf{C}$

WC name	Operator	Type
CVRR_taumutautau	$(ar{\mu}_R \gamma^\mu  au_R) (ar{ au}_R \gamma_\mu  au_R)$	$\mathbf{C}$
CVRR_taumuuu	$(\bar{\mu}_R \gamma^\mu \tau_R)(\bar{u}_R \gamma_\mu u_R)$	$\mathbf{C}$
CVRR_taumucc	$(\bar{\mu}_R \gamma^\mu \tau_R)(\bar{c}_R \gamma_\mu c_R)$	$\mathbf{C}$
CVRR_taumudd	$(ar{\mu}_R \gamma^\mu  au_R) (ar{d}_R \gamma_\mu d_R)$	$\mathbf{C}$
CVRR_taumuss	$(\bar{\mu}_R \gamma^\mu \tau_R)(\bar{s}_R \gamma_\mu s_R)$	$^{\mathrm{C}}$
CVLR_eetaumu	$(ar{e}_L \gamma^\mu e_L)(ar{\mu}_R \gamma_\mu  au_R)$	$\mathbf{C}$
CVLR_mueetau	$(\bar{e}_L \gamma^\mu \mu_L)(\bar{\tau}_R \gamma_\mu e_R)$	$^{\mathrm{C}}$
CVLR_taueemu	$(ar{e}_L \gamma^\mu  au_L) (ar{\mu}_R \gamma_\mu e_R)$	$\mathbf{C}$
CVLR_mumutaumu	$(\bar{\mu}_L \gamma^\mu \mu_L)(\bar{\mu}_R \gamma_\mu \tau_R)$	$\mathbf{C}$
CVLR_taumuee	$(\bar{\mu}_L \gamma^\mu  au_L)(\bar{e}_R \gamma_\mu e_R)$	$\mathbf{C}$
CVLR_taumumumu	$(ar{\mu}_L \gamma^\mu  au_L) (ar{\mu}_R \gamma_\mu \mu_R)$	$\mathbf{C}$
CVLR_taumutautau	$(ar{\mu}_L \gamma^\mu  au_L) (ar{ au}_R \gamma_\mu  au_R)$	$\mathbf{C}$
CVLR_tautautaumu	$(\bar{ au}_L \gamma^\mu  au_L)(\bar{\mu}_R \gamma_\mu  au_R)$	$\mathbf{C}$
CVLR_taumuuu	$(ar{\mu}_L \gamma^\mu  au_L) (ar{u}_R \gamma_\mu u_R)$	$\mathbf{C}$
CVLR_taumucc	$(ar{\mu}_L \gamma^\mu  au_L) (ar{c}_R \gamma_\mu c_R)$	$\mathbf{C}$
CVLR_taumudd	$(ar{\mu}_L \gamma^\mu  au_L) (ar{d}_R \gamma_\mu d_R)$	$\mathbf{C}$
CVLR_taumuss	$(ar{\mu}_L \gamma^\mu  au_L) (ar{s}_R \gamma_\mu s_R)$	$\mathbf{C}$
CVLR_uutaumu	$(\bar{u}_L \gamma^\mu u_L)(\bar{\mu}_R \gamma_\mu  au_R)$	$\mathbf{C}$
CVLR_cctaumu	$(ar{c}_L \gamma^\mu c_L) (ar{\mu}_R \gamma_\mu  au_R)$	$\mathbf{C}$
CVLR_ddtaumu	$(ar{d}_L \gamma^\mu d_L) (ar{\mu}_R \gamma_\mu  au_R)$	$\mathbf{C}$
CVLR_sstaumu	$(\bar{s}_L \gamma^\mu s_L)(\bar{\mu}_R \gamma_\mu  au_R)$	$\mathbf{C}$
CSRL_taumuuu	$(ar{\mu}_L au_R)(ar{u}_Ru_L)$	$\mathbf{C}$
CSRL_taumucc	$(ar{\mu}_L au_R)(ar{c}_Rc_L)$	$\mathbf{C}$
CSRL_mutauuu	$(ar{ au}_L \mu_R)(ar{u}_R u_L)$	$\mathbf{C}$
CSRL_mutaucc	$(ar{ au}_L \mu_R)(ar{c}_R c_L)$	$\mathbf{C}$
CSRL_taumudd	$(ar{\mu}_L au_R)(ar{d}_Rd_L)$	$\mathbf{C}$
CSRL_taumuss	$(ar{\mu}_L au_R)(ar{s}_Rs_L)$	$\mathbf{C}$
CSRL_mutaudd	$(ar{ au}_L \mu_R)(ar{d}_R d_L)$	$^{\mathrm{C}}$
CSRL_mutauss	$(ar{ au}_L \mu_R)(ar{s}_R s_L)$	$^{\mathrm{C}}$
CSRR_eetaumu	$(\bar{e}_L e_R)(\bar{\mu}_L  au_R)$	$^{\mathrm{C}}$
CSRR_eemutau	$(ar{e}_L e_R)(ar{ au}_L \mu_R)$	$\mathbf{C}$
CSRR_mueetau	$(ar{e}_L\mu_R)(ar{ au}_Le_R)$	$\mathbf{C}$
CSRR_taueemu	$(ar{e}_L au_R)(ar{\mu}_Le_R)$	$\mathbf{C}$
CSRR_mumutaumu	$(ar{\mu}_L\mu_R)(ar{\mu}_L au_R)$	$\mathbf{C}$
CSRR_mumumutau	$(ar{\mu}_L\mu_R)(ar{ au}_L\mu_R)$	$\mathbf{C}$
CSRR_taumutautau	$(ar{\mu}_L au_R)(ar{ au}_L au_R)$	$\mathbf{C}$
CSRR_mutautautau	$(ar{ au}_L \mu_R)(ar{ au}_L  au_R)$	$\mathbf{C}$
CSRR_taumuuu	$(ar{\mu}_L au_R)(ar{u}_Lu_R)$	$\mathbf{C}$
CSRR_taumucc	$(ar{\mu}_L au_R)(ar{c}_Lc_R)$	$\mathbf{C}$
CSRR_mutauuu	$(ar{ au}_L\mu_R)(ar{u}_Lu_R)$	$\mathbf{C}$
CSRR_mutaucc	$(ar{ au}_L\mu_R)(ar{c}_Lc_R)$	$\mathbf{C}$
CTRR_taumuuu	$(\bar{\mu}_L \sigma^{\mu\nu} \tau_R)(\bar{u}_L \sigma_{\mu\nu} u_R)$	$^{\mathrm{C}}$
CTRR_taumucc	$(\bar{\mu}_L \sigma^{\mu  u}  au_R) (\bar{c}_L \sigma_{\mu  u} c_R)$	$\mathbf{C}$
CTRR_mutauuu	$(\bar{ au}_L \sigma^{\mu u} \mu_R)(\bar{u}_L \sigma_{\mu u} u_R)$	С

WC name	Operator	Type
CTRR_mutaucc	$(\bar{\tau}_L \sigma^{\mu\nu} \mu_R)(\bar{c}_L \sigma_{\mu\nu} c_R)$	C
CSRR_taumudd	$(ar{\mu}_L au_R)(ar{d}_Ld_R)$	$\mathbf{C}$
CSRR_taumuss	$(ar{\mu}_L au_R)(ar{s}_Ls_R)$	$^{\mathrm{C}}$
CSRR_mutaudd	$(ar{ au}_L\mu_R)(ar{d}_Ld_R)$	$\mathbf{C}$
CSRR_mutauss	$(ar{ au}_L\mu_R)(ar{s}_Ls_R)$	$^{\mathrm{C}}$
CTRR_taumudd	$(ar{\mu}_L\sigma^{\mu u} au_R)(ar{d}_L\sigma_{\mu u}d_R)$	$\mathbf{C}$
CTRR_taumuss	$(ar{\mu}_L \sigma^{\mu  u}  au_R) (ar{s}_L \sigma_{\mu  u} s_R)$	$^{\mathrm{C}}$
CTRR_mutaudd	$(ar{ au}_L\sigma^{\mu u}\mu_R)(ar{d}_L\sigma_{\mu u}d_R)$	$\mathbf{C}$
CTRR_mutauss	$(ar{ au}_L \sigma^{\mu u} \mu_R) (ar{s}_L \sigma_{\mu u} s_R)$	C

#### taue

WC name	Operator	Type
Cgamma_taue	$\bar{e}_L \sigma^{\mu\nu} \tau_R F_{\mu\nu}$	C
Cgamma_etau	$ar{ au}_L \sigma^{\mu u} e_R  \dot{F}_{\mu u}$	$^{\mathrm{C}}$
CVLL_eetaue	$(ar{e}_L \gamma^\mu e_L)(\dot{ar{e}}_L \gamma_\mu  au_L)$	$^{\mathrm{C}}$
CVLL_muetaumu	$(ar{e}_L \gamma^\mu \mu_L) (ar{\mu}_L \gamma_\mu  au_L)$	$^{\mathrm{C}}$
CVLL_tauetautau	$(ar{e}_L \gamma^\mu  au_L) (ar{ au}_L \gamma_\mu  au_L)$	$\mathbf{C}$
CVLL_taueuu	$(\bar{e}_L \gamma^\mu  au_L)(\bar{u}_L \gamma_\mu u_L)$	$\mathbf{C}$
CVLL_tauecc	$(ar{e}_L \gamma^\mu  au_L) (ar{c}_L \gamma_\mu c_L)$	$^{\mathrm{C}}$
CVLL_tauedd	$(ar{e}_L \gamma^\mu  au_L) (ar{d}_L \gamma_\mu d_L)$	$^{\mathrm{C}}$
CVLL_tauess	$(ar{e}_L \gamma^\mu  au_L) (ar{s}_L \gamma_\mu s_L)$	$\mathbf{C}$
CVRR_eetaue	$(\bar{e}_R \gamma^\mu e_R)(\bar{e}_R \gamma_\mu  au_R)$	$\mathbf{C}$
CVRR_muetaumu	$(\bar{e}_R \gamma^\mu \mu_R)(\bar{\mu}_R \gamma_\mu  au_R)$	$\mathbf{C}$
CVRR_tauetautau	$(ar{e}_R \gamma^\mu  au_R) (ar{ au}_R \gamma_\mu  au_R)$	$^{\mathrm{C}}$
CVRR_taueuu	$(\bar{e}_R \gamma^\mu  au_R)(\bar{u}_R \gamma_\mu u_R)$	$^{\mathrm{C}}$
CVRR_tauecc	$(ar{e}_R \gamma^\mu  au_R) (ar{c}_R \gamma_\mu c_R)$	$^{\mathrm{C}}$
CVRR_tauedd	$(ar{e}_R \gamma^\mu  au_R) (ar{d}_R \gamma_\mu d_R)$	$^{\mathrm{C}}$
CVRR_tauess	$(\bar{e}_R \gamma^\mu  au_R)(\bar{s}_R \gamma_\mu s_R)$	$^{\mathrm{C}}$
CVLR_eetaue	$(\bar{e}_L \gamma^\mu e_L)(\bar{e}_R \gamma_\mu  au_R)$	$\mathbf{C}$
CVLR_muetaumu	$(\bar{e}_L \gamma^\mu \mu_L)(\bar{\mu}_R \gamma_\mu \tau_R)$	$^{\mathrm{C}}$
CVLR_taueee	$(ar{e}_L \gamma^\mu  au_L) (ar{e}_R \gamma_\mu e_R)$	$\mathbf{C}$
CVLR_tauemumu	$(\bar{e}_L \gamma^\mu \tau_L)(\bar{\mu}_R \gamma_\mu \mu_R)$	$^{\mathrm{C}}$
CVLR_tauetautau	$(\bar{e}_L \gamma^\mu \tau_L)(\bar{\tau}_R \gamma_\mu \tau_R)$	С
CVLR_mumutaue	$(\bar{\mu}_L \gamma^\mu \mu_L)(\bar{e}_R \gamma_\mu \tau_R)$	$^{\mathrm{C}}$
CVLR_taumumue	$(\bar{\mu}_L \gamma^\mu  au_L)(\bar{e}_R \gamma_\mu \mu_R)$	С
CVLR_tautautaue	$(\bar{ au}_L \gamma^\mu  au_L)(\bar{e}_R \gamma_\mu  au_R)$	$^{\mathrm{C}}$
CVLR_taueuu	$(\bar{e}_L \gamma^\mu \tau_L)(\bar{u}_R \gamma_\mu u_R)$	$^{\mathrm{C}}$
CVLR_tauecc	$(\bar{e}_L \gamma^\mu  au_L)(\bar{c}_R \gamma_\mu c_R)$	С
CVLR_tauedd	$(\bar{e}_L \gamma^\mu  au_L)(d_R \gamma_\mu d_R)$	$^{\mathrm{C}}$
CVLR_tauess	$(\bar{e}_L \gamma^\mu \tau_L)(\bar{s}_R \gamma_\mu s_R)$	С
CVLR_uutaue	$(\bar{u}_L \gamma^\mu u_L)(\bar{e}_R \gamma_\mu \tau_R)$	С

WC name	Operator	Type
CVLR_cctaue	$(\bar{c}_L \gamma^\mu c_L)(\bar{e}_R \gamma_\mu \tau_R)$	С
CVLR_ddtaue	$(ar{d}_L \gamma^\mu d_L) (ar{e}_R \gamma_\mu  au_R)$	$^{\mathrm{C}}$
CVLR_sstaue	$(\bar{s}_L \gamma^\mu s_L)(\bar{e}_R \gamma_\mu  au_R)$	C
CSRL_taueuu	$(\bar{e}_L  au_R)(\bar{u}_R u_L)$	C
CSRL_tauecc	$(ar{e}_L au_R)(ar{c}_Rc_L)$	$^{\mathrm{C}}$
CSRL_etauuu	$(ar{ au}_L e_R)(ar{u}_R u_L)$	$^{\mathrm{C}}$
CSRL_etaucc	$(ar{ au}_L e_R)(ar{c}_R c_L)$	$^{\mathrm{C}}$
CSRL_tauedd	$(ar{e}_L au_R)(ar{d}_Rd_L)$	$^{\mathrm{C}}$
CSRL_tauess	$(ar{e}_L au_R)(ar{s}_Rs_L)$	$^{\mathrm{C}}$
CSRL_etaudd	$(ar{ au}_L e_R)(ar{d}_R d_L)$	C
CSRL_etauss	$(ar{ au}_L e_R)(ar{s}_R s_L)$	$^{\mathrm{C}}$
CSRR_eetaue	$(ar{e}_L e_R)(ar{e}_L  au_R)$	$^{\mathrm{C}}$
CSRR_eeetau	$(ar{e}_L e_R)(ar{ au}_L e_R)$	$^{\mathrm{C}}$
CSRR_muetaumu	$(ar{e}_L \mu_R)(ar{\mu}_L  au_R)$	$^{\mathrm{C}}$
CSRR_tauemumu	$(ar{e}_L au_R)(ar{\mu}_L\mu_R)$	$^{\mathrm{C}}$
CSRR_tauetautau	$(ar{e}_L au_R)(ar{ au}_L au_R)$	$^{\mathrm{C}}$
CSRR_emumutau	$(ar{\mu}_L e_R)(ar{ au}_L \mu_R)$	$^{\mathrm{C}}$
CSRR_mumuetau	$(ar{\mu}_L \mu_R)(ar{ au}_L e_R)$	$\mathbf{C}$
CSRR_etautautau	$(ar{ au}_L e_R)(ar{ au}_L  au_R)$	$^{\mathrm{C}}$
CSRR_taueuu	$(ar{e}_L au_R)(ar{u}_Lu_R)$	$\mathbf{C}$
CSRR_tauecc	$(ar{e}_L au_R)(ar{c}_Lc_R)$	$\mathbf{C}$
CSRR_etauuu	$(ar{ au}_L e_R)(ar{u}_L u_R)$	$^{\mathrm{C}}$
CSRR_etaucc	$(ar{ au}_L e_R)(ar{c}_L c_R)$	$\mathbf{C}$
CTRR_taueuu	$(\bar{e}_L \sigma^{\mu\nu} \tau_R) (\bar{u}_L \sigma_{\mu\nu} u_R)$	$\mathbf{C}$
CTRR_tauecc	$(\bar{e}_L \sigma^{\mu  u}  au_R) (\bar{c}_L \sigma_{\mu  u} c_R)$	$\mathbf{C}$
CTRR_etauuu	$(\bar{ au}_L \sigma^{\mu u} e_R)(\bar{u}_L \sigma_{\mu u} u_R)$	$\mathbf{C}$
CTRR_etaucc	$(\bar{ au}_L \sigma^{\mu  u} e_{ar{R}}) (\bar{c}_L \sigma_{\mu  u} c_R)$	$\mathbf{C}$
CSRR_tauedd	$(ar{e}_L au_R)(d_Ld_R)$	$\mathbf{C}$
CSRR_tauess	$(ar{e}_L au_R)(ar{s}_Ls_R)$	$\mathbf{C}$
CSRR_etaudd	$(ar{ au}_L e_R)(ar{d}_L d_R)$	$^{\mathrm{C}}$
CSRR_etauss	$(ar{ au}_L e_R)(ar{s}_L s_R)$	$^{\mathrm{C}}$
CTRR_tauedd	$(ar{e}_L\sigma^{\mu u} au_R)(ar{d}_L\sigma_{\mu u}d_R)$	C
CTRR_tauess	$(ar{e}_L\sigma^{\mu u} au_R)(ar{s}_L\sigma_{\mu u}s_R)$	$^{\mathrm{C}}$
CTRR_etaudd	$(ar{ au}_L \sigma^{\mu u} e_R) (ar{d}_L \sigma_{\mu u} d_R)$	$^{\mathrm{C}}$
CTRR_etauss	$(\bar{\tau}_L \sigma^{\mu\nu} e_R)(\bar{s}_L \sigma_{\mu\nu} s_R)$	$\mathbf{C}$

## ${\tt nunumue}$

WC name	Operator	Type
CVLL_nuenuemue	$(ar{ u}_{eL}\gamma^{\mu} u_{eL})(ar{e}_{L}\gamma_{\mu}\mu_{L})$	$^{\mathrm{C}}$
CVLL_numunueemu	$(ar{ u}_{eL}\gamma^{\mu} u_{\mu L})(ar{\mu}_{L}\gamma_{\mu}e_{L})$	$^{\mathrm{C}}$
CVLL_numunuemue	$(ar{ u}_{eL}\gamma^{\mu} u_{\mu L})(ar{e}_{L}\gamma_{\mu}\mu_{L})$	$^{\mathrm{C}}$

WC name	Operator	Type
CVLL_numunumumue	$e^{-(\bar{ u}_{\mu L}\gamma^{\mu} u_{\mu L})(\bar{e}_{L}\gamma_{\mu}\mu_{L})}$	C
CVLL_nutaunueemu	i $(ar{ u}_{eL}\gamma^{\mu} u_{ au L})(ar{\mu}_{L}\gamma_{\mu}e_{L})$	$^{\mathrm{C}}$
CVLL_nutaunuemue	$e^{-(ar{ u}_{eL}\gamma^{\mu} u_{ au L})(ar{e}_{L}\gamma_{\mu}\mu_{L})}$	$^{\mathrm{C}}$
CVLL_nutaunumuen	nu $(ar{ u}_{\mu L} \gamma^{\mu}  u_{ au L}) (ar{\mu}_{L} \gamma_{\mu} e_{L})$	$^{\mathrm{C}}$
CVLL_nutaunumumu	ie $(ar{ u}_{\mu L} \gamma^{\mu}  u_{ au L}) (ar{e}_L \gamma_{\mu} \mu_L)$	$\mathbf{C}$
CVLL_nutaunutaun	$\mathrm{nu}(ar{e}ar{ u}_{ au L}\gamma^{\mu} u_{ au L})(ar{e}_{L}\gamma_{\mu}\mu_{L})$	$^{\mathrm{C}}$
CVLR_nuenuemue	$(\bar{ u}_{eL}\gamma^{\mu} u_{eL})(\bar{e}_{R}\gamma_{\mu}\mu_{R})$	$^{\mathrm{C}}$
CVLR_numunueemu	$(ar{ u}_{eL}\gamma^{\mu} u_{\mu L})(ar{\mu}_{R}\gamma_{\mu}e_{R})$	$^{\mathrm{C}}$
CVLR_numunuemue	$(\bar{ u}_{eL}\gamma^{\mu} u_{\mu L})(\bar{e}_{R}\gamma_{\mu}\mu_{R})$	$^{\mathrm{C}}$
CVLR_numunumumue	$(ar{ u}_{\mu L} \gamma^{\mu}  u_{\mu L}) (ar{e}_R \gamma_{\mu} \mu_R)$	$\mathbf{C}$
CVLR_nutaunueemu	i $(ar{ u}_{eL}\gamma^{\mu} u_{ au L})(ar{\mu}_{R}\gamma_{\mu}e_{R})$	$\mathbf{C}$
CVLR_nutaunuemue	$e^{-(ar{ u}_{eL}\gamma^{\mu} u_{ au L})(ar{e}_{R}\gamma_{\mu}\mu_{R})}$	$\mathbf{C}$
CVLR_nutaunumuen	nu $(ar{ u}_{\mu L} \gamma^{\mu}  u_{ au L}) (ar{\mu}_R \gamma_{\mu} e_R)$	$^{\mathrm{C}}$
CVLR_nutaunumumu	ie $(ar{ u}_{\mu L} \gamma^{\mu}  u_{ au L}) (ar{e}_R \gamma_{\mu} \mu_R)$	$^{\mathrm{C}}$
	$\sin(ar{ar{ u}}_{ au L}\gamma^{\mu} u_{ au L})(ar{e}_{R}\gamma_{\mu}\mu_{R})$	$\mathbf{C}$

#### nunumutau

WC name	Operator	Type
CVLL_nuenuetaumu	$(\bar{\nu}_{eL}\gamma^{\mu}\nu_{eL})(\bar{\mu}_{L}\gamma_{\mu}\tau_{L})$	C
CVLL_numunuemuta	$\mathrm{a}(ar{ u}_{eL}\gamma^{\mu} u_{\mu L})(ar{ au}_{L}\gamma_{\mu}\mu_{L})$	$\mathbf{C}$
CVLL_numunuetaum	$\mathrm{a}(ar{ u}_{eL}\gamma^{\mu} u_{\mu L})(ar{\mu}_{L}\gamma_{\mu} au_{L})$	$\mathbf{C}$
CVLL_numunumutaur	$\min_{ar{ u}}ar{ u}_{\mu L}\gamma^{\mu} u_{\mu L})(ar{\mu}_{L}\gamma_{\mu} au_{L})$	C
CVLL_nutaunuemuta	$\Delta (ar{ u}_{eL} \gamma^{\mu}  u_{ au L}) (ar{ au}_{L} \gamma_{\mu} \mu_{L})$	C
CVLL_nutaunuetaur	$\min ar{ u}_{eL} \gamma^{\mu}  u_{ au L}) (ar{\mu}_L \dot{\gamma}_{\mu}  au_L)$	$^{\mathrm{C}}$
CVLL_nutaunumumut	ta $ar{m{u}}_{\mu L}\gamma^{\mu} u_{ au L})(ar{ au}_{L}\gamma_{\mu}\mu_{L})$	$^{\mathrm{C}}$
CVLL_nutaunumutau	ιτ $ar{m{u}}_{\mu L}\gamma^{\mu} u_{ au L})(ar{\mu}_{L}\gamma_{\mu} au_{L})$	$^{\mathrm{C}}$
CVLL_nutaunutauta	ուն $ar{\mathbf{m}}_{\mathbf{L}}\gamma^{\mu} u_{ au L})(ar{\mu}_{L}\gamma_{\mu} au_{L})$	$^{\mathrm{C}}$
CVLR_nuenuetaumu	$(\bar{\nu}_{eL}\gamma^{\mu}\nu_{eL})(\bar{\mu}_R\gamma_{\mu}\tau_R)$	$^{\mathrm{C}}$
	$\mathrm{a}(ar{ u}_{eL}\gamma^{\mu} u_{\mu L})(ar{ au}_{R}\gamma_{\mu}\mu_{R})$	$^{\mathrm{C}}$
CVLR_numunuetaum	$\mathrm{a}(ar{ u}_{eL}\gamma^{\mu} u_{\mu L})(ar{\mu}_{R}\gamma_{\mu} au_{R})$	$^{\mathrm{C}}$
CVLR_numunumutaur	$\min_{\mu L} \gamma^\mu  u_{\mu L}) (ar{\mu}_R \gamma_\mu  au_R)$	$\mathbf{C}$
CVLR_nutaunuemuta	$\Delta u ar{ u}_{eL} \gamma^{\mu}  u_{ au L}) (ar{ au}_R \gamma_{\mu} \mu_R)$	$^{\mathrm{C}}$
	$\min_{eL} \gamma^{\mu}  u_{ au L}) (ar{\mu}_R \gamma_{\mu}  au_R)$	$^{\mathrm{C}}$
CVLR_nutaunumumut	${f t} ar{m u}_{\mu L} \gamma^\mu  u_{ au L}) (ar{ au}_R \gamma_\mu \mu_R)$	C
	ιμ $ar{m{u}}_{\mu L} \gamma^{\mu}  u_{ au L}) (ar{\mu}_R \gamma_{\mu}  au_R)$	$\mathbf{C}$
CVLR_nutaunutauta	аф $\mu_L \gamma^\mu  u_{ au L}) (ar{\mu}_R \gamma_\mu  au_R)$	C

## nunutaue

WC name	Operator	Type
CVLL_nuenuetaue	$(ar{ u}_{eL}\gamma^{\mu} u_{eL})(ar{e}_{L}\gamma_{\mu} au_{L})$	С
CVLL_numunueetau	$(ar{ u}_{eL}\gamma^{\mu} u_{\mu L})(ar{ au}_{L}\gamma_{\mu}e_{L})$	$\mathbf{C}$
CVLL_numunuetaue	$(ar{ u}_{eL}\gamma^{\mu} u_{\mu L})(ar{e}_{L}\gamma_{\mu} au_{L})$	$\mathbf{C}$
CVLL_numunumutau	e $(ar{ u}_{\mu L} \gamma^{\mu}  u_{\mu L}) (ar{e}_L \gamma_{\mu}  au_L)$	$\mathbf{C}$
CVLL_nutaunueeta	u $(ar{ u}_{eL}\gamma^{\mu} u_{ au L})(ar{ au}_{L}\gamma_{\mu}e_{L})$	$\mathbf{C}$
CVLL_nutaunuetau	e $(ar{ u}_{eL}\gamma^{\mu} u_{ au L})(ar{e}_{L}\gamma_{\mu} au_{L})$	$\mathbf{C}$
CVLL_nutaunumueta	au $(ar{ u}_{\mu L}\gamma^{\mu} u_{ au L})(ar{ au}_{L}\gamma_{\mu}e_{L})$	$\mathbf{C}$
CVLL_nutaunumuta	$uigl(ar{ u}_{\mu L}\gamma^{\mu} u_{ au L})(ar{e}_{L}\gamma_{\mu} au_{L})$	$\mathbf{C}$
CVLL_nutaunutauta	au $(ar{m{e}}_{ au L} \gamma^{\mu}  u_{ au L}) (ar{e}_{L} \gamma_{\mu}  au_{L})$	$\mathbf{C}$
CVLR_nuenuetaue	$(ar{ u}_{eL}\gamma^{\mu} u_{eL})(ar{e}_{R}\gamma_{\mu} au_{R})$	$\mathbf{C}$
CVLR_numunueetau	$(ar{ u}_{eL}\gamma^{\mu} u_{\mu L})(ar{ au}_{R}\gamma_{\mu}e_{R})$	$\mathbf{C}$
CVLR_numunuetaue	$(ar{ u}_{eL}\gamma^{\mu} u_{\mu L})(ar{e}_R\gamma_{\mu} au_R)$	$\mathbf{C}$
CVLR_numunumutau	e $(ar{ u}_{\mu L}\gamma^{\mu} u_{\mu L})(ar{e}_R\gamma_{\mu} au_R)$	$\mathbf{C}$
CVLR_nutaunueeta	$\mathrm{u}(ar{ u}_{eL}\gamma^{\mu} u_{ au L})(ar{ au}_{R}\gamma_{\mu}e_{R})$	$\mathbf{C}$
	e $(ar{ u}_{eL}\gamma^{\mu} u_{ au L})(ar{e}_{R}\gamma_{\mu} au_{R})$	$\mathbf{C}$
CVLR_nutaunumueta	au $(ar{ u}_{\mu L}\gamma^{\mu} u_{ au L})(ar{ au}_R\gamma_{\mu}e_R)$	$\mathbf{C}$
CVLR_nutaunumuta	$uigl(ar{ u}_{\mu L}\gamma^{\mu} u_{ au L})(ar{e}_R\gamma_{\mu} au_R)$	$\mathbf{C}$
CVLR_nutaunutauta	a ( $ar{e}_{ au L} \gamma^{\mu}  u_{ au L}) (ar{e}_R \gamma_{\mu}  au_R)$	С

# ${\tt ffnunu}$

WC name	Operator	Type
CVLL_nuenuecc	$\frac{4G_F}{\sqrt{2}}(\bar{\nu}_{eL}\gamma^{\mu}\nu_{eL})(\bar{c}_L\gamma_{\mu}c_L)$	R
CVLL_nuenuedd	$\frac{4 \overset{\circ}{G_F}}{\sqrt{2}} (ar{ u}_{eL} \gamma^{\mu}  u_{eL}) (ar{d}_L \gamma_{\mu} d_L)$	${ m R}$
CVLL_nuenueee	$\frac{4\overset{\circ}{G_F}}{\sqrt{2}}(ar{ u}_{eL}\gamma^{\mu} u_{eL})(ar{e}_L\gamma_{\mu}e_L)$	${ m R}$
CVLL_nuenuemumu	$\frac{4 \check{G}_F}{\sqrt{2}} (\bar{\nu}_{eL} \gamma^\mu \nu_{eL}) (\bar{\mu}_L \gamma_\mu \mu_L)$	${ m R}$
CVLL_nuenuess	$\frac{4G_F}{\sqrt{2}}(\bar{ u}_{eL}\gamma^\mu u_{eL})(\bar{s}_L\gamma_\mu s_L)$	R
CVLL_nuenuetautau	$1  rac{4 G_F}{\sqrt{2}} (ar{ u}_{eL} \gamma^\mu  u_{eL}) (ar{ au}_L \gamma_\mu  au_L)$	$\mathbf{R}$
CVLL_nuenueuu	$\frac{4G_F}{\sqrt{2}}(\bar{\nu}_{eL}\gamma^{\mu}\nu_{eL})(\bar{u}_L\gamma_{\mu}u_L)$	R
CVLL_nuenumucc	$\frac{4G_F}{\sqrt{2}}(\bar{\nu}_{eL}\gamma^{\mu}\nu_{\mu L})(\bar{c}_L\gamma_{\mu}c_L)$	$\mathbf{C}$
CVLL_nuenumudd	$rac{4G_F}{\sqrt{2}}(ar{ u}_{eL}\gamma^\mu u_{\mu L})(ar{d}_L\gamma_\mu d_L)$	$\mathbf{C}$
CVLL_nuenumuee	$\frac{4G_F}{\sqrt{2}}(\bar{\nu}_{eL}\gamma^{\mu}\nu_{\mu L})(\bar{e}_L\gamma_{\mu}e_L)$	$\mathbf{C}$
${\tt CVLL\_nuenumumumu}$	$\frac{4G_F}{\sqrt{2}}(\bar{\nu}_{eL}\gamma^{\mu}\nu_{\mu L})(\bar{\mu}_L\gamma_{\mu}\mu_L)$	$\mathbf{C}$
CVLL_nuenumuss	$\frac{4G_F}{\sqrt{2}}(ar{ u}_{eL}\gamma^\mu u_{\mu L})(ar{s}_L\gamma_\mu s_L)$	$\mathbf{C}$
CVLL_nuenumutauta	$\sinrac{4G_F}{\sqrt{2}}(ar{ u}_{eL}\gamma^\mu u_{\mu L})(ar{ au}_L\gamma_\mu au_L)$	$\mathbf{C}$
CVLL_nuenumuuu	$\frac{4G_F}{\sqrt{2}}(\bar{\nu}_{eL}\gamma^{\mu}\nu_{\mu L})(\bar{u}_L\gamma_{\mu}u_L)$	$\mathbf{C}$
CVLL_nuenutaucc	$\frac{4 \check{G}_F}{\sqrt{2}} (\bar{\nu}_{eL} \gamma^\mu \nu_{\tau L}) (\bar{c}_L \gamma_\mu c_L)$	$\mathbf{C}$
CVLL_nuenutaudd	$\frac{4 \check{G}_F}{\sqrt{2}} (\bar{ u}_{eL} \gamma^\mu  u_{ au L}) (\bar{d}_L \gamma_\mu d_L)$	$^{\mathrm{C}}$
CVLL_nuenutauee	$\frac{4\tilde{G}_F^2}{\sqrt{2}}(\bar{\nu}_{eL}\gamma^{\mu}\nu_{\tau L})(\bar{e}_L\gamma_{\mu}e_L)$	$^{\mathrm{C}}$

WC name	Operator	Type
CVLL_nuenutaumumu	$1 \frac{4G_F}{\sqrt{2}} (\bar{ u}_{eL} \gamma^\mu  u_{\tau L}) (\bar{\mu}_L \gamma_\mu \mu_L)$	$^{\mathrm{C}}$
CVLL_nuenutauss	$rac{4reve{G}_F}{\sqrt{2}}(ar{ u}_{eL}\gamma^\mu u_{ au L})(ar{s}_L\gamma_\mu s_L)$	$\mathbf{C}$
CVLL_nuenutautaut	$\tan \frac{\lambda G_F}{\sqrt{2}} (ar{ u}_{eL} \gamma^\mu  u_{ au L}) (ar{ au}_L \gamma_\mu  au_L)$	$\mathbf{C}$
CVLL_nuenutauuu	$\frac{4\check{G}_F}{\sqrt{2}}(\bar{\nu}_{eL}\gamma^{\mu}\nu_{\tau L})(\bar{u}_L\gamma_{\mu}u_L)$	$^{\mathrm{C}}$
CVLL_numunumucc	$rac{4\check{G_F}}{\sqrt{2}}(ar{ u}_{\mu L}\gamma^{\mu} u_{\mu L})(ar{c}_L\gamma_{\mu}c_L)$	R
CVLL_numunumudd	$rac{4reve{G_F}}{\sqrt{2}}(ar{ u}_{\mu L}\gamma^{\mu} u_{\mu L})(ar{d}_L\gamma_{\mu}d_L)$	R
CVLL_numunumuee	$\frac{4\check{G}_F}{\sqrt{2}}(ar{ u}_{\mu L}\gamma^\mu u_{\mu L})(ar{e}_L\gamma_\mu e_L)$	R
CVLL_numunumumumu	100	R
CVLL_numunumuss	$\frac{4\check{G}_F^F}{\sqrt{2}}(ar{ u}_{\mu L}\gamma^\mu u_{\mu L})(ar{s}_L\gamma_\mu s_L)$	R
CVLL_numunumutaut	$\tan rac{\lambda G_F}{\sqrt{2}} (ar{ u}_{\mu L} \gamma^\mu  u_{\mu L}) (ar{ au}_L \gamma_\mu  au_L)$	R
CVLL_numunumuuu	$\frac{4\check{G}_F^F}{\sqrt{2}}(\bar{\nu}_{\mu L}\gamma^{\mu}\nu_{\mu L})(\bar{u}_L\gamma_{\mu}u_L)$	R
CVLL_numunutaucc	$\frac{4\check{G}_{F}^{F}}{\sqrt{2}}(ar{ u}_{\mu L}\gamma^{\mu} u_{ au L})(ar{c}_{L}\gamma_{\mu}c_{L})$	$\mathbf{C}$
CVLL_numunutaudd	$rac{4reve{G_F}}{\sqrt{2}}(ar{ u}_{\mu L}\gamma^{\mu} u_{ au L})(ar{d}_L\gamma_{\mu}d_L)$	$\mathbf{C}$
CVLL_numunutauee	$\frac{4\overset{\sim}{G_L}}{\sqrt{2}}(\bar{ u}_{\mu L}\gamma^{\mu} u_{\tau L})(\bar{e}_L\gamma_{\mu}e_L)$	$\mathbf{C}$
CVLL_numunutaumur	$\min_{\sqrt{2}}^{4\widetilde{G}_F}(ar{ u}_{\mu L}\gamma^\mu u_{ au L})(ar{\mu}_L\gamma_\mu\mu_L)$	$^{\mathrm{C}}$
CVLL_numunutauss	4V2	$^{\mathrm{C}}$
CVLL_numunutautau	$1$ $\frac{\sqrt{2}}{\sqrt{2}} (ar{ u}_{\mu L} \gamma^{\mu}  u_{ au L}) (ar{ au}_{L} \gamma_{\mu}  au_{L})$	$^{\mathrm{C}}$
CVLL_numunutauuu	$\frac{4\overset{\circ}{G_F}}{\sqrt{2}}(\bar{ u}_{\mu L}\gamma^{\mu} u_{ au L})(\bar{u}_L\gamma_{\mu}u_L)$	$^{\mathrm{C}}$
CVLL_nutaunutauco	$\simeq rac{4  ilde{G_F}}{\sqrt{2}} (ar{ u}_{ au L} \gamma^\mu  u_{ au L}) (ar{c}_L \gamma_\mu c_L)$	R
CVLL_nutaunutaudo	$4 rac{4 ar{Q}_F^F}{\sqrt{2}} (ar{ u}_{ au L} \gamma^\mu  u_{ au L}) (ar{d}_L \gamma_\mu d_L)$	${ m R}$
CVLL_nutaunutaue	$=rac{4\overset{\sim}{Q_L}}{\sqrt{2}}(ar{ u}_{ au L}\gamma^{\mu} u_{ au L})(ar{e}_L\gamma_{\mu}e_L)$	$\mathbf{R}$
CVLL_nutaunutaum	$\lim_{N \to \infty} \hat{ar{eta}_E} (ar{ u}_{ au L} \gamma^\mu  u_{ au L}) (ar{\mu}_L \gamma_\mu \mu_L)$	$\mathbf{R}$
CVLL_nutaunutauss	$=rac{4\overset{\sim}{G_T}}{\sqrt{2}}(ar{ u}_{ au L}\gamma^\mu u_{ au L})(ar{s}_L\gamma_\mu s_L)$	$\mathbf{R}$
CVLL_nutaunutauta	$\Delta V_{ au L}^{ au} (ar{ u}_{ au L} \gamma^{\mu}  u_{ au L}) (ar{ au}_{L} \gamma_{\mu}  au_{L})$	$\mathbf{R}$
CVLL_nutaunutauuı	$1 \frac{4 \overset{\circ}{G_T}}{\sqrt{2}} (\bar{ u}_{\tau L} \gamma^{\mu}  u_{\tau L}) (\bar{u}_L \gamma_{\mu} u_L)$	$\mathbf{R}$
CVLR_nuenuecc	$rac{4ar{G}_F^c}{\sqrt{2}}(ar{ u}_{eL}\gamma^\mu u_{eL})(ar{c}_R\gamma_\mu c_R)$	$\mathbf{R}$
CVLR_nuenuedd	$\frac{4 \overset{\circ}{Q_F}}{\sqrt{2}} (\bar{ u}_{eL} \gamma^{\mu}  u_{eL}) (\bar{d}_R \gamma_{\mu} d_R)$	R
CVLR_nuenueee	$rac{4reve{Q}_F^2}{\sqrt{2}}(ar{ u}_{eL}\gamma^\mu u_{eL})(ar{e}_R\gamma_\mu e_R)$	$\mathbf{R}$
CVLR_nuenuemumu	$\frac{4\tilde{G}_F^2}{\sqrt{2}}(\bar{\nu}_{eL}\gamma^{\mu}\nu_{eL})(\bar{\mu}_R\gamma_{\mu}\mu_R)$	$\mathbf{R}$
CVLR_nuenuess	$rac{{}^4\!$	R
CVLR_nuenuetautau	$1 \frac{\sqrt{2}}{\sqrt{2}} (\bar{\nu}_{eL} \gamma^{\mu} \bar{\nu}_{eL}) (\bar{s}_R \gamma_{\mu} \bar{s}_R) + \frac{4G_F}{\sqrt{2}} (\bar{\nu}_{eL} \gamma^{\mu} \bar{\nu}_{eL}) (\bar{\tau}_R \gamma_{\mu} \tau_R)$	R
CVLR_nuenueuu	$\frac{{}^{4G_F}_{F}}{\sqrt{2}}(\bar{\nu}_{eL}\gamma^{\mu}\nu_{eL})(\bar{u}_R\gamma_{\mu}u_R)$	$\mathbf{R}$
CVLR_nuenumucc	$rac{4G_F}{\sqrt{2}}(ar{ u}_{eL}\gamma^\mu u_{\mu L})(ar{c}_R\gamma_\mu c_R)$	$^{\mathrm{C}}$
CVLR_nuenumudd	$rac{4G_F}{\sqrt{2}}(ar{ u}_{eL}\gamma^\mu u_{\mu L})(ar{d}_R\gamma_\mu d_R)$	$\mathbf{C}$
CVLR_nuenumuee	$\frac{4G_F^2}{\sqrt{2}}(ar{ u}_{eL}\gamma^\mu u_{\mu L})(ar{e}_R\gamma_\mu e_R)$	$\mathbf{C}$
CVLR_nuenumumumu	$rac{4G_F}{\sqrt{2}}(ar{ u}_{eL}\gamma^\mu u_{\mu L})(ar{\mu}_R\gamma_\mu\mu_R)$	$\mathbf{C}$
CVLR_nuenumuss	$rac{4G_F^2}{\sqrt{2}}(ar{ u}_{eL}\gamma^\mu u_{\mu L})(ar{s}_R\gamma_\mu s_R)$	$\mathbf{C}$

WC name	Operator	Type
CVLR_nuenumutautau $\frac{4G_F}{\sqrt{2}}(\bar{\nu}_{eL}\gamma^{\mu}\nu_{\mu L})(\bar{\tau}_R\gamma_{\mu}\tau_R)$		
CVLR_nuenumuuu	$\frac{4\widetilde{G}_F^2}{\sqrt{2}}(\bar{\nu}_{eL}\gamma^{\mu}\nu_{\mu L})(\bar{u}_R\gamma_{\mu}u_R)$	$^{\mathrm{C}}$
CVLR_nuenutaucc	$\frac{4\ddot{G}_F}{\sqrt{2}}(\bar{\nu}_{eL}\gamma^{\mu}\nu_{\tau L})(\bar{c}_R\gamma_{\mu}c_R)$	$^{\mathrm{C}}$
CVLR_nuenutaudd	$\frac{4G_F}{\sqrt{2}}(ar{ u}_{eL}\gamma^\mu u_{ au L})(ar{d}_R\gamma_\mu d_R)$	$^{\mathrm{C}}$
CVLR_nuenutauee	$\frac{4G_F}{\sqrt{2}}(\bar{ u}_{eL}\gamma^{\mu} u_{\tau L})(\bar{e}_R\gamma_{\mu}e_R)$	$^{\mathrm{C}}$
CVLR_nuenutaumumu	$4\frac{4G_F}{\sqrt{2}}(ar{ u}_{eL}\gamma^\mu u_{ au L})(ar{\mu}_R\gamma_\mu\mu_R)$	$^{\mathrm{C}}$
CVLR_nuenutauss	$\frac{4G_F}{\sqrt{2}}(\bar{ u}_{eL}\gamma^{\mu} u_{\tau L})(\bar{s}_R\gamma_{\mu}s_R)$	$\mathbf{C}$
CVLR_nuenutautaut	$a rac{A G_F}{\sqrt{2}} (ar{ u}_{eL} \gamma^\mu  u_{ au L}) (ar{ au}_R \gamma_\mu  au_R)$	$^{\mathrm{C}}$
CVLR_nuenutauuu	$\frac{4G_F}{\sqrt{2}}(\bar{\nu}_{eL}\gamma^{\mu}\nu_{\tau L})(\bar{u}_R\gamma_{\mu}u_R)$	$^{\mathrm{C}}$
CVLR_numunumucc	$rac{4G_F}{\sqrt{2}}(ar{ u}_{\mu L}\gamma^\mu u_{\mu L})(ar{c}_R\gamma_\mu c_R)$	R
CVLR_numunumudd	$rac{4G_F}{\sqrt{2}}(ar{ u}_{\mu L}\gamma^\mu u_{\mu L})(ar{d}_R\gamma_\mu d_R)$	R
CVLR_numunumuee	$rac{4G_F}{\sqrt{2}}(ar{ u}_{\mu L}\gamma^{\mu} u_{\mu L})(ar{e}_R\gamma_{\mu}e_R)$	${ m R}$
CVLR_numunumumumumumumumumumumumumumumumumum	$4\frac{4G_F}{\sqrt{2}}(ar{ u}_{\mu L}\gamma^\mu u_{\mu L})(ar{\mu}_R\gamma_\mu\mu_R)$	R
CVLR_numunumuss	$rac{4G_F}{\sqrt{2}}(ar{ u}_{\mu L}\gamma^{\mu} u_{\mu L})(ar{s}_R\gamma_{\mu}s_R)$	R
CVLR_numunumutaut	$a rac{4G_F}{\sqrt{2}} (ar{ u}_{\mu L} \gamma^\mu  u_{\mu L}) (ar{ au}_R \gamma_\mu  au_R)$	R
CVLR_numunumuuu	$\frac{4G_F}{\sqrt{2}}(\bar{ u}_{\mu L}\gamma^{\mu} u_{\mu L})(\bar{u}_R\gamma_{\mu}u_R)$	R
${\tt CVLR\_numunutaucc}$	$rac{4G_F}{\sqrt{2}}(ar{ u}_{\mu L}\gamma^\mu u_{ au L})(ar{c}_R\gamma_\mu c_R)$	$^{\mathrm{C}}$
${\tt CVLR\_numunutaudd}$	$rac{4G_F}{\sqrt{2}}(ar{ u}_{\mu L}\gamma^\mu u_{ au L})(ar{d}_R\gamma_\mu d_R)$	$^{\mathrm{C}}$
CVLR_numunutauee	$\frac{4G_F}{\sqrt{2}}(\bar{ u}_{\mu L}\gamma^{\mu} u_{\tau L})(\bar{e}_R\gamma_{\mu}e_R)$	$^{\mathrm{C}}$
CVLR_numunutaumum	$\sin^{4G_F}_{\sqrt{2}}(ar{ u}_{\mu L}\gamma^\mu u_{ au L})(ar{\mu}_R\gamma_\mu\mu_R)$	$^{\mathrm{C}}$
CVLR_numunutauss	$\frac{4G_F}{\sqrt{2}}(\bar{\nu}_{\mu L}\gamma^{\mu}\nu_{\tau L})(\bar{s}_R\gamma_{\mu}s_R)$	$^{\mathrm{C}}$
CVLR_numunutautau	$\mathrm{d} \frac{d G_F}{d \tau} (ar{ u}_{\mu L} \gamma^\mu  u_{ au L}) (ar{ au}_R \gamma_\mu  au_R)$	$^{\mathrm{C}}$
${\tt CVLR\_numunutauuu}$	$\frac{4G_F}{\sqrt{2}}(\bar{\nu}_{\mu L}\gamma^{\mu}\nu_{\tau L})(\bar{u}_R\gamma_{\mu}u_R)$	$^{\mathrm{C}}$
CVLR_nutaunutauco	$\pm rac{4G_F}{\sqrt{2}} (ar{ u}_{ au L} \gamma^\mu  u_{ au L}) (ar{c}_R \gamma_\mu c_R)$	R
CVLR_nutaunutaudd	$4\frac{4\widetilde{G}_F^2}{\sqrt{2}}(ar{ u}_{ au L}\gamma^\mu u_{ au L})(ar{d}_R\gamma_\mu d_R)$	R
	$e^{\frac{4G_F}{\sqrt{2}}(\bar{ u}_{ au L}\gamma^{\mu} u_{ au L})(\bar{e}_R\gamma_{\mu}e_R)}$	R
CVLR_nutaunutaumu	$\frac{1}{\sqrt{2}} (\bar{ u}_{ au L} \gamma^{\mu}  u_{ au L}) (\bar{\mu}_R \gamma_{\mu} \mu_R)$	R
CVLR_nutaunutauss	$s  rac{4 \check{G}_F^2}{\sqrt{2}} (ar{ u}_{ au L} \gamma^\mu  u_{ au L}) (ar{s}_R \gamma_\mu s_R)$	R
CVLR_nutaunutauta	$u \hat{\overline{\nu_{ au}}} (ar{ u_{ au L}} \gamma^{\mu}  u_{ au L}) (ar{ au}_R \gamma_{\mu}  au_R)$	R
CVLR_nutaunutauuu	$\frac{4G_F^2}{\sqrt{2}}(\bar{\nu}_{\tau L}\gamma^{\mu}\nu_{\tau L})(\bar{u}_R\gamma_{\mu}u_R)$	R

## ${\tt muemutau}$

WC name	Operator	Type
CVLL_muemutau	$(\bar{e}_L \gamma^\mu \mu_L)(\bar{\tau}_L \gamma_\mu \mu_L)$	С
CVRR_muemutau	$(\bar{e}_R \gamma^\mu \mu_R)(\bar{\tau}_R \gamma_\mu \mu_R)$	$^{\mathrm{C}}$
CVLR_muemutau	$(\bar{e}_L \gamma^\mu \mu_L)(\bar{\tau}_R \gamma_\mu \mu_R)$	$\mathbf{C}$

WC name	Operator	Type
CVLR_taumuemu	$(\bar{\mu}_L \gamma^\mu \tau_L)(\bar{\mu}_R \gamma_\mu e_R)$	С
CSRR_muemutau	$(\bar{e}_L \mu_R)(\bar{ au}_L \mu_R)$	$\mathbf{C}$
CSRR_emutaumu	$(\bar{\mu}_L e_R)(\bar{\mu}_L \tau_R)$	$\mathbf{C}$

## etauemu

WC name	Operator	Type
CVLL_muetaue	$(\bar{e}_L \gamma^\mu \mu_L)(\bar{e}_L \gamma_\mu \tau_L)$	С
CVRR_muetaue	$(\bar{e}_R \gamma^\mu \mu_R)(\bar{e}_R \gamma_\mu \tau_R)$	$\mathbf{C}$
CVLR_muetaue	$(\bar{e}_L \gamma^\mu \mu_L)(\bar{e}_R \gamma_\mu \tau_R)$	$\mathbf{C}$
CVLR_tauemue	$(\bar{e}_L \gamma^\mu \tau_L)(\bar{e}_R \gamma_\mu \mu_R)$	$\mathbf{C}$
CSRR_muetaue	$(\bar{e}_L \mu_R)(\bar{e}_L \tau_R)$	$\mathbf{C}$
CSRR_emuetau	$(\bar{\mu}_L e_R)(\bar{ au}_L e_R)$	С