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

 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)$	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)$	$^{\mathrm{C}}$
C10_sdee	$\frac{4\dot{G}_{F}}{\sqrt{2}}V_{ts}V_{td}^{*}\frac{e^{2}}{16\pi^{2}}(\bar{d}_{L}\gamma^{\mu}s_{L})(\bar{e}\gamma_{\mu}\gamma_{5}e)$	\mathbf{C}

WC name	Operator	Type
C10p_sdee	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_R\gamma^{\mu}s_R)(\bar{e}\gamma_{\mu}\gamma_5 e)$	С
CS_sdee	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*\frac{e^2}{16\pi^2}m_s(\bar{d}_L s_R)(\bar{e}e)$	\mathbf{C}
CSp_sdee	$\frac{4\tilde{Q}_{F}}{\sqrt{2}}V_{ts}V_{td}^{*}\frac{e^{2}}{16\pi^{2}}m_{s}(\bar{d}_{R}s_{L})(\bar{e}e)$	\mathbf{C}
CP_sdee	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*\frac{e^2}{16\pi^2}m_s(\bar{d}_L s_R)(\bar{e}\gamma_5 e)$	\mathbf{C}
CPp_sdee	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*\frac{e^2}{16\pi^2}m_s(\bar{d}_Rs_L)(\bar{e}\gamma_5e)$	\mathbf{C}
C9_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}
C9p_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}
C10_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}
C10p_sdmumu	$\frac{4G_F}{2}V_{ts}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_R\gamma^{\mu}s_R)(\bar{\mu}\gamma_{\mu}\gamma_5\mu)$	\mathbf{C}
CS_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}
CSp_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}
CP_sdmumu	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*\frac{e^2}{16\pi^2}m_s(\bar{d}_L s_R)(\bar{\mu}\gamma_5\mu)$	C
CPp_sdmumu	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*\frac{e^2}{16\pi^2}m_s(\bar{d}_Rs_L)(\bar{\mu}\gamma_5\mu)$	$^{\mathrm{C}}$
C9_sdtautau	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_L\gamma^\mu s_L)(\bar{\tau}\gamma_\mu au)$	\mathbf{C}
C9p_sdtautau	$rac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*rac{e^2}{16\pi^2}(ar{d}_R\gamma^\mu s_R)(ar{ au}\gamma_\mu au)$	$^{\mathrm{C}}$
C10_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)$	C
C10p_sdtautau	$rac{4G_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 au)$	\mathbf{C}
CS_sdtautau	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^* \frac{e^2}{16\pi^2}m_s(\bar{d}_L s_R)(\bar{ au} au)$	\mathbf{C}
CSp_sdtautau	$rac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*rac{e^2}{16\pi^2}m_s(\bar{d}_Rs_L)(\bar{ au} au)$	\mathbf{C}
CP_sdtautau	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*\frac{e^2}{16\pi^2}m_s(\bar{d}_L s_R)(\bar{\tau}\gamma_5 au)$	\mathbf{C}
CPp_sdtautau	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^* \frac{e^2}{16\pi^2}m_s(\bar{d}_R s_L)(\bar{ au}\gamma_5 au)$	\mathbf{C}
C7_sd	$\frac{4V_{L}^{2}}{\sqrt{2}}V_{ts}V_{td}^{*}\frac{e}{16\pi^{2}}m_{s}(\bar{d}_{L}\sigma^{\mu\nu}s_{R})F_{\mu\nu}$	\mathbf{C}
C7p_sd	$rac{4 \check{G_F}}{\sqrt{2}} V_{ts} V_{td}^* rac{e}{16\pi^2} m_s (\bar{d}_R \sigma^{\mu u} s_L) F_{\mu u}$	$^{\mathrm{C}}$
C8_sd	$rac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*rac{g_s}{16\pi^2}m_s(\bar{d}_L\sigma^{\mu u}T^as_R)G_{\mu u}^a$	$^{\mathrm{C}}$
C8p_sd	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^* \frac{g_s}{16\pi^2} m_s(\bar{d}_R \sigma^{\mu\nu} T^a s_L) G_{\mu\nu}^a$	$^{\mathrm{C}}$
CVLL_sdss	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*(ar{d}_L\gamma^\mu s_L)(ar{s}_L\gamma_\mu s_L)$	\mathbf{C}
CVLR_sdss	$rac{4ar{G}_F^2}{\sqrt{2}}V_{ts}V_{td}^*(ar{d}_L\gamma^\mu s_L)(ar{s}_R\gamma_\mu s_R)$	С
CVRL_sdss	$rac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*(ar{d}_R\gamma^\mu s_R)(ar{s}_L\gamma_\mu s_L)$	C
CVRR_sdss	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*(d_R\gamma^\mu s_R)(\bar{s}_R\gamma_\mu s_R)$	С
CSLL_sdss	$\frac{4GF}{\sqrt{2}}V_{ts}V_{td}^*(d_Rs_L)(\bar{s}_Rs_L)$	С
CSLR_sdss	$\frac{4GF}{\sqrt{2}}V_{ts}V_{td}^*(d_Rs_L)(\bar{s}_Ls_R)$	C
CSRL_sdss	$\frac{4GF}{\sqrt{2}}V_{ts}V_{td}^*(d_Ls_R)(\bar{s}_Rs_L)$	C
CSRR_sdss	$\frac{4GF}{\sqrt{2}}V_{ts}V_{td}^*(d_Ls_R)(\bar{s}_Ls_R)$	C
CTLL_sdss	$\begin{array}{c} \frac{\sqrt{2}}{\sqrt{2}} V_{ts} V_{td}^*(d_R \gamma^{\mu} s_R) (\bar{s}_R \gamma_{\mu} s_R) \\ \frac{4G_F}{\sqrt{2}} V_{ts} V_{td}^*(\bar{d}_R s_L) (\bar{s}_R s_L) \\ \frac{4G_F}{\sqrt{2}} V_{ts} V_{td}^*(\bar{d}_R s_L) (\bar{s}_L s_R) \\ \frac{4G_F}{\sqrt{2}} V_{ts} V_{td}^*(\bar{d}_L s_R) (\bar{s}_L s_R) \\ \frac{4G_F}{\sqrt{2}} V_{ts} V_{td}^*(\bar{d}_L s_R) (\bar{s}_R s_L) \\ \frac{4G_F}{\sqrt{2}} V_{ts} V_{td}^*(\bar{d}_L s_R) (\bar{s}_L s_R) \\ \frac{4G_F}{\sqrt{2}} V_{ts} V_{td}^*(\bar{d}_R \sigma^{\mu\nu} s_L) (\bar{s}_R \sigma_{\mu\nu} s_L) \\ \frac{4G_F}{\sqrt{2}} V_{ts} V_{td}^*(\bar{d}_L \sigma^{\mu\nu} s_R) (\bar{s}_L \sigma_{\mu\nu} s_R) \end{array}$	С
CTRR_sdss	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*(d_L\sigma^{\mu\nu}s_R)(\bar{s}_L\sigma_{\mu\nu}s_R)$	$^{\mathrm{C}}$

WC name	Operator	Type
CVLL_sddd	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*(\bar{d}_L\gamma^\mu s_L)(\bar{d}_L\gamma_\mu d_L)$	$^{\mathrm{C}}$
CVLR_sddd	$rac{4G_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	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*(\bar{d}_R\gamma^\mu s_R)(\bar{d}_R\gamma_\mu d_R)$	\mathbf{C}
CSLL_sddd	$\frac{4\ddot{G}_{F}}{\sqrt{2}}V_{ts}V_{td}^{*}(\bar{d}_{R}s_{L})(\bar{d}_{R}d_{L})$	\mathbf{C}
CSLR_sddd	$\frac{4\ddot{G}_F}{\sqrt{2}}V_{ts}V_{td}^*(\bar{d}_Rs_L)(\bar{d}_Ld_R)$	\mathbf{C}
CSRL_sddd	$rac{4ar{G_F}}{\sqrt{2}}V_{ts}V_{td}^*(ar{d}_Ls_R)(ar{d}_Rd_L)$	\mathbf{C}
CSRR_sddd	$rac{4\widetilde{G_F}}{\sqrt{2}}V_{ts}V_{td}^*(ar{d}_Ls_R)(ar{d}_Ld_R)$	\mathbf{C}
CTLL_sddd	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*(\bar{d}_R\sigma^{\mu\nu}s_L)(\bar{d}_R\sigma_{\mu\nu}d_L)$	\mathbf{C}
CTRR_sddd	$\frac{4\tilde{G}_F}{\sqrt{2}}V_{ts}V_{td}^*(\bar{d}_L\sigma^{\mu\nu}s_R)(\bar{d}_L\sigma_{\mu\nu}d_R)$	\mathbf{C}
CVLL_sduu	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*(\bar{d}_L\gamma^\mu s_L)(\bar{u}_L\gamma_\mu u_L)$	\mathbf{C}
CVLR_sduu	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*(\bar{d}_L\gamma^\mu s_L)(\bar{u}_R\gamma_\mu u_R)$	$^{\mathrm{C}}$
CVRL_sduu	$\frac{4\bar{G}_F}{\sqrt{2}}V_{ts}V_{td}^*(\bar{d}_R\gamma^\mu s_R)(\bar{u}_L\gamma_\mu u_L)$	\mathbf{C}
CVRR_sduu	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*(\bar{d}_R\gamma^\mu s_R)(\bar{u}_R\gamma_\mu u_R)$	\mathbf{C}
CSLL_sduu	$\frac{4\tilde{G}_{F}}{\sqrt{2}}V_{ts}V_{td}^{*}(\bar{d}_{R}s_{L})(\bar{u}_{R}u_{L})$	$^{\mathrm{C}}$
CSLR_sduu	$rac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*(ar{d}_Rs_L)(ar{u}_Lu_R)$	$^{\mathrm{C}}$
CSRL_sduu	$\frac{4\dot{G}_F}{\sqrt{2}}V_{ts}V_{td}^*(\bar{d}_L s_R)(\bar{u}_R u_L)$	\mathbf{C}
CSRR_sduu	$\frac{4G_F^2}{\sqrt{2}}V_{ts}V_{td}^*(\bar{d}_L s_R)(\bar{u}_L u_R) \\ \frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*(\bar{d}_R \sigma^{\mu\nu} s_L)(\bar{u}_R \sigma_{\mu\nu} u_L)$	$^{\mathrm{C}}$
CTLL_sduu		$^{\mathrm{C}}$
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	$rac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*(ar{d}_L^lpha\gamma^\mu s_L^eta)(ar{u}_L^eta\gamma_\mu u_L^lpha)$	\mathbf{C}
CVLRt_sduu	$\frac{4\dot{G}_F}{\sqrt{2}}V_{ts}V_{td}^*(\bar{d}_L^{\alpha}\gamma^{\mu}s_L^{\beta})(\bar{u}_R^{\beta}\gamma_{\mu}u_R^{\alpha})$	\mathbf{C}
CVRLt_sduu	$\frac{4\tilde{G}_F}{\sqrt{2}}V_{ts}V_{td}^*(\bar{d}_R^{lpha}\gamma^{\mu}s_R^{eta})(\bar{u}_L^{eta}\gamma_{\mu}u_L^{lpha})$	\mathbf{C}
CVRRt_sduu	$rac{4G_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{4G_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{4G_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	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*(\bar{d}_L^{lpha}s_R^{eta})(\bar{u}_R^{eta}u_L^{lpha})$	$^{\mathrm{C}}$
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	$\frac{4G_F}{G_F}V_{ts}V_{ts}^*(\bar{d}_D^{\alpha}\sigma^{\mu\nu}s_L^{\beta})(\bar{u}_D^{\beta}\sigma_{\mu\nu}u_L^{\alpha})$	$^{\mathrm{C}}$
CTRRt_sduu	$\frac{4G_F}{\overline{c}}V_{ts}V_{ts}^{\prime\prime}(\bar{d}_1^{\alpha}\sigma^{\mu\nu}s_D^{\beta})(\bar{u}_1^{\beta}\sigma_{\mu\nu}u_D^{\alpha})$	$^{\mathrm{C}}$
- CVLL_sdcc	$\frac{\sqrt{2}}{\sqrt{E}} V_{ts} V_{td}^* (\bar{d}_L \gamma^\mu s_L) (\bar{c}_L \gamma_\mu c_L)$	$^{\mathrm{C}}$
CVLR_sdcc	$ \begin{array}{l} \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 s_L) (\bar{c}_R c_L) \\ \frac{4G_F}{\sqrt{2}} V_{ts} V_{td}^* (\bar{d}_R s_L) (\bar{c}_L c_R) \end{array} $	$^{\mathrm{C}}$
- CVRL_sdcc	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*(\bar{d}_R\gamma^\mu s_R)(\bar{c}_L\gamma_\mu c_L)$	$^{\mathrm{C}}$
- CVRR_sdcc	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*(\bar{d}_R\gamma^\mu s_R)(\bar{c}_R\gamma_\mu c_R)$	$^{\mathrm{C}}$
- CSLL_sdcc	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*(\bar{d}_Rs_L)(\bar{c}_Rc_L)$	\mathbf{C}
CSLR_sdcc	$4G_{FV}V^{*}(\bar{J}, \alpha)(\bar{a}, \alpha)$	$^{\mathrm{C}}$

WC name	Operator	Type
CSRL_sdcc	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*(\bar{d}_Ls_R)(\bar{c}_Rc_L)$	C
CSRR_sdcc	$rac{4ar{G}_F^2}{\sqrt{2}}V_{ts}V_{td}^*(ar{d}_L s_R)(ar{c}_L c_R)$	\mathbf{C}
CTLL_sdcc	$rac{4reve{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	$\frac{4 \breve{G_F}}{\sqrt{2}} V_{ts} V_{td}^* (\bar{d}_L \sigma^{\mu u} s_R) (\bar{c}_L \sigma_{\mu u} c_R)$	\mathbf{C}
CVLLt_sdcc	$\frac{4 \overleftarrow{G_F}}{\sqrt{2}} V_{ts} V_{td}^* (\overline{d}_L^{lpha} \gamma^{\mu} s_L^{eta}) (\overline{c}_L^{eta} \gamma_{\mu} c_L^{lpha})$	\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{4G_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}}{\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}}{\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{G}_{F}^{2}}{\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	$\frac{4\tilde{G}_F}{\sqrt{2}}V_{ts}V_{td}^*(\bar{d}_L^\alpha\sigma^{\mu\nu}s_R^\beta)(\bar{c}_L^\beta\sigma_{\mu\nu}c_R^\alpha)$	С

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
${\tt CL_sdnumunumu}$	$\frac{4\tilde{G}_F}{\sqrt{2}}V_{td}V_{ts}^*\frac{e^2}{16\pi^2}(\bar{s}_L\gamma^{\mu}d_L)(\bar{\nu}_{\mu}\gamma_{\mu}(1-\gamma_5)\nu_{\mu})$	\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}
CL_sdnumunutau	$\frac{4G_F}{\sqrt{2}}V_{td}V_{ts}^*\frac{e^2}{16\pi^2}(\bar{s}_L\gamma^{\mu}d_L)(\bar{\nu}_{\tau}\gamma_{\mu}(1-\gamma_5)\nu_{\mu})$	\mathbf{C}
${\tt CL_sdnutaunumu}$	$rac{4\dot{G}_F}{\sqrt{2}}V_{td}V_{ts}^*rac{e^2}{16\pi^2}(ar{s}_L\gamma^{\mu}d_L)(ar{ u}_{\mu}\gamma_{\mu}(1-\gamma_5) u_{ au})$	\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	$\frac{4G_F}{\sqrt{2}}V_{td}V_{ts}^*\frac{e^2}{16\pi^2}(\bar{s}_L\gamma^{\mu}d_L)(\bar{\nu}_e\gamma_{\mu}(1-\gamma_5)\nu_{\tau})$	\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}
$\mathtt{CR_sdnumunumu}$	$rac{4\dot{G}_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_{\mu})$	\mathbf{C}
CR_sdnutaunutau	$rac{4\dot{G}_F}{\sqrt{2}}V_{td}V_{ts}^*rac{e^2}{16\pi^2}(ar{s}_R\gamma^{\mu}d_R)(ar{ u}_{ au}\gamma_{\mu}(1-\gamma_5) u_{ au})$	\mathbf{C}
CR_sdnuenumu	$\frac{4G_F}{\sqrt{2}}V_{td}V_{ts}^* \frac{e^2}{16\pi^2} (\bar{s}_R \gamma^\mu d_R)(\bar{\nu}_\mu \gamma_\mu (1-\gamma_5)\nu_e)$	\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	$\frac{4G_F}{\sqrt{2}}V_{td}V_{ts}^*\frac{e^2}{16\pi^2}(\bar{s}_R\gamma^{\mu}d_R)(\bar{\nu}_{\mu}\gamma_{\mu}(1-\gamma_5)\nu_{\tau})$	\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	$\frac{4G_F}{\sqrt{2}}V_{td}V_{ts}^* \frac{e^2}{16\pi^2} (\bar{s}_R \gamma^{\mu} d_R) (\bar{\nu}_e \gamma_{\mu} (1 - \gamma_5) \nu_{\tau})$	\mathbf{C}

sdemu

WC name	Operator	Type
C9_sdemu	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_L\gamma^{\mu}s_L)(\bar{\mu}\gamma_{\mu}e)$	C
C9p_sdemu	$\frac{4\dot{G}_{F}}{\sqrt{2}}V_{ts}V_{td}^{*}\frac{e^{2}}{16\pi^{2}}(\bar{d}_{R}\gamma^{\mu}s_{R})(\bar{\mu}\gamma_{\mu}e)$	\mathbf{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	$rac{4 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 e)$	\mathbf{C}
CS_sdemu	$\frac{4 G_F}{\sqrt{2}} V_{ts} V_{td}^* \frac{e^2}{16\pi^2} m_s(\bar{d}_L s_R)(\bar{\mu}e)$	\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	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*\frac{e^2}{16\pi^2}m_s(\bar{d}_R s_L)(\bar{\mu}\gamma_5 e)$	\mathbf{C}

sdmue

WC name	Operator	Type
C9_sdmue	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_L\gamma^{\mu}s_L)(\bar{e}\gamma_{\mu}\mu)$	С
C9p_sdmue	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_R\gamma^{\mu}s_R)(\bar{e}\gamma_{\mu}\mu)$	\mathbf{C}
C10_sdmue	$\frac{4\dot{G}_{F}}{\sqrt{2}}V_{ts}V_{td}^{*}\frac{e^{2}}{16\pi^{2}}(\bar{d}_{L}\gamma^{\mu}s_{L})(\bar{e}\gamma_{\mu}\gamma_{5}\mu)$	\mathbf{C}
C10p_sdmue	$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\mu)$	\mathbf{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	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*\frac{e^2}{16\pi^2}m_s(\bar{d}_R s_L)(\bar{e}\mu)$	\mathbf{C}
CP_sdmue	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*\frac{e^2}{16\pi^2}m_s(\bar{d}_L s_R)(\bar{e}\gamma_5\mu)$	\mathbf{C}
CPp_sdmue	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*\frac{e^2}{16\pi^2}m_s(\bar{d}_R s_L)(\bar{e}\gamma_5\mu)$	\mathbf{C}

sdetau

WC name	Operator	Type
C9_sdetau	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_L\gamma^{\mu}s_L)(\bar{\tau}\gamma_{\mu}e)$	\mathbf{C}
C9p_sdetau	$\frac{4\dot{G}_F}{\sqrt{2}}V_{ts}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_R\gamma^\mu s_R)(\bar{\tau}\gamma_\mu e)$	\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	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_R\gamma^{\mu}s_R)(\bar{\tau}\gamma_{\mu}\gamma_5 e)$	\mathbf{C}
CS_sdetau	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*\frac{e^2}{16\pi^2}m_s(\bar{d}_L s_R)(\bar{\tau}e)$	\mathbf{C}
CSp_sdetau	$\frac{4\dot{G}_F}{\sqrt{2}}V_{ts}V_{td}^*\frac{e^2}{16\pi^2}m_s(\bar{d}_Rs_L)(\bar{\tau}e)$	\mathbf{C}
CP_sdetau	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*\frac{e^2}{16\pi^2}m_s(\bar{d}_L s_R)(\bar{\tau}\gamma_5 e)$	\mathbf{C}
CPp_sdetau	$\frac{4\dot{G}_F}{\sqrt{2}}V_{ts}V_{td}^*\frac{e^2}{16\pi^2}m_s(\bar{d}_R s_L)(\bar{\tau}\gamma_5 e)$	C

sdtaue

WC name	Operator	Type
C9_sdtaue	$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} au)$	C
C9p_sdtaue	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_R\gamma^{\mu}s_R)(\bar{e}\gamma_{\mu}\tau)$	\mathbf{C}
C10_sdtaue	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_L\gamma^{\mu}s_L)(\bar{e}\gamma_{\mu}\gamma_5 au)$	\mathbf{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	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*\frac{e^2}{16\pi^2}m_s(\bar{d}_L s_R)(\bar{e} au)$	\mathbf{C}
CSp_sdtaue	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*\frac{e^2}{16\pi^2}m_s(\bar{d}_R s_L)(\bar{e} au)$	\mathbf{C}
CP_sdtaue	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*\frac{e^2}{16\pi^2}m_s(\bar{d}_L s_R)(\bar{e}\gamma_5 au)$	\mathbf{C}
CPp_sdtaue	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*\frac{e^2}{16\pi^2}m_s(\bar{d}_R s_L)(\bar{e}\gamma_5 \tau)$	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)$	C
C9p_sdmutau	$rac{4ar{V_{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)$	\mathbf{C}
C10_sdmutau	$rac{4ar{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{4ar{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)$	\mathbf{C}
CS_sdmutau	$rac{4 G_F}{\sqrt{2}} V_{ts} V_{td}^* rac{e^2}{16 \pi^2} m_s (ar{d}_L s_R) (ar{ au} \mu)$	\mathbf{C}
CSp_sdmutau	$rac{4 V_{GF}}{\sqrt{2}} V_{ts} V_{td}^* rac{e^2}{16 \pi^2} m_s (ar{d}_R s_L) (ar{ au} \mu)$	\mathbf{C}
CP_sdmutau	$rac{4ar{V_{F}}}{\sqrt{2}}V_{ts}V_{td}^{*}rac{e^{2}}{16\pi^{2}}m_{s}(ar{d}_{L}s_{R})(ar{ au}\gamma_{5}\mu)$	\mathbf{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	$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} au)$	С
C9p_sdtaumu	$rac{4 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 au)$	\mathbf{C}
C10_sdtaumu	$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 au)$	\mathbf{C}
C10p_sdtaumu	$rac{4 \overset{\leftarrow}{V_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 ar{G}_F}{\sqrt{2}} V_{ts} V_{td}^* rac{e^2}{16 \pi^2} m_s(ar{d}_L s_R) (ar{\mu} au)$	\mathbf{C}
CSp_sdtaumu	$rac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*rac{e^2}{16\pi^2}m_s(ar{d}_R s_L)(ar{\mu} au)$	\mathbf{C}
CP_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} \gamma_5 au)$	\mathbf{C}
CPp_sdtaumu	$\frac{4G_F}{\sqrt{2}}V_{ts}V_{td}^*\frac{e^2}{16\pi^2}m_s(\bar{d}_Rs_L)(\bar{\mu}\gamma_5\tau)$	С

usenu

WC name	Operator	Type
CVL_suenue	$-rac{4G_F}{\sqrt{2}}V_{us}(ar{u}_L\gamma^\mu s_L)(ar{e}_L\gamma_\mu u_{eL})$	C
CVR_suenue	$-rac{4ar{Q}_F}{\sqrt{2}}V_{us}(ar{u}_R\gamma^\mu s_R)(ar{e}_L\gamma_\mu u_{eL})$	$^{\mathrm{C}}$
CSR_suenue	$-rac{4ar{Q}_F^2}{\sqrt{2}}V_{us}(ar{u}_L s_R)(ar{e}_R u_{eL})$	$^{\mathrm{C}}$
CSL_suenue	$-\frac{4\check{G}_F}{\sqrt{2}}V_{us}(\bar{u}_Rs_L)(\bar{e}_R\nu_{eL})$	$^{\mathrm{C}}$
CT_suenue	$-rac{4ar{G_F}}{\sqrt{2}}V_{us}(ar{u}_R\sigma^{\mu u}s_L)(ar{e}_R\sigma_{\mu u} u_{eL})$	$^{\mathrm{C}}$
CVL_suenumu	$-rac{4G_F}{\sqrt{2}}V_{us}(ar{u}_L\gamma^\mu s_L)(ar{e}_L\gamma_\mu u_{\mu L})$	$^{\mathrm{C}}$
CVR_suenumu	$-rac{4G_F}{\sqrt{2}}V_{us}(ar{u}_R\gamma^\mu s_R)(ar{e}_L\gamma_\mu u_{\mu L})$	\mathbf{C}
CSR_suenumu	$-rac{4G_F}{\sqrt{2}}V_{us}(ar{u}_Ls_R)(ar{e}_R u_{\mu L})$	\mathbf{C}
CSL_suenumu	$-rac{4G_F}{\sqrt{2}}V_{us}(ar{u}_Rs_L)(ar{e}_R u_{\mu L})$	\mathbf{C}
CT_suenumu	$-rac{4G_F}{\sqrt{2}}V_{us}(ar{u}_R\sigma^{\mu u}s_L)(ar{e}_R\sigma_{\mu u} u_{\mu L})$	\mathbf{C}
CVL_suenutau	$-rac{4G_F}{\sqrt{2}}V_{us}(ar{u}_L\gamma^\mu s_L)(ar{e}_L\gamma_\mu u_{ au L})$	\mathbf{C}
CVR_suenutau	$-rac{4G_F}{\sqrt{2}}V_{us}(ar{u}_R\gamma^\mu s_R)(ar{e}_L\gamma_\mu u_{ au L})$	$^{\mathrm{C}}$
CSR_suenutau	$-\frac{4\check{G}_F}{\sqrt{2}}V_{us}(\bar{u}_L s_R)(\bar{e}_R u_{\tau L})$	$^{\mathrm{C}}$
CSL_suenutau	$-rac{4\check{G}_F}{\sqrt{2}}V_{us}(ar{u}_Rs_L)(ar{e}_R u_{ au L})$	$^{\mathrm{C}}$
CT_suenutau	$-rac{4ar{G}_F}{\sqrt{2}}V_{us}(ar{u}_R\sigma^{\mu u}s_L)(ar{e}_R\sigma_{\mu u} u_{ au L})$	С

csenu

WC name	Operator	Type
CVL_scenue	$\begin{split} &-\frac{4G_F}{\sqrt{2}}V_{cs}(\bar{c}_L\gamma^{\mu}s_L)(\bar{e}_L\gamma_{\mu}\nu_{eL}) \\ &-\frac{4G_F}{\sqrt{2}}V_{cs}(\bar{c}_R\gamma^{\mu}s_R)(\bar{e}_L\gamma_{\mu}\nu_{eL}) \\ &-\frac{4G_F}{\sqrt{2}}V_{cs}(\bar{c}_Ls_R)(\bar{e}_R\nu_{eL}) \\ &-\frac{4G_F}{\sqrt{2}}V_{cs}(\bar{c}_Rs_L)(\bar{e}_R\nu_{eL}) \end{split}$	C
CVR_scenue	$-rac{4ar{G_F}}{\sqrt{2}}V_{cs}(ar{c}_R\gamma^\mu s_R)(ar{e}_L\gamma_\mu u_{eL})$	\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	$-rac{4ar{G}_F}{\sqrt{2}}V_{cs}(ar{c}_Rs_L)(ar{e}_R u_{eL})$	\mathbf{C}

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

cdenu

WC name	Operator	Type
CVL_dcenue	$-\frac{4G_F}{\sqrt{2}}V_{cd}(\bar{c}_L\gamma^\mu d_L)(\bar{e}_L\gamma_\mu\nu_{eL})$	C
CVR_dcenue	$-rac{4\widetilde{G}_F^c}{\sqrt{2}}V_{cd}(ar{c}_R\gamma^\mu d_R)(ar{e}_L\gamma_\mu u_{eL})$	\mathbf{C}
CSR_dcenue	$-\frac{4\widetilde{G}_F}{\sqrt{2}}V_{cd}(\bar{c}_Ld_R)(\bar{e}_R\nu_{eL})$	\mathbf{C}
CSL_dcenue	$-\frac{4\widetilde{G}_F}{\sqrt{2}}V_{cd}(\bar{c}_Rd_L)(\bar{e}_R\nu_{eL})$	\mathbf{C}
CT_dcenue	$-rac{4\check{G}_F}{\sqrt{2}}V_{cd}(\bar{c}_R\sigma^{\mu u}d_L)(\bar{e}_R\sigma_{\mu u} u_{eL})$	\mathbf{C}
CVL_dcenumu	$-\frac{4\check{G}_F}{\sqrt{2}}V_{cd}(\bar{c}_L\gamma^\mu d_L)(\bar{e}_L\gamma_\mu\nu_{\mu L})$	\mathbf{C}
CVR_dcenumu	$-\frac{4\check{G}_F}{\sqrt{2}}V_{cd}(\bar{c}_R\gamma^\mu d_R)(\bar{e}_L\gamma_\mu\nu_{\mu L})$	\mathbf{C}
CSR_dcenumu	$-\frac{4\check{G}_F}{\sqrt{2}}V_{cd}(\bar{c}_Ld_R)(\bar{e}_R\nu_{\mu L})$	\mathbf{C}
CSL_dcenumu	$-rac{4\check{G}_F}{\sqrt{2}}V_{cd}(\bar{c}_Rd_L)(\bar{e}_R u_{\mu L})$	\mathbf{C}
CT_dcenumu	$-rac{4\check{G}_F}{\sqrt{2}}V_{cd}(\bar{c}_R\sigma^{\mu u}d_L)(\bar{e}_R\sigma_{\mu u} u_{\mu L})$	\mathbf{C}
CVL_dcenutau	$-rac{4\widetilde{G}_F}{\sqrt{2}}V_{cd}(\bar{c}_L\gamma^\mu d_L)(\bar{e}_L\gamma_\mu u_{\tau L})$	\mathbf{C}
CVR_dcenutau	$-\frac{4\widetilde{G}_F}{\sqrt{2}}V_{cd}(\bar{c}_R\gamma^\mu d_R)(\bar{e}_L\gamma_\mu u_{\tau L})$	\mathbf{C}
CSR_dcenutau	$-\frac{4\widetilde{G}_F}{\sqrt{2}}V_{cd}(\bar{c}_Ld_R)(\bar{e}_R u_{\tau L})$	\mathbf{C}
CSL_dcenutau	$-rac{4\widetilde{G}_F}{\sqrt{2}}V_{cd}(\bar{c}_Rd_L)(\bar{e}_R u_{ au L})$	\mathbf{C}
CT_dcenutau	$-rac{4ar{G}_F^2}{\sqrt{2}}V_{cd}(ar{c}_R\sigma^{\mu u}d_L)(ar{e}_R\sigma_{\mu u} u_{ au L})$	\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	$-\frac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_R\gamma^{\mu}s_R)(\bar{\mu}_L\gamma_{\mu}\nu_{eL})$	\overline{C}
CSR_sumunue	$-rac{4ar{G}_F^F}{\sqrt{2}}V_{us}(ar{u}_L s_R)(ar{\mu}_R u_{eL})$	\mathbf{C}
CSL_sumunue	$-rac{4G_F}{\sqrt{2}}V_{us}(ar{u}_Rs_L)(ar{\mu}_R u_{eL})$	\mathbf{C}
CT_sumunue	$-rac{4ar{G}_F}{\sqrt{2}}V_{us}(ar{u}_R\sigma^{\mu u}s_L)(ar{\mu}_R\sigma_{\mu u} u_{eL})$	\mathbf{C}
CVL_sumunumu	$-rac{4\widetilde{G_F}}{\sqrt{2}}V_{us}(ar{u}_L\gamma^\mu s_L)(ar{\mu}_L\gamma_\mu u_{\mu L})$	\mathbf{C}
CVR_sumunumu	$-rac{4ar{G}_F}{\sqrt{2}}V_{us}(ar{u}_R\gamma^\mu s_R)(ar{\mu}_L\gamma_\mu u_{\mu L})$	\mathbf{C}
CSR_sumunumu	$-rac{4ar{G_F}}{\sqrt{2}}V_{us}(ar{u}_L s_R)(ar{\mu}_R u_{\mu L})$	\mathbf{C}
CSL_sumunumu	$-rac{4ar{G_F}}{\sqrt{2}}V_{us}(ar{u}_Rs_L)(ar{\mu}_R u_{\mu L})$	\mathbf{C}
CT_sumunumu	$-rac{4ar{G_F}}{\sqrt{2}}V_{us}(ar{u}_R\sigma^{\mu u}s_L)(ar{\mu}_R\sigma_{\mu u} u_{\mu L})$	$^{\mathrm{C}}$
CVL_sumunutau	$-rac{4ar{G_F}}{\sqrt{2}}V_{us}(ar{u}_L\gamma^\mu s_L)(ar{\mu}_L\gamma_\mu u_{ au L})$	$^{\mathrm{C}}$
CVR_sumunutau	$-rac{4ar{G_F}}{\sqrt{2}}V_{us}(ar{u}_R\gamma^\mu s_R)(ar{\mu}_L\gamma_\mu u_{ au L})$	$^{\mathrm{C}}$
CSR_sumunutau	$-rac{4ar{G}_F}{\sqrt{2}}V_{us}(ar{u}_Ls_R)(ar{\mu}_R u_{ au L})$	$^{\mathrm{C}}$
CSL_sumunutau	$-rac{4ar{G_F}}{\sqrt{2}}V_{us}(ar{u}_Rs_L)(ar{\mu}_R u_{ au L})$	\mathbf{C}
CT_sumunutau	$-\frac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_R\sigma^{\mu\nu}s_L)(\bar{\mu}_R\sigma_{\mu\nu}\nu_{\tau L})$	С

csmunu

WC name	Operator	Type
CVL_scmunue	$-\frac{4G_F}{\sqrt{2}}V_{cs}(\bar{c}_L\gamma^{\mu}s_L)(\bar{\mu}_L\gamma_{\mu}\nu_{eL})$	
CVR_scmunue	$-rac{4G_F^2}{\sqrt{2}}V_{cs}(ar{c}_R\gamma^\mu s_R)(ar{\mu}_L\gamma_\mu u_{eL})$	\mathbf{C}
CSR_scmunue	$-rac{4\widetilde{G}_F}{\sqrt{2}}V_{cs}(ar{c}_Ls_R)(ar{\mu}_R u_{eL})$	\mathbf{C}
CSL_scmunue	$-rac{4rac{G_F}{\sqrt{2}}}{\sqrt{2}}V_{cs}(ar{c}_Rs_L)(ar{\mu}_R u_{eL})$	\mathbf{C}
CT_scmunue	$-rac{4rac{G_F}{\sqrt{2}}}{\sqrt{2}}V_{cs}(ar{c}_R\sigma^{\mu u}s_L)(ar{\mu}_R\sigma_{\mu u} u_{eL})$	\mathbf{C}
CVL_scmunumu	$-rac{4reve{G_F}}{\sqrt{2}}V_{cs}(ar{c}_L\gamma^\mu s_L)(ar{\mu}_L\gamma_\mu u_{\mu L})$	\mathbf{C}
CVR_scmunumu	$-rac{4ar{G}_F}{\sqrt{2}}V_{cs}(ar{c}_R\gamma^\mu s_R)(ar{\mu}_L\gamma_\mu u_{\mu L})$	\mathbf{C}
CSR_scmunumu	$-rac{4\widetilde{G_F}}{\sqrt{2}}V_{cs}(ar{c}_L s_R)(ar{\mu}_R u_{\mu L})$	\mathbf{C}
CSL_scmunumu	$-rac{4\widetilde{G_F}}{\sqrt{2}}V_{cs}(ar{c}_Rs_L)(ar{\mu}_R u_{\mu L})$	\mathbf{C}
CT_scmunumu	$-rac{4\widetilde{G_F}}{\sqrt{2}}V_{cs}(ar{c}_R\sigma^{\mu u}s_L)(ar{\mu}_R\sigma_{\mu u} u_{\mu L})$	\mathbf{C}
CVL_scmunutau	$-rac{4\widetilde{G_F}}{\sqrt{2}}V_{cs}(ar{c}_L\gamma^\mu s_L)(ar{\mu}_L\gamma_\mu u_{ au L})$	\mathbf{C}
CVR_scmunutau	$-rac{4\widetilde{G_F}}{\sqrt{2}}V_{cs}(ar{c}_R\gamma^\mu s_R)(ar{\mu}_L\gamma_\mu u_{ au L})$	\mathbf{C}
CSR_scmunutau	$-rac{4\widetilde{G_F}}{\sqrt{2}}V_{cs}(ar{c}_Ls_R)(ar{\mu}_R u_{ au L})$	\mathbf{C}
CSL_scmunutau	$-rac{4\widetilde{G_F}}{\sqrt{2}}V_{cs}(ar{c}_Rs_L)(ar{\mu}_R u_{ au L})$	\mathbf{C}
CT_scmunutau	$-rac{4\widetilde{G}_F}{\sqrt{2}}V_{cs}(ar{c}_R\sigma^{\mu u}s_L)(ar{\mu}_R\sigma_{\mu u} u_{ au L})$	\mathbf{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	$-\frac{4\widetilde{G}_F}{\sqrt{2}}V_{cd}(\bar{c}_R\gamma^\mu d_R)(\bar{\mu}_L\gamma_\mu\nu_{eL})$	\mathbf{C}
CSR_dcmunue	$-\frac{4G_F}{\sqrt{2}}V_{cd}(\bar{c}_Ld_R)(\bar{\mu}_R\nu_{eL})$	\mathbf{C}
CSL_dcmunue	$-\frac{4G_F}{\sqrt{2}}V_{cd}(\bar{c}_Rd_L)(\bar{\mu}_R\nu_{eL})$	\mathbf{C}
CT_dcmunue	$-rac{4\widetilde{G}_F}{\sqrt{2}}V_{cd}(ar{c}_R\sigma^{\mu u}d_L)(ar{\mu}_R\sigma_{\mu u} u_{eL})$	\mathbf{C}
CVL_dcmunumu	$-rac{4\widetilde{G}_F}{\sqrt{2}}V_{cd}(ar{c}_L\gamma^\mu d_L)(ar{\mu}_L\gamma_\mu u_{\mu L})$	\mathbf{C}
CVR_dcmunumu	$-\frac{4\widetilde{G_F}}{\sqrt{2}}V_{cd}(\bar{c}_R\gamma^\mu d_R)(\bar{\mu}_L\gamma_\mu\nu_{\mu L})$	\mathbf{C}
CSR_dcmunumu	$-rac{4ar{G_F}}{\sqrt{2}}V_{cd}(ar{c}_Ld_R)(ar{\mu}_R u_{\mu L})$	\mathbf{C}
CSL_dcmunumu	$-rac{4ar{G_F}}{\sqrt{2}}V_{cd}(ar{c}_Rd_L)(ar{\mu}_R u_{\mu L})$	\mathbf{C}
CT_dcmunumu	$-rac{4ar{G}_F}{\sqrt{2}}V_{cd}(ar{c}_R\sigma^{\mu u}d_L)(ar{\mu}_R\sigma_{\mu u} u_{\mu L})$	\mathbf{C}
CVL_dcmunutau	$-rac{4 ilde{G_F}}{\sqrt{2}}V_{cd}(ar{c}_L\gamma^\mu d_L)(ar{\mu}_L\gamma_\mu u_{ au L})$	\mathbf{C}
CVR_dcmunutau	$-\frac{4\widetilde{G}_F}{\sqrt{2}}V_{cd}(\bar{c}_R\gamma^\mu d_R)(\bar{\mu}_L\gamma_\mu\nu_{\tau L})$	\mathbf{C}
CSR_dcmunutau	$-rac{4G_F}{\sqrt{2}}V_{cd}(ar{c}_Ld_R)(ar{\mu}_R u_{ au L})$	\mathbf{C}
CSL_dcmunutau	$-rac{4G_F^2}{\sqrt{2}}V_{cd}(ar{c}_Rd_L)(ar{\mu}_R u_{ au L})$	\mathbf{C}
CT_dcmunutau	$-rac{4G_F^2}{\sqrt{2}}V_{cd}(\bar{c}_R\sigma^{\mu u}d_L)(\bar{\mu}_R\sigma_{\mu u} u_{ au L})$	С

${\tt ustaunu}$

WC name	Operator	Type
CVL_sutaunue	$-\frac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_L\gamma^\mu s_L)(\bar{ au}_L\gamma_\mu u_{eL})$	C
CVR_sutaunue	$-rac{4 ilde{Q}_F^2}{\sqrt{2}}V_{us}(ar{u}_R\gamma^\mu s_R)(ar{ au}_L\gamma_\mu u_{eL})$	\mathbf{C}
CSR_sutaunue	$-\frac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_L s_R)(\bar{\tau}_R \nu_{eL})$	$^{\mathrm{C}}$
CSL_sutaunue	$-\frac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_Rs_L)(\bar{\tau}_R\nu_{eL})$	\mathbf{C}
CT_sutaunue	$-\frac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_R\sigma^{\mu\nu}s_L)(\bar{\tau}_R\sigma_{\mu\nu}\nu_{eL})$	\mathbf{C}
CVL_sutaunumu	$-\frac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_L\gamma^{\mu}s_L)(\bar{\tau}_L\gamma_{\mu}\nu_{\mu L})$	\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	$-rac{4G_F}{\sqrt{2}}V_{us}(ar{u}_R\sigma^{\mu u}s_L)(ar{ au}_R\sigma_{\mu u} u_{\mu L})$	\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	$-\frac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_R\gamma^{\mu}s_R)(\bar{\tau}_L\gamma_{\mu}\nu_{\tau L})$	\mathbf{C}
CSR_sutaunutau	$-\frac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_L s_R)(\bar{\tau}_R \nu_{\tau L})$	\mathbf{C}
CSL_sutaunutau	$-\frac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_R s_L)(\bar{\tau}_R \nu_{\tau L})$	\mathbf{C}
CT_sutaunutau	$-\frac{4\tilde{G}_F}{\sqrt{2}}V_{us}(\bar{u}_R\sigma^{\mu\nu}s_L)(\bar{\tau}_R\sigma_{\mu\nu}\nu_{\tau L})$	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	$-rac{4\widetilde{G}_F^2}{\sqrt{2}}V_{cs}(ar{c}_R\gamma^\mu s_R)(ar{ au}_L\gamma_\mu u_{eL})$	\mathbf{C}
CSR_sctaunue	$-\frac{4G_F}{\sqrt{2}}V_{cs}(\bar{c}_L s_R)(\bar{\tau}_R \nu_{eL})$	$^{\mathrm{C}}$
CSL_sctaunue	$-\frac{4G_F}{\sqrt{2}}V_{cs}(\bar{c}_Rs_L)(\bar{\tau}_R\nu_{eL})$	$^{\mathrm{C}}$
CT_sctaunue	$-\frac{4G_F}{\sqrt{2}}V_{cs}(\bar{c}_R\sigma^{\mu\nu}s_L)(\bar{\tau}_R\sigma_{\mu\nu}\nu_{eL})$	$^{\mathrm{C}}$
CVL_sctaunumu	$-\frac{4G_F}{\sqrt{2}}V_{cs}(\bar{c}_L\gamma^\mu s_L)(\bar{\tau}_L\gamma_\mu\nu_{\mu L})$	$^{\mathrm{C}}$
CVR_sctaunumu	$-\frac{4G_F}{\sqrt{2}}V_{cs}(\bar{c}_R\gamma^{\mu}s_R)(\bar{\tau}_L\gamma_{\mu}\nu_{\mu L})$	$^{\mathrm{C}}$
CSR_sctaunumu	$-\frac{4G_F}{\sqrt{2}}V_{cs}(\bar{c}_L s_R)(\bar{\tau}_R \nu_{\mu L})$	$^{\mathrm{C}}$
CSL_sctaunumu	$-\frac{4G_F}{\sqrt{2}}V_{cs}(\bar{c}_R s_L)(\bar{\tau}_R \nu_{\mu L})$	$^{\mathrm{C}}$
CT_sctaunumu	$-\frac{4G_F}{\sqrt{2}}V_{cs}(\bar{c}_R\sigma^{\mu\nu}s_L)(\bar{\tau}_R\sigma_{\mu\nu}\nu_{\mu L})$	$^{\mathrm{C}}$
CVL_sctaunutau	$-\frac{4G_F}{\sqrt{2}}V_{cs}(\bar{c}_L\gamma^\mu s_L)(\bar{\tau}_L\gamma_\mu u_{\tau L})$	$^{\mathrm{C}}$
CVR_sctaunutau	$-rac{4G_F}{\sqrt{2}}V_{cs}(\bar{c}_R\gamma^\mu s_R)(\bar{ au}_L\gamma_\mu u_{ au L})$	\mathbf{C}
CSR_sctaunutau	$-rac{4\overset{\circ}{G_F}}{\sqrt{2}}V_{cs}(ar{c}_Ls_R)(ar{ au}_R u_{ au L})$	\mathbf{C}
CSL_sctaunutau	$-rac{4\overset{\circ}{G_F}}{\sqrt{2}}V_{cs}(\bar{c}_Rs_L)(\bar{ au}_R u_{ au L})$	\mathbf{C}
CT_sctaunutau	$-\frac{4\tilde{G}_F}{\sqrt{2}}V_{cs}(\bar{c}_R\sigma^{\mu\nu}s_L)(\bar{\tau}_R\sigma_{\mu\nu}\nu_{\tau L})$	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	$-rac{4\widetilde{G}_F^2}{\sqrt{2}}V_{cd}(ar{c}_R\gamma^\mu d_R)(ar{ au}_L\gamma_\mu u_{eL})$	\mathbf{C}
CSR_dctaunue	$-\frac{4G_F}{\sqrt{2}}V_{cd}(\bar{c}_Ld_R)(\bar{\tau}_R\nu_{eL})$	\mathbf{C}
CSL_dctaunue	$-\frac{4G_F}{\sqrt{2}}V_{cd}(\bar{c}_Rd_L)(\bar{\tau}_R\nu_{eL})$	\mathbf{C}
CT_dctaunue	$-\frac{4G_F}{\sqrt{2}}V_{cd}(\bar{c}_R\sigma^{\mu\nu}d_L)(\bar{\tau}_R\sigma_{\mu\nu}\nu_{eL})$	\mathbf{C}
CVL_dctaunumu	$-\frac{4G_F}{\sqrt{2}}V_{cd}(\bar{c}_L\gamma^\mu d_L)(\bar{\tau}_L\gamma_\mu\nu_{\mu L})$	\mathbf{C}
CVR_dctaunumu	$-rac{4 \check{G}_F}{\sqrt{2}} V_{cd}(\bar{c}_R \gamma^\mu d_R)(\bar{ au}_L \gamma_\mu u_{\mu L})$	\mathbf{C}
CSR_dctaunumu	$-rac{4G_F}{\sqrt{2}}V_{cd}(\bar{c}_Ld_R)(\bar{ au}_R u_{\mu L})$	\mathbf{C}
CSL_dctaunumu	$-\frac{4G_F}{\sqrt{2}}V_{cd}(\bar{c}_Rd_L)(\bar{\tau}_R\nu_{\mu L})$	\mathbf{C}
CT_dctaunumu	$-\frac{4G_F}{\sqrt{2}}V_{cd}(\bar{c}_R\sigma^{\mu\nu}d_L)(\bar{\tau}_R\sigma_{\mu\nu}\nu_{\mu L})$	\mathbf{C}
CVL_dctaunutau	$-\frac{4G_F}{\sqrt{2}}V_{cd}(\bar{c}_L\gamma^\mu d_L)(\bar{\tau}_L\gamma_\mu\nu_{\tau L})$	\mathbf{C}
CVR_dctaunutau	$-\frac{4G_F}{\sqrt{2}}V_{cd}(\bar{c}_R\gamma^\mu d_R)(\bar{\tau}_L\gamma_\mu\nu_{\tau L})$	\mathbf{C}
CSR_dctaunutau	$-\frac{4G_F}{\sqrt{2}}V_{cd}(\bar{c}_Ld_R)(\bar{\tau}_R\nu_{\tau L})$	\mathbf{C}
CSL_dctaunutau	$-\frac{4G_F}{\sqrt{2}}V_{cd}(\bar{c}_Rd_L)(\bar{\tau}_R\nu_{\tau L})$	\mathbf{C}
CT_dctaunutau	$-\frac{4\widetilde{G}_F}{\sqrt{2}}V_{cd}(\bar{c}_R\sigma^{\mu\nu}d_L)(\bar{\tau}_R\sigma_{\mu\nu}\nu_{\tau L})$	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	$-rac{4\widetilde{G}_F^2}{\sqrt{2}}V_{ud}(ar{u}_R\gamma^\mu d_R)(ar{e}_L\gamma_\mu u_{eL})$	\mathbf{C}
CSR_duenue	$-\frac{4G_F}{\sqrt{2}}V_{ud}(\bar{u}_Ld_R)(\bar{e}_R\nu_{eL})$	$^{\mathrm{C}}$
CSL_duenue	$-\frac{4G_F}{\sqrt{2}}V_{ud}(\bar{u}_Rd_L)(\bar{e}_R\nu_{eL})$	$^{\mathrm{C}}$
CT_duenue	$-rac{4ar{G_F}}{\sqrt{2}}V_{ud}(ar{u}_R\sigma^{\mu u}d_L)(ar{e}_R\sigma_{\mu u} u_{eL})$	$^{\mathrm{C}}$
CVL_duenumu	$-rac{4ar{G_F}}{\sqrt{2}}V_{ud}(ar{u}_L\gamma^\mu d_L)(ar{e}_L\gamma_\mu u_{\mu L})$	$^{\mathrm{C}}$
CVR_duenumu	$-\frac{4G_F}{\sqrt{2}}V_{ud}(\bar{u}_R\gamma^\mu d_R)(\bar{e}_L\gamma_\mu\nu_{\mu L})$	$^{\mathrm{C}}$
CSR_duenumu	$-\frac{4G_F}{\sqrt{2}}V_{ud}(\bar{u}_Ld_R)(\bar{e}_R\nu_{\mu L})$	$^{\mathrm{C}}$
CSL_duenumu	$-\frac{4G_F}{\sqrt{2}}V_{ud}(\bar{u}_Rd_L)(\bar{e}_R\nu_{\mu L})$	$^{\mathrm{C}}$
CT_duenumu	$-rac{4\check{G_F}}{\sqrt{2}}V_{ud}(ar{u}_R\sigma^{\mu u}d_L)(ar{e}_R\sigma_{\mu u} u_{\mu L})$	$^{\mathrm{C}}$
CVL_duenutau	$-rac{4reve{G_F}}{\sqrt{2}}V_{ud}(ar{u}_L\gamma^\mu d_L)(ar{e}_L\gamma_\mu u_{ au L})$	$^{\mathrm{C}}$
CVR_duenutau	$-rac{4ar{G_F}}{\sqrt{2}}V_{ud}(ar{u}_R\gamma^\mu d_R)(ar{e}_L\gamma_\mu u_{ au L})$	\mathbf{C}
CSR_duenutau	$-\frac{4\check{G_F}}{\sqrt{2}}V_{ud}(\bar{u}_Ld_R)(\bar{e}_R u_{ au L})$	\mathbf{C}
CSL_duenutau	$-\frac{4\widetilde{G}_F}{\sqrt{2}}V_{ud}(\bar{u}_Rd_L)(\bar{e}_R u_{\tau L})$	\mathbf{C}
CT_duenutau	$-rac{4ar{G}_F^c}{\sqrt{2}}V_{ud}(ar{u}_R\sigma^{\mu u}d_L)(ar{e}_R\sigma_{\mu u} u_{ au L})$	C

udmunu

WC name	Operator	Type
CVL_dumunue	$-\frac{4G_F}{\sqrt{2}}V_{ud}(\bar{u}_L\gamma^\mu d_L)(\bar{\mu}_L\gamma_\mu\nu_{eL})$	С
CVR_dumunue	$-rac{4 ilde{G_F}}{\sqrt{2}}V_{ud}(ar{u}_R\gamma^\mu d_R)(ar{\mu}_L\gamma_\mu u_{eL})$	\mathbf{C}
CSR_dumunue	$-\frac{4\bar{G_F}}{\sqrt{2}}V_{ud}(\bar{u}_Ld_R)(\bar{\mu}_R\nu_{eL})$	\mathbf{C}
CSL_dumunue	$-rac{4ar{G_F}}{\sqrt{2}}V_{ud}(ar{u}_Rd_L)(ar{\mu}_R u_{eL})$	\mathbf{C}
CT_dumunue	$-rac{4ar{G_F}}{\sqrt{2}}V_{ud}(ar{u}_R\sigma^{\mu u}d_L)(ar{\mu}_R\sigma_{\mu u} u_{eL})$	\mathbf{C}
CVL_dumunumu	$-\frac{4G_F}{\sqrt{2}}V_{ud}(\bar{u}_L\gamma^\mu d_L)(\bar{\mu}_L\gamma_\mu u_{\mu L})$	\mathbf{C}
CVR_dumunumu	$-rac{4\widetilde{G_F}}{\sqrt{2}}V_{ud}(ar{u}_R\gamma^\mu d_R)(ar{\mu}_L\gamma_\mu u_{\mu L})$	\mathbf{C}
CSR_dumunumu	$-rac{4G_F}{\sqrt{2}}V_{ud}(ar{u}_Ld_R)(ar{\mu}_R u_{\mu L})$	\mathbf{C}
CSL_dumunumu	$-rac{4ar{G_F}}{\sqrt{2}}V_{ud}(ar{u}_Rd_L)(ar{\mu}_R u_{\mu L})$	\mathbf{C}
CT_dumunumu	$-rac{4ar{G_F}}{\sqrt{2}}V_{ud}(ar{u}_R\sigma^{\mu u}d_L)(ar{\mu}_R\sigma_{\mu u} u_{\mu L})$	\mathbf{C}
CVL_dumunutau	$-rac{4 ilde{G_F}}{\sqrt{2}}V_{ud}(ar{u}_L\gamma^\mu d_L)(ar{\mu}_L\gamma_\mu u_{ au L})$	\mathbf{C}
CVR_dumunutau	$-rac{4\check{G}_F}{\sqrt{2}}V_{ud}(\bar{u}_R\gamma^\mu d_R)(\bar{\mu}_L\gamma_\mu u_{ au L})$	\mathbf{C}
CSR_dumunutau	$-\frac{4G_F}{\sqrt{2}}V_{ud}(\bar{u}_Ld_R)(\bar{\mu}_R u_{\tau L})$	\mathbf{C}
CSL_dumunutau	$-rac{4G_F}{\sqrt{2}}V_{ud}(ar{u}_Rd_L)(ar{\mu}_R u_{ au L})$	\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	$-\frac{4G_F}{\sqrt{2}}V_{ud}(\bar{u}_L\gamma^\mu d_L)(\bar{\tau}_L\gamma_\mu\nu_{eL})$	
CVR_dutaunue	$-\frac{4\widetilde{G}_F}{\sqrt{2}}V_{ud}(\bar{u}_R\gamma^\mu d_R)(\bar{\tau}_L\gamma_\mu\nu_{eL})$	$^{\mathrm{C}}$
CSR_dutaunue	$-\frac{4G_F}{\sqrt{2}}V_{ud}(\bar{u}_Ld_R)(\bar{\tau}_R\nu_{eL})$	\mathbf{C}
CSL_dutaunue	$-\frac{4G_F}{\sqrt{2}}V_{ud}(\bar{u}_Rd_L)(\bar{\tau}_R\nu_{eL})$	\mathbf{C}
CT_dutaunue	$-\frac{4G_F}{\sqrt{2}}V_{ud}(\bar{u}_R\sigma^{\mu\nu}d_L)(\bar{\tau}_R\sigma_{\mu\nu}\nu_{eL})$	\mathbf{C}
CVL_dutaunumu	$-\frac{4G_F}{\sqrt{2}}V_{ud}(\bar{u}_L\gamma^\mu d_L)(\bar{\tau}_L\gamma_\mu\nu_{\mu L})$	\mathbf{C}
CVR_dutaunumu	$-\frac{4G_F}{\sqrt{2}}V_{ud}(\bar{u}_R\gamma^\mu d_R)(\bar{\tau}_L\gamma_\mu\nu_{\mu L})$	\mathbf{C}
CSR_dutaunumu	$-\frac{4G_F}{\sqrt{2}}V_{ud}(\bar{u}_Ld_R)(\bar{\tau}_R\nu_{\mu L})$	\mathbf{C}
CSL_dutaunumu	$-\frac{4G_F}{\sqrt{2}}V_{ud}(\bar{u}_Rd_L)(\bar{\tau}_R\nu_{\mu L})$	\mathbf{C}
CT_dutaunumu	$-\frac{4G_F}{\sqrt{2}}V_{ud}(\bar{u}_R\sigma^{\mu\nu}d_L)(\bar{\tau}_R\sigma_{\mu\nu}\nu_{\mu L})$	\mathbf{C}
CVL_dutaunutau	$-\frac{4G_F}{\sqrt{2}}V_{ud}(\bar{u}_L\gamma^\mu d_L)(\bar{\tau}_L\gamma_\mu\nu_{\tau L})$	\mathbf{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	$-\frac{4G_F}{\sqrt{2}}V_{ud}(\bar{u}_Ld_R)(\bar{\tau}_R\nu_{\tau L})$	$^{\mathrm{C}}$
CSL_dutaunutau	$-rac{4\widetilde{G}_F}{\sqrt{2}}V_{ud}(\bar{u}_Rd_L)(\bar{ au}_R u_{ au L})$	\mathbf{C}
CT_dutaunutau	$-rac{4ar{G_F}}{\sqrt{2}}V_{ud}(ar{u}_R\sigma^{\mu u}d_L)(ar{ au}_R\sigma_{\mu u} u_{ au L})$	С

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	$\frac{{}^{4}\!G_{F}}{\sqrt{2}}f^{ABC}\widetilde{G}_{\mu}^{A\nu}G_{\nu}^{B\rho}G_{\rho}^{C\mu}$ $\frac{{}^{4}\!G_{F}}{\sqrt{2}}\frac{e}{16\pi^{2}}m_{u}\bar{u}_{L}\sigma^{\mu\nu}u_{R}F_{\mu\nu}$	${ m R}$
C7_uu	$rac{4 \overset{\circ}{Q_F}}{\sqrt{2}} rac{e}{16 \pi^2} m_u ar{u}_L \sigma^{\mu u} u_R F_{\mu u}$	\mathbf{C}
C7_cc	$rac{4 \check{G}_F}{\sqrt{2}} rac{e}{16\pi^2} m_c ar{c}_L \sigma^{\mu u} c_R F_{\mu u}$	\mathbf{C}
C7_dd	$rac{4G_F}{\sqrt{2}}rac{e}{16\pi^2}m_dar{d}_L\sigma^{\mu u}d_RF_{\mu u}$	\mathbf{C}
C7_ss	$rac{4G_F}{\sqrt{2}}rac{e}{16\pi^2}m_sar{s}_L\sigma^{\mu u}s_RF_{\mu u}$	\mathbf{C}
C7_ee	$rac{4G_F}{\sqrt{2}}rac{e}{16\pi^2}m_ear{e}_L\sigma^{\mu u}e_RF_{\mu u}$	\mathbf{C}
C7_mumu	$rac{4G_F}{\sqrt{2}}rac{e}{16\pi^2}m_\muar{\mu}_L\sigma^{\mu u}\mu_RF_{\mu u}$	\mathbf{C}
C7_tautau	$rac{4 { m G}_F}{\sqrt{2}} rac{e}{16\pi^2} m_ au ar au_L \sigma^{\mu u} au_R F_{\mu u}$	\mathbf{C}
C8_uu	$rac{4G_F}{\sqrt{2}}rac{g_s}{16\pi^2}m_uar{u}_L\sigma^{\mu u}T^Au_RG^A_{\mu u}$	\mathbf{C}
C8_cc	$rac{4G_F}{\sqrt{2}}rac{g_s}{16\pi^2}m_car{c}_L\sigma^{\mu u}T^Ac_RG^A_{\mu u}$	\mathbf{C}
C8_dd	$rac{4 G_F}{\sqrt{2}} rac{g_s}{16\pi^2} m_d ar{d}_L \sigma^{\mu u} T^A d_R G_{\mu u}^A$	\mathbf{C}
C8_ss	$rac{4 ar{G}_F}{\sqrt{2}} rac{g_s}{16\pi^2} m_s ar{s}_L \sigma^{\mu u} T^A s_R G^A_{\mu u}$	\mathbf{C}
CTRR_eeuu	$\frac{4 \check{G}_F}{\sqrt{2}} (\bar{e}_L \sigma^{\mu u} e_R) (\bar{u}_L \sigma_{\mu u} u_R)$	\mathbf{C}
CTRR_mumuuu	$rac{4reve{G}_F}{\sqrt{2}}(ar{\mu}_L\sigma^{\mu u}\mu_R)(ar{u}_L\sigma_{\mu u}u_R)$	\mathbf{C}

WC name	Operator	Type
CTRR_tautauuu	$\frac{4G_F}{\sqrt{2}}(\bar{\tau}_L\sigma^{\mu\nu}\tau_R)(\bar{u}_L\sigma_{\mu\nu}u_R)$	С
CTRR_eedd	$\frac{4G_F}{\sqrt{2}}(\bar{e}_L\sigma^{\mu\nu}e_R)(\bar{d}_L\sigma_{\mu\nu}d_R)$	$^{\mathrm{C}}$
CTRR_eess	$\frac{4\tilde{G}_F^2}{\sqrt{2}}(\bar{e}_L\sigma^{\mu\nu}e_R)(\bar{s}_L\sigma_{\mu\nu}s_R)$	\mathbf{C}
CTRR_mumudd	$\frac{4 \check{G}_F}{\sqrt{2}} (\bar{\mu}_L \sigma^{\mu u} \mu_R) (\bar{d}_L \sigma_{\mu u} d_R)$	\mathbf{C}
CTRR_mumuss	$rac{4 \check{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{4 \check{G_F}}{\sqrt{2}} (ar{ au}_L \sigma^{\mu u} au_R) (ar{d}_L \sigma_{\mu u} d_R)$	$^{\mathrm{C}}$
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	$\frac{4G_F}{\sqrt{2}}(\bar{u}_L u_R)(\bar{u}_L u_R)$	\mathbf{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	$\frac{4G_F}{\sqrt{2}}(\bar{u}_L u_R)(\bar{d}_L d_R)$	\mathbf{C}
CS1RR_uuss	$rac{4G_F}{\sqrt{2}}(ar{u}_L u_R)(ar{s}_L s_R)$	$^{\mathrm{C}}$
CS8RR_uudd	$\frac{4\overset{C}{G_F}}{\sqrt{2}}(\bar{u}_L T^A u_R)(\bar{d}_L T^A d_R)$	\mathbf{C}
CS8RR_uuss	$\frac{4G_F}{\sqrt{2}}(\bar{u}_L T^A u_R)(\bar{s}_L T^A s_R)$	\mathbf{C}
CS1RR_dddd	$rac{4G_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)$	$^{\mathrm{C}}$
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)$	$^{\mathrm{C}}$
CS8RR_dddd	$\frac{4G_F}{\sqrt{2}}(\bar{d}_L T^A d_R)(\bar{d}_L T^A d_R)$	$^{\mathrm{C}}$
CS8RR_ddss	$rac{4\dot{G}_F}{\sqrt{2}}(ar{d}_L T^A d_R)(ar{s}_L T^A s_R)$	$^{\mathrm{C}}$
CS8RR_dssd	$\frac{4G_F}{\sqrt{2}}(\bar{d}_L T^A s_R)(\bar{s}_L T^A d_R)$	$^{\mathrm{C}}$
CS8RR_ssss	$\frac{4G_F}{\sqrt{2}}(\bar{s}_L T^A s_R)(\bar{s}_L T^A s_R)$	$^{\mathrm{C}}$
CS1RR_uddu	$rac{4G_F}{\sqrt{2}}(ar{u}_L d_R)(ar{d}_L u_R)$	$^{\mathrm{C}}$
CS1RR_ussu	$\frac{4G_F}{\sqrt{2}}(\bar{u}_L s_R)(\bar{s}_L u_R)$	$^{\mathrm{C}}$
CS8RR_uddu	$\frac{4G_F}{\sqrt{2}}(\bar{u}_L T^A d_R)(\bar{d}_L T^A u_R)$	$^{\mathrm{C}}$
CS8RR_ussu	$\frac{4G_F}{\sqrt{2}}(\bar{u}_L T^A s_R)(\bar{s}_L T^A u_R)$	$^{\mathrm{C}}$
CS1RR_cccc	$rac{4G_F}{\sqrt{2}}(ar{c}_L c_R)(ar{c}_L c_R)$	$^{\mathrm{C}}$
CS1RR_ccdd	$rac{4\dot{G}_F}{\sqrt{2}}(ar{c}_L c_R)(ar{d}_L d_R)$	$^{\mathrm{C}}$
CS1RR_ccss	$\frac{4G_F}{\sqrt{2}}(\bar{c}_L c_R)(\bar{s}_L s_R)$	$^{\mathrm{C}}$
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)$	$^{\mathrm{C}}$
CS1RR_uccu	$\frac{4G_F}{\sqrt{2}}(\bar{u}_L c_R)(\bar{c}_L u_R)$	$^{\mathrm{C}}$
CS1RR_uucc	$rac{4\widetilde{G_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)$	C
CS8RR_ccdd	$\frac{4G_F}{\sqrt{2}}(\bar{c}_L T^A c_R)(d_L T^A d_R)$	C
CS8RR_ccss	$\frac{4G_F}{\sqrt{2}}(\bar{c}_L T^A c_R)(\bar{s}_L T^A s_R)$	C
CS8RR_cddc	$\frac{\frac{4G_F}{\sqrt{2}}(\bar{c}_L T^A c_R)(\bar{s}_L T^A s_R)}{\frac{4G_F}{\sqrt{2}}(\bar{c}_L T^A d_R)(\bar{d}_L T^A c_R)}$	$^{\mathrm{C}}$
CS8RR_cssc	$rac{4ar{G}_F}{\sqrt{2}}(ar{c}_L T^A s_R)(ar{s}_L T^A c_R)$	$^{\mathrm{C}}$

WC name	Operator	Type
CS8RR_uccu	$\frac{4G_F}{\sqrt{2}}(\bar{u}_L T^A c_R)(\bar{c}_L T^A u_R)$	\mathbf{C}
CS8RR_uucc	$\frac{4G_F}{\sqrt{2}}(\bar{u}_L T^A u_R)(\bar{c}_L T^A c_R)$	$^{\mathrm{C}}$
CSRL_eecc	$\frac{4G_F}{\sqrt{2}}(\bar{e}_L e_R)(\bar{c}_R c_L)$	$^{\mathrm{C}}$
CSRL_eedd	$\frac{4G_F}{\sqrt{2}}(\bar{e}_L e_R)(\bar{d}_R d_L)$	$^{\mathrm{C}}$
CSRL_eess	$\frac{4G_F}{\sqrt{2}}(\bar{e}_L e_R)(\bar{s}_R s_L)$	$^{\mathrm{C}}$
CSRL_eeuu	$\frac{4G_F}{\sqrt{2}}(\bar{e}_L e_R)(\bar{u}_R u_L)$	$^{\mathrm{C}}$
CSRL_mumucc	$\frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\mu_R)(\bar{c}_Rc_L)$	$^{\mathrm{C}}$
CSRL_mumudd	$\frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\mu_R)(\bar{d}_Rd_L)$	\mathbf{C}
CSRL_mumuss	$\frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\mu_R)(\bar{s}_Rs_L)$	\mathbf{C}
CSRL_mumuuu	$\frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\mu_R)(\bar{u}_Ru_L)$	\mathbf{C}
CSRL_tautaucc	$\frac{4G_F}{\sqrt{2}}(\bar{ au}_L au_R)(\bar{c}_Rc_L)$	\mathbf{C}
CSRL_tautaudd	$\frac{4G_F}{\sqrt{2}}(\bar{\tau}_L\tau_R)(\bar{d}_Rd_L)$	$^{\mathrm{C}}$
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	$\frac{4G_F}{\sqrt{2}}(\bar{e}_L e_R)(\bar{\mu}_L \mu_R)$	\mathbf{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	$\frac{4G_F}{\sqrt{2}}(\bar{e}_L\tau_R)(\bar{\tau}_L e_R)$	\mathbf{C}
CSRR_mumucc	$\frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\mu_R)(\bar{c}_Lc_R)$	$^{\mathrm{C}}$
CSRR_mumudd	$\frac{4\check{G}_F}{\sqrt{2}}(\bar{\mu}_L\mu_R)(\bar{d}_Ld_R)$	\mathbf{C}
CSRR_mumumumu	$\frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\mu_R)(\bar{\mu}_L\mu_R)$	$^{\mathrm{C}}$
CSRR_mumuss	$\frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\mu_R)(\bar{s}_Ls_R)$	\mathbf{C}
CSRR_mumutautau	$\frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\mu_R)(\bar{\tau}_L\tau_R)$	$^{\mathrm{C}}$
CSRR_mumuuu	$\frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\mu_R)(\bar{u}_Lu_R)$	$^{\mathrm{C}}$
CSRR_mutautaumu	$\frac{4G_F}{\sqrt{2}}(\bar{\mu}_L \tau_R)(\bar{\tau}_L \mu_R)$	$^{\mathrm{C}}$
CSRR_tautaucc	$\frac{4G_F}{\sqrt{2}}(\bar{\tau}_L \tau_R)(\bar{c}_L c_R)$	$^{\mathrm{C}}$
CSRR_tautaudd	$\frac{4\overset{\sim}{G_F}}{\sqrt{2}}(\bar{\tau}_L\tau_R)(\bar{d}_Ld_R)$	$^{\mathrm{C}}$
CSRR_tautauss	$\frac{4G_F}{\sqrt{2}}(\bar{\tau}_L \tau_R)(\bar{d}_L d_R)$ $\frac{4G_F}{\sqrt{2}}(\bar{\tau}_L \tau_R)(\bar{s}_L s_R)$	\mathbf{C}
CSRR_tautautautau	$4\frac{4G_F}{\sqrt{2}}(\bar{ au}_L au_R)(\bar{ au}_L au_R)$	\mathbf{C}
CSRR_tautauuu	$\frac{\sqrt[4]{G_F}}{\sqrt[4]{2}} (\bar{\tau}_L \tau_R) (\bar{u}_L u_R)$ $\frac{4G_F}{\sqrt[4]{2}} (\bar{e}_L \sigma^{\mu\nu} e_R) (\bar{c}_L \sigma_{\mu\nu} c_R)$ $\frac{4G_F}{\sqrt{2}} (\bar{\mu}_L \sigma^{\mu\nu} \mu_R) (\bar{c}_L \sigma_{\mu\nu} c_R)$	\mathbf{C}
CTRR_eecc	$\frac{4\check{G}_F^c}{\sqrt{2}}(\bar{e}_L\sigma^{\mu\nu}e_R)(\bar{c}_L\sigma_{\mu\nu}c_R)$	\mathbf{C}
	45°C	$^{\mathrm{C}}$

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)$	C
CV1LL_ccdd	$rac{4\ddot{G}_F}{\sqrt{2}}(ar{c}_L\gamma^\mu c_L)(ar{d}_L\gamma_\mu d_L)$	R
CV1LL_ccss	$\frac{4\check{G}_F}{\sqrt{2}}(\bar{c}_L\gamma^\mu c_L)(\bar{s}_L\gamma_\mu s_L)$	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	$rac{4G_F}{\sqrt{2}}(ar{c}_L\gamma^\mu c_L)(ar{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)$	$^{\mathrm{C}}$
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{4 G_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	$\frac{4G_F}{\sqrt{2}}(\bar{s}_L\gamma^\mu s_L)(\bar{s}_R\gamma_\mu s_R)$	R
CV1LR_ssuu	$rac{4G_F}{\sqrt{2}}(ar{s}_L\gamma^\mu s_L)(ar{u}_R\gamma_\mu u_R)$	R
CV1LR_uccu	$rac{4G_F}{\sqrt{2}}(ar{u}_L\gamma^\mu c_L)(ar{c}_R\gamma_\mu u_R)$	$^{\mathrm{C}}$
CV1LR_uddu	$rac{4G_F}{\sqrt{2}}(ar{u}_L\gamma^\mu d_L)(ar{d}_R\gamma_\mu u_R)$	$^{\mathrm{C}}$
CV1LR_ussu	$rac{4G_F}{\sqrt{2}}(ar{u}_L\gamma^\mu s_L)(ar{s}_R\gamma_\mu u_R)$	$^{\mathrm{C}}$
CV1LR_uucc	$rac{4G_F}{\sqrt{2}}(ar{u}_L\gamma^\mu u_L)(ar{c}_R\gamma_\mu c_R)$	R
CV1LR_uudd	$rac{4G_F}{\sqrt{2}}(ar{u}_L\gamma^\mu u_L)(ar{d}_R\gamma_\mu d_R)$	R
CV1LR_uuss	$rac{4G_F}{\sqrt{2}}(ar{u}_L\gamma^\mu u_L)(ar{s}_R\gamma_\mu s_R)$	R
CV1LR_uuuu	$\frac{4G_F}{\sqrt{2}}(\bar{u}_L\gamma^\mu u_L)(\bar{u}_R\gamma_\mu u_R)$	R
CV1RR_ccdd	$rac{4 G_F}{\sqrt{2}} (ar{c}_R \gamma^\mu c_R) (ar{d}_R \gamma_\mu d_R)$	R
CV1RR_ccss	$rac{4G_F}{\sqrt{2}}(ar{c}_R\gamma^\mu c_R)(ar{s}_R\gamma_\mu s_R)$	R
CV1RR_uudd	$rac{4G_F}{\sqrt{2}}(ar{u}_R\gamma^\mu u_R)(ar{d}_R\gamma_\mu d_R)$	R
CV1RR_uuss	$\frac{4G_F}{\sqrt{2}}(ar{u}_R\gamma^\mu u_R)(ar{s}_R\gamma_\mu s_R)$	R
CV8LL_ccdd	$rac{4G_F}{\sqrt{2}}(ar{c}_L\gamma^\mu T^A c_L)(ar{d}_L\gamma_\mu T^A d_L)$	R
CV8LL_ccss	$\frac{4G_F}{\sqrt{2}}(\bar{c}_L\gamma^{\mu}T^Ac_L)(\bar{s}_L\gamma_{\mu}T^As_L)$	R
CV8LL_uudd	$\frac{4G_F}{\sqrt{2}}(\bar{u}_L\gamma^{\mu}T^Au_L)(\bar{d}_L\gamma_{\mu}T^Ad_L)$	R
CV8LL_uuss	$\frac{4G_F}{\sqrt{2}}(\bar{u}_L\gamma^{\mu}T^Au_L)(\bar{s}_L\gamma_{\mu}T^As_L)$	R
CV8LR_cccc	$\frac{4\dot{G}_F}{\sqrt{2}}(\bar{c}_L\gamma^\mu T^Ac_L)(\bar{c}_R\gamma_\mu T^Ac_R)$	R
CV8LR_ccdd	$\begin{array}{c} \frac{\sqrt{2}}{\sqrt{2}} \left(\bar{u}_R \gamma^\mu u_R \right) (\bar{s}_R \gamma_\mu s_R) \\ \frac{4G_F}{\sqrt{2}} \left(\bar{c}_L \gamma^\mu T^A c_L \right) (\bar{d}_L \gamma_\mu T^A d_L) \\ \frac{4G_F}{\sqrt{2}} \left(\bar{c}_L \gamma^\mu T^A c_L \right) (\bar{s}_L \gamma_\mu T^A s_L) \\ \frac{4G_F}{\sqrt{2}} \left(\bar{u}_L \gamma^\mu T^A u_L \right) (\bar{d}_L \gamma_\mu T^A d_L) \\ \frac{4G_F}{\sqrt{2}} \left(\bar{u}_L \gamma^\mu T^A u_L \right) (\bar{s}_L \gamma_\mu T^A s_L) \\ \frac{4G_F}{\sqrt{2}} \left(\bar{c}_L \gamma^\mu T^A c_L \right) (\bar{c}_R \gamma_\mu T^A c_R) \\ \frac{4G_F}{\sqrt{2}} \left(\bar{c}_L \gamma^\mu T^A c_L \right) (\bar{d}_R \gamma_\mu T^A d_R) \\ \end{array}$	R

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	$\frac{4\widetilde{G}_F}{\sqrt{2}}(\bar{c}_L\gamma^{\mu}T^Ac_L)(\bar{u}_R\gamma_{\mu}T^Au_R)$	R
CV8LR_cddc	$\frac{4\tilde{G}_F^2}{\sqrt{2}}(\bar{c}_L\gamma^\mu T^A d_L)(\bar{d}_R\gamma_\mu T^A c_R)$	\mathbf{C}
CV8LR_cssc	$\frac{4\tilde{G}_F^2}{\sqrt{2}}(\bar{c}_L\gamma^\mu T^A s_L)(\bar{s}_R\gamma_\mu T^A c_R)$	\mathbf{C}
CV8LR_ddcc	$\frac{4\overset{C}{G_F}}{\sqrt{2}}(\bar{d}_L\gamma^{\mu}T^Ad_L)(\bar{c}_R\gamma_{\mu}T^Ac_R)$	R
CV8LR_dddd	$\frac{4\ddot{G}_F}{\sqrt{2}}(\bar{d}_L\gamma^{\mu}T^Ad_L)(\bar{d}_R\gamma_{\mu}T^Ad_R)$	R
CV8LR_ddss	$\frac{4G_F^2}{\sqrt{2}}(\bar{d}_L\gamma^\mu T^A d_L)(\bar{s}_R\gamma_\mu T^A s_R)$	${ m R}$
CV8LR_dduu	$\frac{4G_F}{\sqrt{2}}(\bar{d}_L\gamma^{\mu}T^Ad_L)(\bar{u}_R\gamma_{\mu}T^Au_R)$	${ m R}$
CV8LR_dssd	$\frac{4\overset{G}{G_F}}{\sqrt{2}}(\bar{d}_L\gamma^{\mu}T^As_L)(\bar{s}_R\gamma_{\mu}T^Ad_R)$	\mathbf{C}
CV8LR_sscc	$\frac{4\overset{G}{G_F}}{\sqrt{2}}(\bar{s}_L\gamma^{\mu}T^As_L)(\bar{c}_R\gamma_{\mu}T^Ac_R)$	R
CV8LR_ssdd	$\frac{4G_F}{\sqrt{2}}(\bar{s}_L\gamma^{\mu}T^As_L)(\bar{d}_R\gamma_{\mu}T^Ad_R)$	R
CV8LR_ssss	$\frac{4G_F}{\sqrt{2}}(\bar{s}_L\gamma^{\mu}T^As_L)(\bar{s}_R\gamma_{\mu}T^As_R)$	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	$\frac{4G_F}{\sqrt{2}}(\bar{c}_R\gamma^{\mu}T^Ac_R)(\bar{d}_R\gamma_{\mu}T^Ad_R)$	R
CV8RR_ccss	$rac{4G_F}{\sqrt{2}}(ar{c}_R\gamma^\mu T^Ac_R)(ar{s}_R\gamma_\mu T^As_R)$	R
CV8RR_uudd	$rac{4G_F}{\sqrt{2}}(ar{u}_R\gamma^\mu T^A u_R)(d_R\gamma_\mu T^A d_R)$	R
CV8RR_uuss	$\frac{4G_F}{\sqrt{2}}(\bar{u}_R\gamma^\mu T^A u_R)(\bar{s}_R\gamma_\mu T^A s_R)$	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	$\frac{4G_F}{\sqrt{2}}(\bar{d}_L\gamma^\mu d_L)(\bar{d}_L\gamma_\mu d_L)$	R
CVLL_ddss	$\frac{\frac{4G_F}{\sqrt{2}}(\bar{d}_L\gamma^\mu d_L)(\bar{s}_L\gamma_\mu s_L)}{\frac{4G_F}{\sqrt{2}}(\bar{d}_L\gamma^\mu s_L)(\bar{s}_L\gamma_\mu d_L)}$	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	$rac{4G_F}{\sqrt{2}}(ar{e}_L\gamma^\mu e_L)(ar{d}_L\gamma_\mu d_L)$	R
CVLL_eeee	$\frac{{}^{4}\!$	R
CVLL_eemumu	$\frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{\mu}_L\gamma_\mu\mu_L)$	R
CVLL_eess	$\frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^{\mu}e_L)(\bar{s}_L\gamma_{\mu}s_L)$	${ m R}$
CVLL_eetautau	$ \frac{{}^{4}G_{F}}{\sqrt{2}}(\bar{e}_{L}\gamma^{\mu}e_{L})(\bar{\tau}_{L}\gamma_{\mu}\tau_{L}) + \frac{{}^{4}G_{F}}{\sqrt{2}}(\bar{e}_{L}\gamma^{\mu}e_{L})(\bar{u}_{L}\gamma_{\mu}u_{L}) + \frac{{}^{4}G_{F}}{\sqrt{2}}(\bar{\mu}_{L}\gamma^{\mu}\mu_{L})(\bar{c}_{L}\gamma_{\mu}c_{L}) + \frac{{}^{4}G_{F}}{\sqrt{2}}(\bar{\mu}_{L}\gamma^{\mu}\mu_{L})(\bar{d}_{L}\gamma_{\mu}d_{L}) $	R
CVLL_eeuu	$\frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{u}_L\gamma_\mu u_L)$	R
CVLL_mumucc	$rac{4ar{G}_F}{\sqrt{2}}(ar{\mu}_L\gamma^\mu\mu_L)(ar{c}_L\gamma_\mu c_L)$	${ m R}$
CVLL_mumudd	$rac{4ar{G}_F}{\sqrt{2}}(ar{\mu}_L\gamma^\mu\mu_L)(ar{d}_L\gamma_\mu d_L)$	${ m R}$

$\begin{array}{c} \text{CVLL}_\text{mumumum} & \frac{4G_F}{4G_F}(\bar{\mu}_L\gamma^\mu\mu_L)(\bar{\nu}_L\gamma_\mu\mu_L) & \text{R} \\ \text{CVLL}_\text{mumuss} & \frac{4G_F}{4G_F}(\bar{\mu}_L\gamma^\mu\mu_L)(\bar{\nu}_L\gamma_\mu s_L) & \text{R} \\ \text{CVLL}_\text{mumutautau} & \frac{4G_F}{4G_F}(\bar{\mu}_L\gamma^\mu\mu_L)(\bar{\nu}_L\gamma_\mu r_L) & \text{R} \\ \text{CVLL}_\text{mumuu} & \frac{4G_F}{4G_F}(\bar{\mu}_L\gamma^\mu\mu_L)(\bar{\nu}_L\gamma_\mu r_L) & \text{R} \\ \text{CVLL}_\text{ssss} & \frac{4G_F}{4G_F}(\bar{\nu}_L\gamma^\mu\mu_L)(\bar{\nu}_L\gamma_\mu s_L) & \text{R} \\ \text{CVLL}_\text{ssss} & \frac{4G_F}{4G_F}(\bar{\nu}_L\gamma^\mu\mu_L)(\bar{\nu}_L\gamma_\mu s_L) & \text{R} \\ \text{CVLL}_\text{tautaucc} & \frac{4G_F}{4G_F}(\bar{\nu}_L\gamma^\mu r_L)(\bar{\nu}_L\gamma_\mu c_L) & \text{R} \\ \text{CVLL}_\text{tautaudd} & \frac{4G_F}{4G_F}(\bar{\nu}_L\gamma^\mu r_L)(\bar{\nu}_L\gamma_\mu c_L) & \text{R} \\ \text{CVLL}_\text{tautautautautau} & \frac{4G_F}{4G_F}(\bar{\nu}_L\gamma^\mu r_L)(\bar{\nu}_L\gamma_\mu c_L) & \text{R} \\ \text{CVLL}_\text{tautautautautau} & \frac{4G_F}{4G_F}(\bar{\nu}_L\gamma^\mu r_L)(\bar{\nu}_L\gamma_\mu c_L) & \text{R} \\ \text{CVLL}_\text{tautauuu} & \frac{4G_F}{4G_F}(\bar{\nu}_L\gamma^\mu r_L)(\bar{\nu}_L\gamma_\mu r_L) & \text{R} \\ \text{CVLL}_\text{tucc} & \frac{4G_F}{4G_F}(\bar{\nu}_L\gamma^\mu r_L)(\bar{\nu}_L\gamma_\mu u_L) & \text{R} \\ \text{CVLL}_\text{uucu} & \frac{4G_F}{4G_F}(\bar{\nu}_L\gamma^\mu r_L)(\bar{\nu}_L\gamma_\mu u_L) & \text{R} \\ \text{CVLL}_\text{uucu} & \frac{4G_F}{4G_F}(\bar{\nu}_L\gamma^\mu r_L)(\bar{\nu}_L\gamma_\mu u_L) & \text{R} \\ \text{CVLR}_\text{cee} & \frac{4G_F}{4G_F}(\bar{\nu}_L\gamma^\mu r_L)(\bar{\nu}_L\gamma_\mu u_L) & \text{R} \\ \text{CVLR}_\text{cee} & \frac{4G_F}{4G_F}(\bar{\nu}_L\gamma^\mu c_L)(\bar{\nu}_R\gamma_\mu e_R) & \text{R} \\ \text{CVLR}_\text{cetautau} & \frac{4G_F}{4G_F}(\bar{\nu}_L\gamma^\mu c_L)(\bar{\nu}_R\gamma_\mu e_R) & \text{R} \\ \text{CVLR}_\text{ddeumu} & \frac{4G_F}{4G_F}(\bar{\nu}_L\gamma^\mu c_L)(\bar{\nu}_R\gamma_\mu e_R) & \text{R} \\ \text{CVLR}_\text{eecc} & \frac{4G_F}{4G_F}(\bar{\nu}_L\gamma^\mu c_L)(\bar{\nu}_R\gamma_\mu e_R) & \text{R} \\ \text{CVLR}_\text{eee} & \frac{4G_F}{4G_F}(\bar{\nu}_L\gamma^\mu c_L)(\bar{\nu}_R\gamma_\mu e_R) & \text{R} \\ \text{CVLR}_\text{eee} & \frac{4G_F}{4G_F}(\bar{\nu}_L\gamma^\mu e_L)(\bar{\nu}_R\gamma_\mu e_R) & \text{R} \\ \text{CVLR}_\text{eee} & \frac{4G_F}{4G_F}(\bar{\nu}_L\gamma^\mu e_L)(\bar{\nu}_R\gamma_\mu e_R) & \text{R} \\ \text{CVLR}_\text{eeeumuu} & \frac{4G_F}{4G_F}(\bar{\nu}_L\gamma^\mu e_L)(\bar{\nu}_R\gamma_\mu e_R) & \text{R} \\ \text{CVLR}_\text{eeumuu} & \frac{4G_F}{4G_F}(\bar{\nu}_L\gamma^\mu e_L)(\bar{\nu}_R\gamma_\mu e_R) & \text{R} \\ \text{CVLR}_\text{eeumuu} & \frac{4G_F}{4G_F}(\bar{\nu}_L\gamma^\mu e_L)(\bar{\nu}_R\gamma_\mu e_R) & \text{R} \\ \text{CVLR}_\text{eeumuu} & \frac{4G_F}{4G_F}(\bar{\nu}_L\gamma^\mu e_L)(\bar{\nu}_R\gamma_\mu e_R) & \text{C} \\ \text{CVLR}_\text{mumue} & \frac{4G_F}{4G_F}(\bar{\nu}_L\gamma^\mu e_L)(\bar{\nu}_R\gamma_\mu e_R) & \text{R} \\ \text{CVLR}_\text{mumuue} & \frac{4G_F}{4G_F}(\bar{\nu}_L\gamma^\mu e_L)(\bar{\nu}_R\gamma_\mu e_R) & \text{R} \\$	WC name	Operator	Type
$\begin{array}{c} \text{CVLL_mumutautau} & \frac{4G_F}{\sqrt{2}} (\bar{\mu}_L \gamma^\mu \mu_L) (\bar{\tau}_L \gamma_\mu \tau_L) \\ \text{CVLL_mumuu} & \frac{4G_F}{\sqrt{2}} (\bar{\mu}_L \gamma^\mu \mu_L) (\bar{u}_L \gamma_\mu u_L) \\ \text{CVLL_ssss} & \frac{4G_F}{\sqrt{2}} (\bar{s}_L \gamma^\mu s_L) (\bar{s}_L \gamma_\mu s_L) \\ \text{CVLL_tautaucc} & \frac{4G_F}{\sqrt{2}} (\bar{\tau}_L \gamma^\mu \tau_L) (\bar{c}_L \gamma_\mu c_L) \\ \text{CVLL_tautaudd} & \frac{4G_F}{\sqrt{2}} (\bar{\tau}_L \gamma^\mu \tau_L) (\bar{d}_L \gamma_\mu d_L) \\ \text{CVLL_tautauss} & \frac{4G_F}{\sqrt{2}} (\bar{\tau}_L \gamma^\mu \tau_L) (\bar{d}_L \gamma_\mu s_L) \\ \text{CVLL_tautautautautau} & \frac{4G_F}{\sqrt{2}} (\bar{\tau}_L \gamma^\mu \tau_L) (\bar{s}_L \gamma_\mu s_L) \\ \text{CVLL_tautautautautau} & \frac{4G_F}{\sqrt{2}} (\bar{\tau}_L \gamma^\mu \tau_L) (\bar{\tau}_L \gamma_\mu \tau_L) \\ \text{CVLL_tautautautau} & \frac{4G_F}{\sqrt{2}} (\bar{\tau}_L \gamma^\mu \tau_L) (\bar{\tau}_L \gamma_\mu u_L) \\ \text{CVLL_uccu} & \frac{4G_F}{\sqrt{2}} (\bar{u}_L \gamma^\mu u_L) (\bar{c}_L \gamma_\mu u_L) \\ \text{CVLL_uuucc} & \frac{4G_F}{\sqrt{2}} (\bar{u}_L \gamma^\mu u_L) (\bar{c}_L \gamma_\mu u_L) \\ \text{CVLL_uuuu} & \frac{4G_F}{\sqrt{2}} (\bar{u}_L \gamma^\mu u_L) (\bar{c}_L \gamma_\mu u_L) \\ \text{CVLL_uuuu} & \frac{4G_F}{\sqrt{2}} (\bar{u}_L \gamma^\mu u_L) (\bar{u}_L \gamma_\mu u_L) \\ \text{CVLR_ccee} & \frac{4G_F}{\sqrt{2}} (\bar{c}_L \gamma^\mu c_L) (\bar{c}_R \gamma_\mu e_R) \\ \text{CVLR_ccmumu} & \frac{4G_F}{\sqrt{2}} (\bar{c}_L \gamma^\mu c_L) (\bar{c}_R \gamma_\mu e_R) \\ \text{CVLR_cctautau} & \frac{4G_F}{\sqrt{2}} (\bar{c}_L \gamma^\mu c_L) (\bar{c}_R \gamma_\mu e_R) \\ \text{CVLR_ddee} & \frac{4G_F}{\sqrt{2}} (\bar{c}_L \gamma^\mu d_L) (\bar{c}_R \gamma_\mu e_R) \\ \text{CVLR_ddumu} & \frac{4G_F}{\sqrt{2}} (\bar{d}_L \gamma^\mu d_L) (\bar{c}_R \gamma_\mu e_R) \\ \text{CVLR_dduatau} & \frac{4G_F}{\sqrt{2}} (\bar{d}_L \gamma^\mu d_L) (\bar{c}_R \gamma_\mu e_R) \\ \text{CVLR_ddtautau} & \frac{4G_F}{\sqrt{2}} (\bar{d}_L \gamma^\mu d_L) (\bar{c}_R \gamma_\mu e_R) \\ \text{CVLR_eeec} & \frac{4G_F}{\sqrt{2}} (\bar{d}_L \gamma^\mu d_L) (\bar{c}_R \gamma_\mu e_R) \\ \text{CVLR_eedd} & \frac{4G_F}{\sqrt{2}} (\bar{c}_L \gamma^\mu e_L) (\bar{c}_R \gamma_\mu e_R) \\ \text{CVLR_eedd} & \frac{4G_F}{\sqrt{2}} (\bar{e}_L \gamma^\mu e_L) (\bar{c}_R \gamma_\mu e_R) \\ \text{CVLR_eetautau} & \frac{4G_F}{\sqrt{2}} (\bar{c}_L \gamma^\mu e_L) (\bar{c}_R \gamma_\mu e_R) \\ \text{CVLR_eetautau} & \frac{4G_F}{\sqrt{2}} (\bar{c}_L \gamma^\mu e_L) (\bar{c}_R \gamma_\mu e_R) \\ \text{CVLR_eeuu} & \frac{4G_F}{\sqrt{2}} (\bar{c}_L \gamma^\mu e_L) (\bar{c}_R \gamma_\mu e_R) \\ \text{CVLR_eeuu} & \frac{4G_F}{\sqrt{2}} (\bar{c}_L \gamma^\mu e_L) (\bar{c}_R \gamma_\mu e_R) \\ \text{CVLR_eeuu} & \frac{4G_F}{\sqrt{2}} (\bar{c}_L \gamma^\mu e_L) (\bar{c}_R \gamma_\mu e_R) \\ \text{CVLR_eeuu} & \frac{4G_F}{\sqrt{2}} (\bar{c}_L \gamma^\mu e_L) (\bar{c}_R \gamma_\mu e_R) \\ \text{CVLR_eeuu} & \frac{4G_F}{\sqrt{2}} (\bar{c}_L \gamma^\mu e_L) (\bar{c}_R \gamma_\mu e_R) \\ \text{CVLR_eeuu} & $	CVLL_mumumumu		m R
$\begin{array}{c} \text{CVLL_mumuuu} & \frac{4G_F}{G_F}(\bar{\mu}_L\gamma^\mu\mu_L)(\bar{u}_L\gamma_\mu u_L) \\ \\ \text{CVLL_ssss} & \frac{4G_F}{G_F}(\bar{s}_L\gamma^\mu s_L)(\bar{s}_L\gamma_\mu s_L) \\ \\ \text{CVLL_tautaucc} & \frac{4G_F}{\sqrt{2}}(\bar{\tau}_L\gamma^\mu \tau_L)(\bar{c}_L\gamma_\mu c_L) \\ \\ \frac{4G_F}{\sqrt{2}}(\bar{\tau}_L\gamma^\mu \tau_L)(\bar{d}_L\gamma_\mu d_L) \\ \\ \text{CVLL_tautaudd} & \frac{4G_F}{\sqrt{2}}(\bar{\tau}_L\gamma^\mu \tau_L)(\bar{s}_L\gamma_\mu s_L) \\ \\ \text{CVLL_tautautautautautautautautautautautau} \\ \frac{4G_F}{\sqrt{2}}(\bar{\tau}_L\gamma^\mu \tau_L)(\bar{t}_L\gamma_\mu t_L) \\ \\ \frac{4G_F}{\sqrt{2}}(\bar{\tau}_L\gamma^\mu \tau_L)(\bar{t}_L\gamma_\mu t_L) \\ \\ \text{CVLL_tautautau} & \frac{4G_F}{\sqrt{2}}(\bar{\tau}_L\gamma^\mu \tau_L)(\bar{t}_L\gamma_\mu u_L) \\ \\ \text{CVLL_tautauuu} & \frac{4G_F}{\sqrt{2}}(\bar{\tau}_L\gamma^\mu \tau_L)(\bar{t}_L\gamma_\mu u_L) \\ \\ \text{CVLL_uucc} & \frac{4G_F}{\sqrt{2}}(\bar{u}_L\gamma^\mu u_L)(\bar{c}_L\gamma_\mu u_L) \\ \\ \text{CVLL_uuuu} & \frac{4G_F}{\sqrt{2}}(\bar{u}_L\gamma^\mu u_L)(\bar{t}_L\gamma_\mu u_L) \\ \\ \text{CVLL_uuuu} & \frac{4G_F}{\sqrt{2}}(\bar{u}_L\gamma^\mu u_L)(\bar{t}_L\gamma_\mu u_L) \\ \\ \text{CVLR_ccee} & \frac{4G_F}{\sqrt{2}}(\bar{c}_L\gamma^\mu c_L)(\bar{t}_R\gamma_\mu u_L) \\ \\ \text{CVLR_ccmumu} & \frac{4G_F}{\sqrt{2}}(\bar{c}_L\gamma^\mu c_L)(\bar{t}_R\gamma_\mu u_R) \\ \\ \text{CVLR_cctautau} & \frac{4G_F}{\sqrt{2}}(\bar{c}_L\gamma^\mu c_L)(\bar{t}_R\gamma_\mu u_R) \\ \\ \text{CVLR_ddee} & \frac{4G_F}{\sqrt{2}}(\bar{c}_L\gamma^\mu d_L)(\bar{t}_R\gamma_\mu u_R) \\ \\ \text{CVLR_ddauunu} & \frac{4G_F}{\sqrt{2}}(\bar{d}_L\gamma^\mu d_L)(\bar{t}_R\gamma_\mu u_R) \\ \\ \text{CVLR_eedd} & \frac{4G_F}{\sqrt{2}}(\bar{d}_L\gamma^\mu d_L)(\bar{t}_R\gamma_\mu u_R) \\ \\ \text{CVLR_eedd} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{d}_R\gamma_\mu e_R) \\ \\ \text{CVLR_eemumu} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{d}_R\gamma_\mu u_R) \\ \\ \text{CVLR_eetautau} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{t}_R\gamma_\mu u_R) \\ \\ \text{CVLR_eetautau} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{t}_R\gamma_\mu u_R) \\ \\ \text{CVLR_eetautau} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{t}_R\gamma_\mu u_R) \\ \\ \text{CVLR_eetautaue} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{t}_R\gamma_\mu u_R) \\ \\ \text{CVLR_emumuce} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{t}_R\gamma_\mu e_R) \\ \\ \text{CVLR_euuu} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^$	CVLL_mumuss	$rac{4ar{G}_F}{\sqrt{2}}(ar{\mu}_L\gamma^\mu\mu_L)(ar{s}_L\gamma_\mu s_L)$	R
$\begin{array}{c} \text{CVLL_ssss} & \frac{\sqrt{4G_F}}{\sqrt{2}}(\bar{s}_L\gamma^\mu s_L)(\bar{s}_L\gamma_\mu s_L) & \text{R} \\ \text{CVLL_tautaucc} & \frac{\sqrt{2G_F}}{\sqrt{2}}(\bar{\tau}_L\gamma^\mu \tau_L)(\bar{c}_L\gamma_\mu c_L) & \text{R} \\ \text{CVLL_tautaudd} & \frac{\sqrt{2G_F}}{\sqrt{2}}(\bar{\tau}_L\gamma^\mu \tau_L)(\bar{d}_L\gamma_\mu d_L) & \text{R} \\ \text{CVLL_tautauss} & \frac{\sqrt{2G_F}}{\sqrt{2}}(\bar{\tau}_L\gamma^\mu \tau_L)(\bar{s}_L\gamma_\mu s_L) & \text{R} \\ \text{CVLL_tautautautautautautautautautau} & \frac{\sqrt{2G_F}}{\sqrt{2}}(\bar{\tau}_L\gamma^\mu \tau_L)(\bar{\tau}_L\gamma_\mu \tau_L) & \text{R} \\ \text{CVLL_tautautau} & \frac{\sqrt{2G_F}}{\sqrt{2}}(\bar{\tau}_L\gamma^\mu \tau_L)(\bar{\tau}_L\gamma_\mu u_L) & \text{R} \\ \text{CVLL_uucc} & \frac{\sqrt{2G_F}}{\sqrt{2}}(\bar{u}_L\gamma^\mu c_L)(\bar{c}_L\gamma_\mu u_L) & \text{R} \\ \text{CVLL_uucc} & \frac{\sqrt{2G_F}}{\sqrt{2}}(\bar{u}_L\gamma^\mu c_L)(\bar{c}_L\gamma_\mu c_L) & \text{R} \\ \text{CVLL_uucc} & \frac{\sqrt{2G_F}}{\sqrt{2}}(\bar{u}_L\gamma^\mu c_L)(\bar{c}_L\gamma_\mu c_L) & \text{R} \\ \text{CVLL_uuu} & \frac{\sqrt{2G_F}}{\sqrt{2}}(\bar{u}_L\gamma^\mu u_L)(\bar{u}_L\gamma_\mu u_L) & \text{R} \\ \text{CVLR_ccee} & \frac{\sqrt{2G_F}}{\sqrt{2}}(\bar{c}_L\gamma^\mu c_L)(\bar{e}_R\gamma_\mu e_R) & \text{R} \\ \text{CVLR_ccmumu} & \frac{\sqrt{2G_F}}{\sqrt{2}}(\bar{c}_L\gamma^\mu c_L)(\bar{e}_R\gamma_\mu e_R) & \text{R} \\ \text{CVLR_cctautau} & \frac{\sqrt{2G_F}}{\sqrt{2}}(\bar{c}_L\gamma^\mu c_L)(\bar{e}_R\gamma_\mu e_R) & \text{R} \\ \text{CVLR_ddee} & \frac{\sqrt{2G_F}}{\sqrt{2}}(\bar{d}_L\gamma^\mu d_L)(\bar{e}_R\gamma_\mu e_R) & \text{R} \\ \text{CVLR_ddaumu} & \frac{\sqrt{2G_F}}{\sqrt{2}}(\bar{d}_L\gamma^\mu d_L)(\bar{e}_R\gamma_\mu e_R) & \text{R} \\ \text{CVLR_ddautau} & \frac{\sqrt{2G_F}}{\sqrt{2}}(\bar{d}_L\gamma^\mu d_L)(\bar{e}_R\gamma_\mu e_R) & \text{R} \\ \text{CVLR_eedd} & \frac{\sqrt{2G_F}}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{e}_R\gamma_\mu e_R) & \text{R} \\ \text{CVLR_eedd} & \frac{\sqrt{2G_F}}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{e}_R\gamma_\mu e_R) & \text{R} \\ \text{CVLR_eemumu} & \frac{\sqrt{2G_F}}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{e}_R\gamma_\mu e_R) & \text{R} \\ \text{CVLR_eetautau} & \frac{\sqrt{2G_F}}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{e}_R\gamma_\mu e_R) & \text{R} \\ \text{CVLR_eetautau} & \frac{\sqrt{2G_F}}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{e}_R\gamma_\mu e_R) & \text{R} \\ \text{CVLR_eetuu} & \frac{\sqrt{2G_F}}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{e}_R\gamma_\mu e_R) & \text{R} \\ \text{CVLR_eetuutau} & \frac{\sqrt{2G_F}}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{e}_R\gamma_\mu e_R) & \text{C} \\ \text{CVLR_emumuc} & \frac{\sqrt{2G_F}}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{e}_R\gamma_\mu e_R) & \text{C} \\ \text{CVLR_emumuc} & \frac{\sqrt{2G_F}}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{e}_R\gamma_\mu e_R) & \text{C} \\ \text{CVLR_emumuc} & \frac{\sqrt{2G_F}}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{e}_R\gamma_\mu e_R) & \text{C} \\ \text{CVLR_emumucd} & \frac{\sqrt{2G_F}}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{e}_R\gamma_\mu e_R) & \text{C} \\ \text{CVLR_emumucd} & \frac{\sqrt{2G_F}}{\sqrt{2}}(\bar{e}_L\gamma^\mu $	CVLL_mumutautau	$\frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\gamma^\mu\mu_L)(\bar{\tau}_L\gamma_\mu\tau_L)$	R
$\begin{array}{c} \text{CVLL_tautaucc} & \frac{4G_F^2}{\sqrt{2}} (\bar{\tau}_L \gamma^\mu \tau_L) (\bar{c}_L \gamma_\mu c_L) & \text{R} \\ \text{CVLL_tautaudd} & \frac{4G_F}{\sqrt{2}} (\bar{\tau}_L \gamma^\mu \tau_L) (\bar{d}_L \gamma_\mu d_L) & \text{R} \\ \text{CVLL_tautauss} & \frac{4G_F}{\sqrt{2}} (\bar{\tau}_L \gamma^\mu \tau_L) (\bar{d}_L \gamma_\mu d_L) & \text{R} \\ \text{CVLL_tautautautau} & \frac{4G_F}{\sqrt{2}} (\bar{\tau}_L \gamma^\mu \tau_L) (\bar{\tau}_L \gamma_\mu \tau_L) & \text{R} \\ \text{CVLL_tautautautau} & \frac{4G_F}{\sqrt{2}} (\bar{\tau}_L \gamma^\mu \tau_L) (\bar{\tau}_L \gamma_\mu \tau_L) & \text{R} \\ \text{CVLL_tautauuu} & \frac{4G_F}{\sqrt{2}} (\bar{\tau}_L \gamma^\mu \tau_L) (\bar{\tau}_L \gamma_\mu u_L) & \text{R} \\ \text{CVLL_uccu} & \frac{4G_F}{\sqrt{2}} (\bar{u}_L \gamma^\mu u_L) (\bar{c}_L \gamma_\mu u_L) & \text{R} \\ \text{CVLL_uuuu} & \frac{4G_F}{\sqrt{2}} (\bar{u}_L \gamma^\mu u_L) (\bar{u}_L \gamma_\mu u_L) & \text{R} \\ \text{CVLL_uuuu} & \frac{4G_F}{\sqrt{2}} (\bar{u}_L \gamma^\mu u_L) (\bar{u}_L \gamma_\mu u_L) & \text{R} \\ \text{CVLR_ccee} & \frac{4G_F}{\sqrt{2}} (\bar{c}_L \gamma^\mu c_L) (\bar{u}_R \gamma_\mu u_R) & \text{R} \\ \text{CVLR_ccmumu} & \frac{4G_F}{\sqrt{2}} (\bar{c}_L \gamma^\mu c_L) (\bar{t}_R \gamma_\mu u_R) & \text{R} \\ \text{CVLR_cctautau} & \frac{4G_F}{\sqrt{2}} (\bar{c}_L \gamma^\mu c_L) (\bar{t}_R \gamma_\mu u_R) & \text{R} \\ \text{CVLR_ddee} & \frac{4G_F}{\sqrt{2}} (\bar{d}_L \gamma^\mu d_L) (\bar{t}_R \gamma_\mu u_R) & \text{R} \\ \text{CVLR_ddmumu} & \frac{4G_F}{\sqrt{2}} (\bar{d}_L \gamma^\mu d_L) (\bar{t}_R \gamma_\mu u_R) & \text{R} \\ \text{CVLR_ddtautau} & \frac{4G_F}{\sqrt{2}} (\bar{d}_L \gamma^\mu d_L) (\bar{t}_R \gamma_\mu u_R) & \text{R} \\ \text{CVLR_eecc} & \frac{4G_F}{\sqrt{2}} (\bar{d}_L \gamma^\mu d_L) (\bar{t}_R \gamma_\mu u_R) & \text{R} \\ \text{CVLR_eedd} & \frac{4G_F}{\sqrt{2}} (\bar{e}_L \gamma^\mu e_L) (\bar{d}_R \gamma_\mu d_R) & \text{R} \\ \text{CVLR_eedd} & \frac{4G_F}{\sqrt{2}} (\bar{e}_L \gamma^\mu e_L) (\bar{d}_R \gamma_\mu u_R) & \text{R} \\ \text{CVLR_eess} & \frac{4G_F}{\sqrt{2}} (\bar{e}_L \gamma^\mu e_L) (\bar{t}_R \gamma_\mu u_R) & \text{R} \\ \text{CVLR_eess} & \frac{4G_F}{\sqrt{2}} (\bar{e}_L \gamma^\mu e_L) (\bar{t}_R \gamma_\mu u_R) & \text{R} \\ \text{CVLR_eetautau} & \frac{4G_F}{\sqrt{2}} (\bar{e}_L \gamma^\mu e_L) (\bar{t}_R \gamma_\mu u_R) & \text{R} \\ \text{CVLR_eeuu} & \frac{4G_F}{\sqrt{2}} (\bar{e}_L \gamma^\mu e_L) (\bar{t}_R \gamma_\mu u_R) & \text{R} \\ \text{CVLR_eeuu} & \frac{4G_F}{\sqrt{2}} (\bar{e}_L \gamma^\mu e_L) (\bar{t}_R \gamma_\mu u_R) & \text{R} \\ \text{CVLR_eeuu} & \frac{4G_F}{\sqrt{2}} (\bar{e}_L \gamma^\mu e_L) (\bar{t}_R \gamma_\mu u_R) & \text{R} \\ \text{CVLR_eeuu} & \frac{4G_F}{\sqrt{2}} (\bar{e}_L \gamma^\mu e_L) (\bar{t}_R \gamma_\mu e_R) & \text{C} \\ \text{CVLR_emumue} & \frac{4G_F}{\sqrt{2}} (\bar{e}_L \gamma^\mu u_L) (\bar{t}_R \gamma_\mu e_R) & \text{C} \\ \text{CVLR_emumucc} & \frac{4G_F}{\sqrt{2}} (\bar{e}_L \gamma^\mu u_L) (\bar{t}_R \gamma_\mu c_R) & \text{R} \\ \text{CVLR_emumucc} & \frac{4G_F}{\sqrt{2}} (\bar{e}_L $	CVLL_mumuuu	$\frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\gamma^\mu\mu_L)(\bar{u}_L\gamma_\mu u_L)$	R
$\begin{array}{c} \text{CVLL_tautaudd} & \frac{4G_F}{\sqrt{2}} (\bar{\tau}_L \gamma^\mu \tau_L) (\bar{d}_L \gamma_\mu d_L) \\ \text{CVLL_tautauss} & \frac{4G_F}{\sqrt{2}} (\bar{\tau}_L \gamma^\mu \tau_L) (\bar{s}_L \gamma_\mu s_L) \\ \text{CVLL_tautautautautautautau} & \frac{4G_F}{\sqrt{2}} (\bar{\tau}_L \gamma^\mu \tau_L) (\bar{\tau}_L \gamma_\mu \tau_L) \\ \text{CVLL_tautautautau} & \frac{4G_F}{\sqrt{2}} (\bar{\tau}_L \gamma^\mu \tau_L) (\bar{\tau}_L \gamma_\mu \tau_L) \\ \text{CVLL_tautauuu} & \frac{4G_F}{\sqrt{2}} (\bar{\tau}_L \gamma^\mu \tau_L) (\bar{\tau}_L \gamma_\mu u_L) \\ \text{CVLL_uccu} & \frac{4G_F}{\sqrt{2}} (\bar{\tau}_L \gamma^\mu \tau_L) (\bar{\tau}_L \gamma_\mu u_L) \\ \text{CVLL_uuuu} & \frac{4G_F}{\sqrt{2}} (\bar{\tau}_L \gamma^\mu u_L) (\bar{\tau}_L \gamma_\mu u_L) \\ \text{CVLL_uuuu} & \frac{4G_F}{\sqrt{2}} (\bar{\tau}_L \gamma^\mu u_L) (\bar{\tau}_L \gamma_\mu u_L) \\ \text{CVLR_ccee} & \frac{4G_F}{\sqrt{2}} (\bar{\tau}_L \gamma^\mu u_L) (\bar{\tau}_L \gamma_\mu u_L) \\ \text{CVLR_ccmumu} & \frac{4G_F}{\sqrt{2}} (\bar{\tau}_L \gamma^\mu u_L) (\bar{\tau}_L \gamma_\mu u_L) \\ \text{CVLR_cctautau} & \frac{4G_F}{\sqrt{2}} (\bar{\tau}_L \gamma^\mu c_L) (\bar{\tau}_R \gamma_\mu \mu_R) \\ \text{CVLR_ddee} & \frac{4G_F}{\sqrt{2}} (\bar{\tau}_L \gamma^\mu d_L) (\bar{\tau}_R \gamma_\mu u_R) \\ \text{CVLR_ddmumu} & \frac{4G_F}{\sqrt{2}} (\bar{\tau}_L \gamma^\mu d_L) (\bar{\tau}_R \gamma_\mu u_R) \\ \text{CVLR_ddtautau} & \frac{4G_F}{\sqrt{2}} (\bar{\tau}_L \gamma^\mu d_L) (\bar{\tau}_R \gamma_\mu u_R) \\ \text{CVLR_eecc} & \frac{4G_F}{\sqrt{2}} (\bar{\tau}_L \gamma^\mu d_L) (\bar{\tau}_R \gamma_\mu u_R) \\ \text{CVLR_eedd} & \frac{4G_F}{\sqrt{2}} (\bar{\tau}_L \gamma^\mu d_L) (\bar{\tau}_R \gamma_\mu u_R) \\ \text{CVLR_eedd} & \frac{4G_F}{\sqrt{2}} (\bar{\tau}_L \gamma^\mu e_L) (\bar{\tau}_R \gamma_\mu u_R) \\ \text{CVLR_eemumu} & \frac{4G_F}{\sqrt{2}} (\bar{\tau}_L \gamma^\mu e_L) (\bar{\tau}_R \gamma_\mu u_R) \\ \text{CVLR_eetautau} & \frac{4G_F}{\sqrt{2}} (\bar{\tau}_L \gamma^\mu e_L) (\bar{\tau}_R \gamma_\mu u_R) \\ \text{CVLR_eetautau} & \frac{4G_F}{\sqrt{2}} (\bar{\tau}_L \gamma^\mu e_L) (\bar{\tau}_R \gamma_\mu u_R) \\ \text{CVLR_eetautau} & \frac{4G_F}{\sqrt{2}} (\bar{\tau}_L \gamma^\mu e_L) (\bar{\tau}_R \gamma_\mu u_R) \\ \text{CVLR_eetuu} & \frac{4G_F}{\sqrt{2}} (\bar{\tau}_L \gamma^\mu u_L) (\bar{\tau}_R \gamma_\mu u_R) \\ \text{CVLR_emumue} & \frac{4G_F}{\sqrt{2}} (\bar{\tau}_L \gamma^\mu u_L) (\bar{\tau}_R \gamma_\mu e_R) \\ \text{CVLR_etautaue} & \frac{4G_F}{\sqrt{2}} (\bar{\tau}_L \gamma^\mu u_L) (\bar{\tau}_R \gamma_\mu e_R) \\ \text{CVLR_etautaue} & \frac{4G_F}{\sqrt{2}} (\bar{\tau}_L \gamma^\mu u_L) (\bar{\tau}_R \gamma_\mu e_R) \\ \text{CVLR_etautaue} & \frac{4G_F}{\sqrt{2}} (\bar{\tau}_L \gamma^\mu u_L) (\bar{\tau}_R \gamma_\mu e_R) \\ \text{CVLR_etautaue} & \frac{4G_F}{\sqrt{2}} (\bar{\tau}_L \gamma^\mu u_L) (\bar{\tau}_R \gamma_\mu e_R) \\ \text{CVLR_etautaue} & \frac{4G_F}{\sqrt{2}} (\bar{\tau}_L \gamma^\mu u_L) (\bar{\tau}_R \gamma_\mu e_R) \\ \text{CVLR_etautaue} & \frac{4G_F}{\sqrt{2}} (\bar{\tau}_L \gamma^\mu u_L) (\bar{\tau}_R \gamma_\mu e_R) \\ \text{CVLR_etautaue} & \frac{4G_F}{\sqrt{2}} (\bar{\tau}_L \gamma^\mu u_L) (\bar{\tau}_R \gamma_\mu e_$	CVLL_ssss	$rac{4ar{G}_F}{\sqrt{2}}(ar{s}_L\gamma^\mu s_L)(ar{s}_L\gamma_\mu s_L)$	R
$\begin{array}{c} \text{CVLL_tautauss} & \frac{4G_F^2}{\sqrt{2}}(\bar{\tau}_L\gamma^\mu\tau_L)(\bar{s}_L\gamma_\mu s_L) \\ \hline CVLL_tautautautautautautautautautautautautaut$	CVLL_tautaucc	$rac{4reve{G_F}}{\sqrt{2}}(ar{ au}_L\gamma^\mu au_L)(ar{c}_L\gamma_\mu c_L)$	R
$\begin{array}{c} \text{CVLL_tautautautau} & \frac{4G_F}{\sqrt{2}} (\bar{\tau}_L \gamma^\mu \tau_L) (\bar{\tau}_L \gamma_\mu \tau_L) \\ \hline \text{CVLL_tautauuu} & \frac{4G_F}{\sqrt{2}} (\bar{\tau}_L \gamma^\mu \tau_L) (\bar{\tau}_L \gamma_\mu u_L) \\ \hline \text{CVLL_uccu} & \frac{4G_F}{\sqrt{2}} (\bar{u}_L \gamma^\mu u_L) (\bar{c}_L \gamma_\mu u_L) \\ \hline \text{CVLL_uucc} & \frac{4G_F}{\sqrt{2}} (\bar{u}_L \gamma^\mu u_L) (\bar{c}_L \gamma_\mu u_L) \\ \hline \text{CVLL_uuuu} & \frac{4G_F}{\sqrt{2}} (\bar{u}_L \gamma^\mu u_L) (\bar{u}_L \gamma_\mu u_L) \\ \hline \text{CVLL_uuuu} & \frac{4G_F}{\sqrt{2}} (\bar{u}_L \gamma^\mu u_L) (\bar{u}_L \gamma_\mu u_L) \\ \hline \text{CVLR_ccee} & \frac{4G_F}{\sqrt{2}} (\bar{c}_L \gamma^\mu c_L) (\bar{e}_R \gamma_\mu e_R) \\ \hline \text{CVLR_ccmumu} & \frac{4G_F}{\sqrt{2}} (\bar{c}_L \gamma^\mu c_L) (\bar{\mu}_R \gamma_\mu \mu_R) \\ \hline \text{CVLR_cctautau} & \frac{4G_F}{\sqrt{2}} (\bar{c}_L \gamma^\mu c_L) (\bar{\tau}_R \gamma_\mu \tau_R) \\ \hline \text{CVLR_ddee} & \frac{4G_F}{\sqrt{2}} (\bar{c}_L \gamma^\mu c_L) (\bar{\tau}_R \gamma_\mu e_R) \\ \hline \text{CVLR_ddmumu} & \frac{4G_F}{\sqrt{2}} (\bar{d}_L \gamma^\mu d_L) (\bar{\mu}_R \gamma_\mu \mu_R) \\ \hline \text{CVLR_ddtautau} & \frac{4G_F}{\sqrt{2}} (\bar{d}_L \gamma^\mu d_L) (\bar{\mu}_R \gamma_\mu \mu_R) \\ \hline \text{CVLR_eecc} & \frac{4G_F}{\sqrt{2}} (\bar{d}_L \gamma^\mu d_L) (\bar{\tau}_R \gamma_\mu \tau_R) \\ \hline \text{CVLR_eedd} & \frac{4G_F}{\sqrt{2}} (\bar{e}_L \gamma^\mu e_L) (\bar{c}_R \gamma_\mu c_R) \\ \hline \text{CVLR_eeedd} & \frac{4G_F}{\sqrt{2}} (\bar{e}_L \gamma^\mu e_L) (\bar{d}_R \gamma_\mu d_R) \\ \hline \text{CVLR_eeeuu} & \frac{4G_F}{\sqrt{2}} (\bar{e}_L \gamma^\mu e_L) (\bar{\mu}_R \gamma_\mu \mu_R) \\ \hline \text{CVLR_eetautau} & \frac{4G_F}{\sqrt{2}} (\bar{e}_L \gamma^\mu e_L) (\bar{\mu}_R \gamma_\mu \mu_R) \\ \hline \text{CVLR_eetautau} & \frac{4G_F}{\sqrt{2}} (\bar{e}_L \gamma^\mu e_L) (\bar{\mu}_R \gamma_\mu u_R) \\ \hline \text{CVLR_eeuu} & \frac{4G_F}{\sqrt{2}} (\bar{e}_L \gamma^\mu e_L) (\bar{\mu}_R \gamma_\mu u_R) \\ \hline \text{CVLR_eeuu} & \frac{4G_F}{\sqrt{2}} (\bar{e}_L \gamma^\mu e_L) (\bar{\mu}_R \gamma_\mu u_R) \\ \hline \text{CVLR_euumue} & \frac{4G_F}{\sqrt{2}} (\bar{e}_L \gamma^\mu e_L) (\bar{\mu}_R \gamma_\mu e_R) \\ \hline \text{CVLR_euumue} & \frac{4G_F}{\sqrt{2}} (\bar{e}_L \gamma^\mu e_L) (\bar{\mu}_R \gamma_\mu e_R) \\ \hline \text{CVLR_euumue} & \frac{4G_F}{\sqrt{2}} (\bar{e}_L \gamma^\mu e_L) (\bar{\mu}_R \gamma_\mu e_R) \\ \hline \text{CVLR_etautaue} & \frac{4G_F}{\sqrt{2}} (\bar{e}_L \gamma^\mu e_L) (\bar{\mu}_R \gamma_\mu e_R) \\ \hline \text{CVLR_etautaue} & \frac{4G_F}{\sqrt{2}} (\bar{e}_L \gamma^\mu e_L) (\bar{\ell}_R \gamma_\mu e_R) \\ \hline \text{CVLR_etautaue} & \frac{4G_F}{\sqrt{2}} (\bar{e}_L \gamma^\mu e_L) (\bar{\ell}_R \gamma_\mu e_R) \\ \hline \text{CVLR_mumucc} & \frac{4G_F}{\sqrt{2}} (\bar{e}_L \gamma^\mu \mu_L) (\bar{\ell}_R \gamma_\mu e_R) \\ \hline \end{array} & \\ \hline \text{CVLR_mumucc} & \frac{4G_F}{\sqrt{2}} (\bar{\ell}_L \gamma^\mu \mu_L) (\bar{\ell}_R \gamma_\mu e_R) \\ \hline \end{array} & \\ \hline \end{array} & \\ \hline \end{array}$	CVLL_tautaudd	$rac{4ar{G}_F}{\sqrt{2}}(ar{ au}_L\gamma^\mu au_L)(ar{d}_L\gamma_\mu d_L)$	R
$\begin{array}{c} \text{CVLL_tautauuu} & \frac{4G_F}{\sqrt{2}}(\bar{\tau}_L\gamma^\mu\tau_L)(\bar{u}_L\gamma_\mu u_L) & \text{R} \\ \text{CVLL_uccu} & \frac{4G_F}{\sqrt{2}}(\bar{u}_L\gamma^\mu\tau_L)(\bar{c}_L\gamma_\mu u_L) & \text{R} \\ \text{CVLL_uucc} & \frac{4G_F}{\sqrt{2}}(\bar{u}_L\gamma^\mu u_L)(\bar{c}_L\gamma_\mu c_L) & \text{R} \\ \text{CVLL_uuuu} & \frac{4G_F}{\sqrt{2}}(\bar{u}_L\gamma^\mu u_L)(\bar{u}_L\gamma_\mu u_L) & \text{R} \\ \text{CVLR_ccee} & \frac{4G_F}{\sqrt{2}}(\bar{c}_L\gamma^\mu c_L)(\bar{e}_R\gamma_\mu e_R) & \text{R} \\ \text{CVLR_ccmumu} & \frac{4G_F}{\sqrt{2}}(\bar{c}_L\gamma^\mu c_L)(\bar{e}_R\gamma_\mu e_R) & \text{R} \\ \text{CVLR_ctautau} & \frac{4G_F}{\sqrt{2}}(\bar{c}_L\gamma^\mu c_L)(\bar{e}_R\gamma_\mu \mu_R) & \text{R} \\ \text{CVLR_ddee} & \frac{4G_F}{\sqrt{2}}(\bar{c}_L\gamma^\mu c_L)(\bar{e}_R\gamma_\mu e_R) & \text{R} \\ \text{CVLR_ddmumu} & \frac{4G_F}{\sqrt{2}}(\bar{d}_L\gamma^\mu d_L)(\bar{e}_R\gamma_\mu e_R) & \text{R} \\ \text{CVLR_ddtautau} & \frac{4G_F}{\sqrt{2}}(\bar{d}_L\gamma^\mu d_L)(\bar{e}_R\gamma_\mu e_R) & \text{R} \\ \text{CVLR_eecc} & \frac{4G_F}{\sqrt{2}}(\bar{d}_L\gamma^\mu d_L)(\bar{e}_R\gamma_\mu e_R) & \text{R} \\ \text{CVLR_eedd} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{c}_R\gamma_\mu c_R) & \text{R} \\ \text{CVLR_eeed} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{e}_R\gamma_\mu e_R) & \text{R} \\ \text{CVLR_eeee} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{e}_R\gamma_\mu e_R) & \text{R} \\ \text{CVLR_eess} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{e}_R\gamma_\mu e_R) & \text{R} \\ \text{CVLR_eetautau} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{e}_R\gamma_\mu e_R) & \text{R} \\ \text{CVLR_eetautau} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{e}_R\gamma_\mu e_R) & \text{R} \\ \text{CVLR_eetuu} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{e}_R\gamma_\mu e_R) & \text{R} \\ \text{CVLR_emumue} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{e}_R\gamma_\mu e_R) & \text{C} \\ \text{CVLR_etautaue} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{e}_R\gamma_\mu e_R) & \text{C} \\ C$	CVLL_tautauss	$rac{4ar{G}_F}{\sqrt{2}}(ar{ au}_L\gamma^\mu au_L)(ar{s}_L\gamma_\mu s_L)$	R
$\begin{array}{c} \text{CVLL_uccu} & \frac{4G_F}{\sqrt{2}}(\bar{u}_L\gamma^\mu c_L)(\bar{c}_L\gamma_\mu u_L) \\ \text{CVLL_uucc} & \frac{4G_F}{\sqrt{2}}(\bar{u}_L\gamma^\mu u_L)(\bar{c}_L\gamma_\mu u_L) \\ \text{CVLL_uuuu} & \frac{4G_F}{\sqrt{2}}(\bar{u}_L\gamma^\mu u_L)(\bar{u}_L\gamma_\mu u_L) \\ \text{CVLR_ccee} & \frac{4G_F}{\sqrt{2}}(\bar{c}_L\gamma^\mu c_L)(\bar{e}_R\gamma_\mu e_R) \\ \text{CVLR_ccmumu} & \frac{4G_F}{\sqrt{2}}(\bar{c}_L\gamma^\mu c_L)(\bar{e}_R\gamma_\mu e_R) \\ \text{CVLR_cctautau} & \frac{4G_F}{\sqrt{2}}(\bar{c}_L\gamma^\mu c_L)(\bar{r}_R\gamma_\mu r_R) \\ \text{CVLR_ddee} & \frac{4G_F}{\sqrt{2}}(\bar{d}_L\gamma^\mu d_L)(\bar{e}_R\gamma_\mu e_R) \\ \text{CVLR_ddmumu} & \frac{4G_F}{\sqrt{2}}(\bar{d}_L\gamma^\mu d_L)(\bar{e}_R\gamma_\mu e_R) \\ \text{CVLR_ddtautau} & \frac{4G_F}{\sqrt{2}}(\bar{d}_L\gamma^\mu d_L)(\bar{r}_R\gamma_\mu r_R) \\ \text{CVLR_eecc} & \frac{4G_F}{\sqrt{2}}(\bar{d}_L\gamma^\mu d_L)(\bar{r}_R\gamma_\mu r_R) \\ \text{CVLR_eedd} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{c}_R\gamma_\mu c_R) \\ \text{CVLR_eedd} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{d}_R\gamma_\mu d_R) \\ \text{CVLR_eeee} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{d}_R\gamma_\mu d_R) \\ \text{CVLR_eess} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{r}_R\gamma_\mu r_R) \\ \text{CVLR_eess} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{r}_R\gamma_\mu r_R) \\ \text{CVLR_eetautau} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{r}_R\gamma_\mu r_R) \\ \text{CVLR_eeuu} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{r}_R\gamma_\mu r_R) \\ \text{CVLR_euuuue} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{r}_R\gamma_\mu r_R) \\ \text{CVLR_euuuue} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu r_L)(\bar{r}_R\gamma_\mu r_R) \\ \text{CVLR_euuuue} & \frac{4G_F}{\sqrt{2}}(\bar{r}_L\gamma^\mu r_L)(\bar{r}_R\gamma_\mu r_R) \\ \text{CVLR_euuuue} & \frac{4G_F}{\sqrt{2}}(\bar{r}_L\gamma^\mu r_L)(\bar{r}_R\gamma$	CVLL_tautautautau	$rac{4ar{G}_F}{\sqrt{2}}(ar{ au}_L\gamma^\mu au_L)(ar{ au}_L\gamma_\mu au_L)$	R
$\begin{array}{c} \text{CVLL_uucc} & \frac{4G_F}{\sqrt{2}}(\bar{u}_L\gamma^\mu u_L)(\bar{c}_L\gamma_\mu c_L) \\ \text{CVLL_uuuu} & \frac{4G_F}{\sqrt{2}}(\bar{u}_L\gamma^\mu u_L)(\bar{u}_L\gamma_\mu u_L) \\ \text{CVLR_ccee} & \frac{4G_F}{\sqrt{2}}(\bar{c}_L\gamma^\mu c_L)(\bar{e}_R\gamma_\mu e_R) \\ \text{CVLR_ccmumu} & \frac{4G_F}{\sqrt{2}}(\bar{c}_L\gamma^\mu c_L)(\bar{\mu}_R\gamma_\mu \mu_R) \\ \text{CVLR_cctautau} & \frac{4G_F}{\sqrt{2}}(\bar{c}_L\gamma^\mu c_L)(\bar{\tau}_R\gamma_\mu \tau_R) \\ \text{CVLR_ddee} & \frac{4G_F}{\sqrt{2}}(\bar{d}_L\gamma^\mu d_L)(\bar{e}_R\gamma_\mu e_R) \\ \text{CVLR_ddmumu} & \frac{4G_F}{\sqrt{2}}(\bar{d}_L\gamma^\mu d_L)(\bar{\mu}_R\gamma_\mu \mu_R) \\ \text{CVLR_ddtautau} & \frac{4G_F}{\sqrt{2}}(\bar{d}_L\gamma^\mu d_L)(\bar{\tau}_R\gamma_\mu \tau_R) \\ \text{CVLR_eecc} & \frac{4G_F}{\sqrt{2}}(\bar{d}_L\gamma^\mu d_L)(\bar{\tau}_R\gamma_\mu c_R) \\ \text{CVLR_eedd} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{c}_R\gamma_\mu c_R) \\ \text{CVLR_eeed} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{d}_R\gamma_\mu d_R) \\ \text{CVLR_eeeunumu} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{\mu}_R\gamma_\mu \mu_R) \\ \text{CVLR_eetautau} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{\mu}_R\gamma_\mu \mu_R) \\ \text{CVLR_eetautau} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{\mu}_R\gamma_\mu a_R) \\ \text{CVLR_eetautau} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{\mu}_R\gamma_\mu a_R) \\ \text{CVLR_eetautau} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{\mu}_R\gamma_\mu a_R) \\ \text{CVLR_emumue} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{\mu}_R\gamma_\mu a_R) \\ \text{CVLR_emumue} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{\mu}_R\gamma_\mu a_R) \\ \text{CVLR_etautaue} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu a_L)(\bar{\mu}_R\gamma_\mu a_R) \\ \text{CVLR_etautaue} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu a_L)(\bar{\mu}_R\gamma_\mu a_R) \\ \text{CVLR_emumucc} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu a_L)(\bar{\mu}_R\gamma_\mu a_R) \\ \text{CVLR_mumucc} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu a_L)(\bar{d}_R\gamma_\mu a_R) \\ \text{CVLR_mumucc} & \frac$	CVLL_tautauuu	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{\tau}_L\gamma^\mu\tau_L)(\bar{u}_L\gamma_\mu u_L)$	R
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	CVLL_uccu	$\frac{4G_F}{\sqrt{2}}(\bar{u}_L\gamma^\mu c_L)(\bar{c}_L\gamma_\mu u_L)$	R
$\begin{array}{c} \text{CVLR_ccee} & \frac{4G_F}{\sqrt{2}}(\bar{c}_L\gamma^\mu c_L)(\bar{e}_R\gamma_\mu e_R) & \text{R} \\ \text{CVLR_ccmumu} & \frac{4G_F}{\sqrt{2}}(\bar{c}_L\gamma^\mu c_L)(\bar{\mu}_R\gamma_\mu \mu_R) & \text{R} \\ \text{CVLR_cctautau} & \frac{4G_F}{\sqrt{2}}(\bar{c}_L\gamma^\mu c_L)(\bar{\tau}_R\gamma_\mu \tau_R) & \text{R} \\ \text{CVLR_ddee} & \frac{4G_F}{\sqrt{2}}(\bar{d}_L\gamma^\mu d_L)(\bar{e}_R\gamma_\mu e_R) & \text{R} \\ \text{CVLR_ddmumu} & \frac{4G_F}{\sqrt{2}}(\bar{d}_L\gamma^\mu d_L)(\bar{\mu}_R\gamma_\mu \mu_R) & \text{R} \\ \text{CVLR_ddtautau} & \frac{4G_F}{\sqrt{2}}(\bar{d}_L\gamma^\mu d_L)(\bar{\tau}_R\gamma_\mu \tau_R) & \text{R} \\ \text{CVLR_eecc} & \frac{4G_F}{\sqrt{2}}(\bar{d}_L\gamma^\mu d_L)(\bar{\tau}_R\gamma_\mu \tau_R) & \text{R} \\ \text{CVLR_eedd} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{c}_R\gamma_\mu e_R) & \text{R} \\ \text{CVLR_eedd} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{d}_R\gamma_\mu d_R) & \text{R} \\ \text{CVLR_eeeumumu} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{\mu}_R\gamma_\mu \mu_R) & \text{R} \\ \text{CVLR_eess} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{\mu}_R\gamma_\mu \mu_R) & \text{R} \\ \text{CVLR_eetautau} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{\tau}_R\gamma_\mu r_R) & \text{R} \\ \text{CVLR_eetuutau} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{\tau}_R\gamma_\mu r_R) & \text{R} \\ \text{CVLR_eeuu} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{\mu}_R\gamma_\mu u_R) & \text{R} \\ \text{CVLR_emumue} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{\mu}_R\gamma_\mu e_R) & \text{C} \\ \text{CVLR_etautaue} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu \mu_L)(\bar{\mu}_R\gamma_\mu e_R) & \text{C} \\ \text{CVLR_mumucc} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu \mu_L)(\bar{\tau}_R\gamma_\mu e_R) & \text{C} \\ \text{CVLR_mumucc} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu \mu_L)(\bar{\tau}_R\gamma_\mu e_R) & \text{C} \\ \text{CVLR_mumucc} & \frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\gamma^\mu \mu_L)(\bar{\tau}_R\gamma_\mu e_R) & \text{R} \\ \text{CVIR_mumudd} & \frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\gamma^\mu \mu_L)(\bar{\tau}_R\gamma_\mu e_R) & \text{R} \\ \text{CVIR_mumucc} & \frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\gamma^\mu \mu_L)(\bar{\tau}_R\gamma_\mu e_R) & \text{C} \\ \text{CVIR_mumudd} & \frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\gamma^\mu \mu_L)(\bar{\tau}_R\gamma_\mu e_R) & \text{R} \\ \end{array}$	CVLL_uucc	$\frac{4G_F}{\sqrt{2}}(\bar{u}_L\gamma^\mu u_L)(\bar{c}_L\gamma_\mu c_L)$	R
$\begin{array}{c} \text{CVLR_ccmumu} & \frac{4G_F}{\sqrt{2}}(\bar{c}_L\gamma^\mu c_L)(\bar{\mu}_R\gamma_\mu\mu_R) & \text{R} \\ \text{CVLR_cctautau} & \frac{4G_F}{\sqrt{2}}(\bar{c}_L\gamma^\mu c_L)(\bar{\tau}_R\gamma_\mu\tau_R) & \text{R} \\ \text{CVLR_ddee} & \frac{4G_F}{\sqrt{2}}(\bar{d}_L\gamma^\mu d_L)(\bar{e}_R\gamma_\mu e_R) & \text{R} \\ \text{CVLR_ddmumu} & \frac{4G_F}{\sqrt{2}}(\bar{d}_L\gamma^\mu d_L)(\bar{\mu}_R\gamma_\mu\mu_R) & \text{R} \\ \text{CVLR_ddtautau} & \frac{4G_F}{\sqrt{2}}(\bar{d}_L\gamma^\mu d_L)(\bar{\tau}_R\gamma_\mu\tau_R) & \text{R} \\ \text{CVLR_eecc} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{c}_R\gamma_\mu c_R) & \text{R} \\ \text{CVLR_eedd} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{d}_R\gamma_\mu d_R) & \text{R} \\ \text{CVLR_eeed} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{e}_R\gamma_\mu e_R) & \text{R} \\ \text{CVLR_eemumu} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{e}_R\gamma_\mu e_R) & \text{R} \\ \text{CVLR_eetautau} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{e}_R\gamma_\mu e_R) & \text{R} \\ \text{CVLR_eetautau} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{e}_R\gamma_\mu r_R) & \text{R} \\ \text{CVLR_eeuu} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{e}_R\gamma_\mu r_R) & \text{R} \\ \text{CVLR_eeuu} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{e}_R\gamma_\mu r_R) & \text{R} \\ \text{CVLR_emumue} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{u}_R\gamma_\mu u_R) & \text{R} \\ \text{CVLR_emumue} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{u}_R\gamma_\mu e_R) & \text{C} \\ \text{CVLR_emumucc} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu t_L)(\bar{t}_R\gamma_\mu e_R) & \text{C} \\ \text{CVLR_mumucc} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu t_L)(\bar{t}_R\gamma_\mu e_R) & \text{C} \\ \text{CVLR_mumucc} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu t_L)(\bar{t}_R\gamma_\mu e_R) & \text{R} \\ \text{CVIR_mumucc} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu t_L)(\bar{t}_R\gamma_\mu e_R) & \text{R} \\ \text{CVIR_mumucd} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu t_L)(\bar{t}_R\gamma_\mu e_R) & \text{R} \\ \text{CVIR_mumucd} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu t_L)(\bar{t}_R\gamma_\mu e_R) & \text{R} \\ \text{CVIR_mumucd} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu t_L)(\bar{t}_R\gamma_\mu e_R) & \text{R} \\ \text{CVIR_mumudd} & \frac{4G_F}{\sqrt{2}}(\bar{t}_L\gamma^\mu t_L)(\bar{t}_R\gamma_\mu e_R) & \text{R} \\ \text{CVIR_mumudd} & \frac{4G_F}{\sqrt{2}}(\bar{t}_L\gamma^\mu t_L)(\bar{t}_R\gamma_\mu e_R) & \text{R} \\ \end{array}$	CVLL_uuuu	$\frac{4G_F}{\sqrt{2}}(\bar{u}_L\gamma^\mu u_L)(\bar{u}_L\gamma_\mu u_L)$	R
$\begin{array}{c} \text{CVLR_cctautau} & \frac{4G_F}{\sqrt{2}}(\bar{c}_L\gamma^\mu c_L)(\bar{\tau}_R\gamma_\mu\tau_R) & \text{R} \\ \text{CVLR_ddee} & \frac{4G_F}{\sqrt{2}}(\bar{d}_L\gamma^\mu d_L)(\bar{e}_R\gamma_\mu e_R) & \text{R} \\ \text{CVLR_ddmumu} & \frac{4G_F}{\sqrt{2}}(\bar{d}_L\gamma^\mu d_L)(\bar{\mu}_R\gamma_\mu\mu_R) & \text{R} \\ \text{CVLR_ddtautau} & \frac{4G_F}{\sqrt{2}}(\bar{d}_L\gamma^\mu d_L)(\bar{\tau}_R\gamma_\mu\tau_R) & \text{R} \\ \text{CVLR_eecc} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{c}_R\gamma_\mu c_R) & \text{R} \\ \text{CVLR_eedd} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{d}_R\gamma_\mu d_R) & \text{R} \\ \text{CVLR_eemumu} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{e}_R\gamma_\mu e_R) & \text{R} \\ \text{CVLR_eemumu} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{\mu}_R\gamma_\mu\mu_R) & \text{R} \\ \text{CVLR_eess} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{\tau}_R\gamma_\mu\tau_R) & \text{R} \\ \text{CVLR_eetautau} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{\tau}_R\gamma_\mu\tau_R) & \text{R} \\ \text{CVLR_eetunumu} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{\tau}_R\gamma_\mu\tau_R) & \text{R} \\ \text{CVLR_eeuu} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{\tau}_R\gamma_\mu e_R) & \text{C} \\ \text{CVLR_etautaue} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu t_L)(\bar{\tau}_R\gamma_\mu e_R) & \text{C} \\ \text{CVLR_etautaue} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu t_L)(\bar{\tau}_R\gamma_\mu e_R) & \text{C} \\ \text{CVLR_mumucc} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu t_L)(\bar{\tau}_R\gamma_\mu e_R) & \text{C} \\ \text{CVLR_mumucc} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu t_L)(\bar{\tau}_R\gamma_\mu e_R) & \text{R} \\ \text{CVIR_mumucc} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu t_L)(\bar{\tau}_R\gamma_\mu e_R) & \text{R} \\ \text{CVIR_mumucc} & \frac{4G_F}{\sqrt{2}}(\bar{t}_L\gamma^\mu t_L)(\bar{\tau}_R\gamma_\mu e_R) & \text{R} \\ \text{CVIR_mumucc} & \frac{4G_F}{\sqrt{2}}(\bar{t}_L\gamma^\mu t_L)(\bar{\tau}_R\gamma_\mu e_R) & \text{R} \\ \text{CVIR_mumucc} & \frac{4G_F}{\sqrt{2}}(\bar{t}_L\gamma^\mu t_L)(\bar{t}_R\gamma_\mu e_R) & \text{R} \\ \text{CVIR_mumucd} & \frac{4G_F}{\sqrt{2}}(\bar{t}_L\gamma^\mu t_L)(\bar{t}_R\gamma_\mu e_R) & \text{R} \\ \text{CVIR_mumucd} & \frac{4G_F}{\sqrt{2}}(\bar{t}_L\gamma^\mu t_L)(\bar{t}_R\gamma_\mu e_R) & \text{R} \\ \end{array}$	CVLR_ccee	$\frac{4G_F}{\sqrt{2}}(\bar{c}_L\gamma^\mu c_L)(\bar{e}_R\gamma_\mu e_R)$	R
$\begin{array}{llll} & & & & & & & & & & & & & & & & & $	CVLR_ccmumu	$\frac{4G_F}{\sqrt{2}}(\bar{c}_L\gamma^\mu c_L)(\bar{\mu}_R\gamma_\mu\mu_R)$	R
$\begin{array}{llll} & \text{CVLR_ddmumu} & \frac{\sqrt{G_F}}{\sqrt{2}}(\bar{d}_L\gamma^\mu d_L)(\bar{\mu}_R\gamma_\mu\mu_R) & \text{R} \\ & \text{CVLR_ddtautau} & \frac{4G_F}{\sqrt{2}}(\bar{d}_L\gamma^\mu d_L)(\bar{\tau}_R\gamma_\mu\tau_R) & \text{R} \\ & \text{CVLR_eecc} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{c}_R\gamma_\mu c_R) & \text{R} \\ & \text{CVLR_eedd} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{d}_R\gamma_\mu d_R) & \text{R} \\ & \text{CVLR_eeee} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{e}_R\gamma_\mu e_R) & \text{R} \\ & \text{CVLR_eemumu} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{\mu}_R\gamma_\mu\mu_R) & \text{R} \\ & \text{CVLR_eess} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{s}_R\gamma_\mu s_R) & \text{R} \\ & \text{CVLR_eetautau} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{\tau}_R\gamma_\mu \tau_R) & \text{R} \\ & \text{CVLR_eeuu} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{\tau}_R\gamma_\mu u_R) & \text{R} \\ & \text{CVLR_eeuu} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{\mu}_R\gamma_\mu e_R) & \text{C} \\ & \text{CVLR_etautaue} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu \tau_L)(\bar{\tau}_R\gamma_\mu e_R) & \text{C} \\ & \text{CVLR_etautaue} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu \tau_L)(\bar{\tau}_R\gamma_\mu e_R) & \text{C} \\ & \text{CVLR_mumucc} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu \tau_L)(\bar{\tau}_R\gamma_\mu e_R) & \text{R} \\ & \text{CVIR_mumucd} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu \tau_L)(\bar{\tau}_R\gamma_\mu e_R) & \text{R} \\ & \text{CVIR_mumucd} & \frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\gamma^\mu \mu_L)(\bar{\tau}_R\gamma_\mu e_R) & \text{R} \\ & \text{CVIR_mumucd} & \frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\gamma^\mu \mu_L)(\bar{\tau}_R\gamma_\mu e_R) & \text{R} \\ & \text{CVIR_mumucd} & \frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\gamma^\mu \mu_L)(\bar{\tau}_R\gamma_\mu e_R) & \text{R} \\ & \text{CVIR_mumucd} & \frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\gamma^\mu \mu_L)(\bar{\tau}_R\gamma_\mu e_R) & \text{R} \\ & \text{CVIR_mumucd} & \frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\gamma^\mu \mu_L)(\bar{\tau}_R\gamma_\mu e_R) & \text{R} \\ & \text{CVIR_mumucd} & \frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\gamma^\mu \mu_L)(\bar{\tau}_R\gamma_\mu e_R) & \text{R} \\ & \text{CVIR_mumudd} & \frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\gamma^\mu \mu_L)(\bar{\tau}_R\gamma_\mu e_R) & \text{R} \\ & \text{CVIR_mumudd} & \frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\gamma^\mu \mu_L)(\bar{\tau}_R\gamma_\mu e_R) & \text{R} \\ & \frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\gamma^\mu e_L)(\bar{\tau}_R\gamma_\mu e_R) & \text{R} \\ & \frac{4G_F}{\sqrt{2}}(\bar$	CVLR_cctautau	$rac{4ar{G}_F}{\sqrt{2}}(ar{c}_L\gamma^\mu c_L)(ar{ au}_R\gamma_\mu au_R)$	R
$\begin{array}{c} \text{CVLR_ddtautau} & \frac{4 \widetilde{G}_F}{\sqrt{2}} (\bar{d}_L \gamma^\mu d_L) (\bar{\tau}_R \gamma_\mu \tau_R) & \text{R} \\ \text{CVLR_eecc} & \frac{4 G_F}{\sqrt{2}} (\bar{e}_L \gamma^\mu e_L) (\bar{c}_R \gamma_\mu c_R) & \text{R} \\ \text{CVLR_eedd} & \frac{4 G_F}{\sqrt{2}} (\bar{e}_L \gamma^\mu e_L) (\bar{d}_R \gamma_\mu d_R) & \text{R} \\ \text{CVLR_eeee} & \frac{4 G_F}{\sqrt{2}} (\bar{e}_L \gamma^\mu e_L) (\bar{e}_R \gamma_\mu e_R) & \text{R} \\ \text{CVLR_eemumu} & \frac{4 G_F}{\sqrt{2}} (\bar{e}_L \gamma^\mu e_L) (\bar{\mu}_R \gamma_\mu \mu_R) & \text{R} \\ \text{CVLR_eess} & \frac{4 G_F}{\sqrt{2}} (\bar{e}_L \gamma^\mu e_L) (\bar{s}_R \gamma_\mu s_R) & \text{R} \\ \text{CVLR_eetautau} & \frac{4 G_F}{\sqrt{2}} (\bar{e}_L \gamma^\mu e_L) (\bar{\tau}_R \gamma_\mu r_R) & \text{R} \\ \text{CVLR_eeuu} & \frac{4 G_F}{\sqrt{2}} (\bar{e}_L \gamma^\mu e_L) (\bar{\tau}_R \gamma_\mu u_R) & \text{R} \\ \text{CVLR_emumue} & \frac{4 G_F}{\sqrt{2}} (\bar{e}_L \gamma^\mu \mu_L) (\bar{\mu}_R \gamma_\mu e_R) & \text{C} \\ \text{CVLR_etautaue} & \frac{4 G_F}{\sqrt{2}} (\bar{e}_L \gamma^\mu \tau_L) (\bar{\tau}_R \gamma_\mu e_R) & \text{C} \\ \text{CVLR_mumucc} & \frac{4 G_F}{\sqrt{2}} (\bar{e}_L \gamma^\mu \tau_L) (\bar{\tau}_R \gamma_\mu e_R) & \text{R} \\ \text{CVLR_mumucc} & \frac{4 G_F}{\sqrt{2}} (\bar{e}_L \gamma^\mu \tau_L) (\bar{\tau}_R \gamma_\mu e_R) & \text{R} \\ \text{CVIR_mumucc} & \frac{4 G_F}{\sqrt{2}} (\bar{\mu}_L \gamma^\mu \mu_L) (\bar{\sigma}_R \gamma_\mu e_R) & \text{R} \\ \text{CVIR_mumucc} & \frac{4 G_F}{\sqrt{2}} (\bar{\mu}_L \gamma^\mu \mu_L) (\bar{\sigma}_R \gamma_\mu e_R) & \text{R} \\ \text{CVIR_mumucc} & \frac{4 G_F}{\sqrt{2}} (\bar{\mu}_L \gamma^\mu \mu_L) (\bar{\sigma}_R \gamma_\mu e_R) & \text{R} \\ \text{CVIR_mumucc} & \frac{4 G_F}{\sqrt{2}} (\bar{\mu}_L \gamma^\mu \mu_L) (\bar{\sigma}_R \gamma_\mu e_R) & \text{R} \\ \text{CVIR_mumucc} & \frac{4 G_F}{\sqrt{2}} (\bar{\mu}_L \gamma^\mu \mu_L) (\bar{\sigma}_R \gamma_\mu e_R) & \text{R} \\ \text{CVIR_mumucc} & \frac{4 G_F}{\sqrt{2}} (\bar{\mu}_L \gamma^\mu \mu_L) (\bar{\sigma}_R \gamma_\mu e_R) & \text{R} \\ \text{CVIR_mumucc} & \frac{4 G_F}{\sqrt{2}} (\bar{\mu}_L \gamma^\mu \mu_L) (\bar{\sigma}_R \gamma_\mu e_R) & \text{R} \\ \text{CVIR_mumucc} & \frac{4 G_F}{\sqrt{2}} (\bar{\mu}_L \gamma^\mu \mu_L) (\bar{\sigma}_R \gamma_\mu e_R) & \text{R} \\ \text{CVIR_mumucc} & \frac{4 G_F}{\sqrt{2}} (\bar{\mu}_L \gamma^\mu \mu_L) (\bar{\sigma}_R \gamma_\mu e_R) & \text{R} \\ \text{CVIR_mumucc} & \frac{4 G_F}{\sqrt{2}} (\bar{\mu}_L \gamma^\mu \mu_L) (\bar{\sigma}_R \gamma_\mu e_R) & \text{R} \\ \text{CVIR_mumucc} & \frac{4 G_F}{\sqrt{2}} (\bar{\mu}_L \gamma^\mu \mu_L) (\bar{\sigma}_R \gamma_\mu e_R) & \text{R} \\ \text{CVIR_mumucc} & \frac{4 G_F}{\sqrt{2}} (\bar{\mu}_L \gamma^\mu \mu_L) (\bar{\sigma}_R \gamma_\mu e_R) & \text{R} \\ \text{CVIR_mumucc} & \frac{4 G_F}{\sqrt{2}} (\bar{\mu}_L \gamma^\mu \mu_L) (\bar{\sigma}_R \gamma_\mu e_R) & \text{R} \\ \text{CVIR_mumucc} & \frac{4 G_F}{\sqrt{2}} (\bar{\mu}_L \gamma^\mu \mu_L) (\bar{\sigma}_R \gamma_\mu e_R) & \text{R} \\ \text{CVIR_mumucc} & \frac{4 G_F}{\sqrt{2}} (\bar{\mu}_L \gamma^\mu \mu_L) (\bar{\sigma}_R \gamma_\mu e_R) & \text{R} \\ \text{CVIR_mumucc} $	CVLR_ddee	$\frac{4G_F}{\sqrt{2}}(\bar{d}_L\gamma^\mu d_L)(\bar{e}_R\gamma_\mu e_R)$	R
$\begin{array}{c} \text{CVLR_eecc} & \frac{4G_F^C}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{c}_R\gamma_\mu c_R) & \text{R} \\ \text{CVLR_eedd} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{d}_R\gamma_\mu d_R) & \text{R} \\ \text{CVLR_eeee} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{e}_R\gamma_\mu e_R) & \text{R} \\ \text{CVLR_eemumu} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{\mu}_R\gamma_\mu \mu_R) & \text{R} \\ \text{CVLR_eess} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{s}_R\gamma_\mu s_R) & \text{R} \\ \text{CVLR_eetautau} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{\tau}_R\gamma_\mu \tau_R) & \text{R} \\ \text{CVLR_eeuu} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{u}_R\gamma_\mu u_R) & \text{R} \\ \text{CVLR_emumue} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{\mu}_R\gamma_\mu e_R) & \text{C} \\ \text{CVLR_etautaue} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu \tau_L)(\bar{\tau}_R\gamma_\mu e_R) & \text{C} \\ \text{CVLR_mumucc} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu \tau_L)(\bar{\tau}_R\gamma_\mu e_R) & \text{R} \\ \text{CVLR_mumucc} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu \tau_L)(\bar{\tau}_R\gamma_\mu e_R) & \text{R} \\ \text{CVIR_mumucc} & \frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\gamma^\mu \mu_L)(\bar{\sigma}_R\gamma_\mu e_R) & \text{R} \\ CVIR_mumucc$	CVLR_ddmumu	$rac{4G_F}{\sqrt{2}}(ar{d}_L\gamma^\mu d_L)(ar{\mu}_R\gamma_\mu\mu_R)$	R
$\begin{array}{c} \text{CVLR_eedd} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{d}_R\gamma_\mu d_R) & \text{R} \\ \text{CVLR_eeee} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{e}_R\gamma_\mu e_R) & \text{R} \\ \text{CVLR_eemumu} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{\mu}_R\gamma_\mu \mu_R) & \text{R} \\ \text{CVLR_eess} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{s}_R\gamma_\mu s_R) & \text{R} \\ \text{CVLR_eetautau} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{\tau}_R\gamma_\mu \tau_R) & \text{R} \\ \text{CVLR_eeuu} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{\tau}_R\gamma_\mu u_R) & \text{R} \\ \text{CVLR_emumue} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{\mu}_R\gamma_\mu u_R) & \text{R} \\ \text{CVLR_etautaue} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu \mu_L)(\bar{\mu}_R\gamma_\mu e_R) & \text{C} \\ \text{CVLR_etautaue} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu \tau_L)(\bar{\tau}_R\gamma_\mu e_R) & \text{C} \\ \text{CVLR_mumucc} & \frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\gamma^\mu \mu_L)(\bar{c}_R\gamma_\mu e_R) & \text{R} \\ \text{CVIR_mumucc} & \frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\gamma^\mu \mu_L)(\bar{d}_R\gamma_\mu e_R) & \text{R} \\ \text{CVIR_mumudd} & \frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\gamma^\mu \mu_L)(\bar{d}_R\gamma_\mu d_R) & \text{R} \\ \text{CVIR_mumudd} & \frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\gamma^\mu \mu_L)(\bar{d}_R\gamma_\mu d_R) & \text{R} \\ \end{array}$	CVLR_ddtautau	$rac{4ar{G}_F}{\sqrt{2}}(ar{d}_L\gamma^\mu d_L)(ar{ au}_R\gamma_\mu au_R)$	R
$\begin{array}{lll} \text{CVLR_eeee} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{e}_R\gamma_\mu e_R) & \text{R} \\ \text{CVLR_eemumu} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{\mu}_R\gamma_\mu \mu_R) & \text{R} \\ \text{CVLR_eess} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{s}_R\gamma_\mu s_R) & \text{R} \\ \text{CVLR_eetautau} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{\tau}_R\gamma_\mu \tau_R) & \text{R} \\ \text{CVLR_eeuu} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{u}_R\gamma_\mu u_R) & \text{R} \\ \text{CVLR_emumue} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu \mu_L)(\bar{\mu}_R\gamma_\mu e_R) & \text{C} \\ \text{CVLR_etautaue} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu \tau_L)(\bar{\tau}_R\gamma_\mu e_R) & \text{C} \\ \text{CVLR_mumucc} & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu \tau_L)(\bar{\tau}_R\gamma_\mu e_R) & \text{R} \\ \text{CVLR_mumucc} & \frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\gamma^\mu \mu_L)(\bar{c}_R\gamma_\mu e_R) & \text{R} \\ \text{CVIR_mumucc} & \frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\gamma^\mu \mu_L)(\bar{d}_R\gamma_\mu e_R) & \text{R} \\ \text{CVIR_mumucc} & \frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\gamma^\mu \mu_L)(\bar{d}_R\gamma_\mu e_R) & \text{R} \\ \end{array}$	CVLR_eecc	$rac{4ar{G}_F}{\sqrt{2}}(ar{e}_L\gamma^\mu e_L)(ar{c}_R\gamma_\mu c_R)$	R
$\begin{array}{lll} & & & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{\mu}_R\gamma_\mu\mu_R) & & & & \\ \text{CVLR_eess} & & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{s}_R\gamma_\mu s_R) & & & & \\ \text{CVLR_eetautau} & & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{\tau}_R\gamma_\mu\tau_R) & & & & \\ \text{CVLR_eeuu} & & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{u}_R\gamma_\mu u_R) & & & & \\ \text{CVLR_emumue} & & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{\mu}_R\gamma_\mu e_R) & & & \\ \text{CVLR_etautaue} & & & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu\tau_L)(\bar{\tau}_R\gamma_\mu e_R) & & & \\ \text{CVLR_mumucc} & & & & \frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu\tau_L)(\bar{\tau}_R\gamma_\mu e_R) & & \\ \text{CVLR_mumucc} & & & & & \\ \text{CVLR_mumucc} & & & & & \\ \text{CVLR_mumudd} & & \\$	CVLR_eedd	$\frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^{\mu}e_L)(\bar{d}_R\gamma_{\mu}d_R)$	R
$\begin{array}{lll} \text{CVLR_eess} & \frac{4G_F^c}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{s}_R\gamma_\mu s_R) & \text{R} \\ \text{CVLR_eetautau} & \frac{4G_F^c}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{\tau}_R\gamma_\mu \tau_R) & \text{R} \\ \text{CVLR_eeuu} & \frac{4G_F^c}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{u}_R\gamma_\mu u_R) & \text{R} \\ \text{CVLR_emumue} & \frac{4G_F^c}{\sqrt{2}}(\bar{e}_L\gamma^\mu \mu_L)(\bar{\mu}_R\gamma_\mu e_R) & \text{C} \\ \text{CVLR_etautaue} & \frac{4G_F^c}{\sqrt{2}}(\bar{e}_L\gamma^\mu \tau_L)(\bar{\tau}_R\gamma_\mu e_R) & \text{C} \\ \text{CVLR_mumucc} & \frac{4G_F^c}{\sqrt{2}}(\bar{\mu}_L\gamma^\mu \mu_L)(\bar{c}_R\gamma_\mu e_R) & \text{R} \\ \text{CVLR_mumucc} & \frac{4G_F^c}{\sqrt{2}}(\bar{\mu}_L\gamma^\mu \mu_L)(\bar{d}_R\gamma_\mu d_R) & \text{R} \\ \text{CVLR_mumudd} & \frac{4G_F^c}{\sqrt{2}}(\bar{\mu}_L\gamma^\mu \mu_L)(\bar{d}_R\gamma_\mu d_R) & \text{R} \\ \end{array}$	CVLR_eeee	$\frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^{\mu}e_L)(\bar{e}_R\gamma_{\mu}e_R)$	R
CVLR_eetautau $\frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{\tau}_R\gamma_\mu\tau_R) \qquad \qquad R$ CVLR_eeuu $\frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{u}_R\gamma_\mu u_R) \qquad \qquad R$ CVLR_emumue $\frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu \mu_L)(\bar{\mu}_R\gamma_\mu e_R) \qquad \qquad C$ CVLR_etautaue $\frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu \tau_L)(\bar{\tau}_R\gamma_\mu e_R) \qquad \qquad C$ CVLR_mumucc $\frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\gamma^\mu \mu_L)(\bar{c}_R\gamma_\mu e_R) \qquad \qquad R$ CVLR_mumudd $\frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\gamma^\mu \mu_L)(\bar{d}_R\gamma_\mu e_R) \qquad \qquad R$	CVLR_eemumu	$\frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^{\mu}e_L)(\bar{\mu}_R\gamma_{\mu}\mu_R)$	R
CVLR_eeuu $\frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu e_L)(\bar{u}_R\gamma_\mu u_R) \qquad \qquad R$ CVLR_emumue $\frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu \mu_L)(\bar{\mu}_R\gamma_\mu e_R) \qquad \qquad C$ CVLR_etautaue $\frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu \tau_L)(\bar{\tau}_R\gamma_\mu e_R) \qquad \qquad C$ CVLR_mumucc $\frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\gamma^\mu \mu_L)(\bar{c}_R\gamma_\mu e_R) \qquad \qquad R$ CVLR_mumudd $\frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\gamma^\mu \mu_L)(\bar{d}_R\gamma_\mu e_R) \qquad \qquad R$	CVLR_eess	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{e}_L\gamma^{\mu}e_L)(\bar{s}_R\gamma_{\mu}s_R)$	R
CVLR_emumue $\frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu\mu_L)(\bar{\mu}_R\gamma_\mu e_R) \qquad \qquad C$ CVLR_etautaue $\frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu\tau_L)(\bar{\tau}_R\gamma_\mu e_R) \qquad \qquad C$ CVLR_mumucc $\frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\gamma^\mu\mu_L)(\bar{c}_R\gamma_\mu e_R) \qquad \qquad R$ CVLR_mumudd $\frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\gamma^\mu\mu_L)(\bar{d}_R\gamma_\mu d_R) \qquad \qquad R$	CVLR_eetautau	$\frac{4\check{G}_F}{\sqrt{2}}(\bar{e}_L\gamma^{\mu}e_L)(\bar{\tau}_R\gamma_{\mu}\tau_R)$	R
CVLR_etautaue $\frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu\tau_L)(\bar{\tau}_R\gamma_\mu e_R) \qquad \qquad C$ CVLR_mumucc $\frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\gamma^\mu\mu_L)(\bar{c}_R\gamma_\mu e_R) \qquad \qquad R$ CVLR_mumudd $\frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\gamma^\mu\mu_L)(\bar{d}_R\gamma_\mu e_R) \qquad \qquad R$	CVLR_eeuu	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{e}_L\gamma^{\mu}e_L)(\bar{u}_R\gamma_{\mu}u_R)$	R
CVLR_mumucc $\frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\gamma^{\mu}\mu_L)(\bar{c}_R\gamma_{\mu}c_R)$ R $\frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\gamma^{\mu}\mu_L)(\bar{d}_R\gamma_{\mu}d_R)$ R	CVLR_emumue	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu\mu_L)(\bar{\mu}_R\gamma_\mu e_R)$	$^{\mathrm{C}}$
CVI R mumudd $\frac{4G_F}{4G_F}(\bar{\mu}_L \gamma^{\mu} \mu_L)(\bar{d}_D \gamma d_D)$ R	CVLR_etautaue	$\frac{4G_F}{\sqrt{2}}(\bar{e}_L\gamma^\mu au_L)(\bar{\tau}_R\gamma_\mu e_R)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	CVLR_mumucc	$\frac{4\ddot{G_F}}{\sqrt{2}}(\bar{\mu}_L\gamma^\mu\mu_L)(\bar{c}_R\gamma_\mu c_R)$	R
$\begin{array}{lll} \text{CVLR_mumuee} & \frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\gamma^\mu\mu_L)(\bar{e}_R\gamma_\mu e_R) & \text{R} \\ \text{CVLR_mumumumu} & \frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\gamma^\mu\mu_L)(\bar{\mu}_R\gamma_\mu\mu_R) & \text{R} \\ \text{CVLR_mumuss} & \frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\gamma^\mu\mu_L)(\bar{s}_R\gamma_\mu s_R) & \text{R} \\ \text{CVLR_mumutautau} & \frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\gamma^\mu\mu_L)(\bar{\tau}_R\gamma_\mu \tau_R) & \text{R} \\ \text{CVLR_mumuuu} & \frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\gamma^\mu\mu_L)(\bar{\tau}_R\gamma_\mu u_R) & \text{R} \\ \text{CVLR_mutautaumu} & \frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\gamma^\mu\tau_L)(\bar{\tau}_R\gamma_\mu\mu_R) & \text{C} \\ \text{CVLR_ssee} & \frac{4G_F}{\sqrt{2}}(\bar{s}_L\gamma^\mu s_L)(\bar{e}_R\gamma_\mu e_R) & \text{R} \\ \end{array}$	CVLR_mumudd	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{\mu}_L\gamma^\mu\mu_L)(\bar{d}_R\gamma_\mu d_R)$	R
$\begin{array}{lll} \text{CVLR_mumumum} & \frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\gamma^\mu\mu_L)(\bar{\mu}_R\gamma_\mu\mu_R) & \text{R} \\ \text{CVLR_mumuss} & \frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\gamma^\mu\mu_L)(\bar{s}_R\gamma_\mu s_R) & \text{R} \\ \text{CVLR_mumutautau} & \frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\gamma^\mu\mu_L)(\bar{\tau}_R\gamma_\mu \tau_R) & \text{R} \\ \text{CVLR_mumuuu} & \frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\gamma^\mu\mu_L)(\bar{u}_R\gamma_\mu u_R) & \text{R} \\ \text{CVLR_mutautaumu} & \frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\gamma^\mu\tau_L)(\bar{\tau}_R\gamma_\mu\mu_R) & \text{C} \\ \text{CVLR_ssee} & \frac{4G_F}{\sqrt{2}}(\bar{s}_L\gamma^\mu s_L)(\bar{e}_R\gamma_\mu e_R) & \text{R} \\ \end{array}$	CVLR_mumuee	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{\mu}_L\gamma^\mu\mu_L)(\bar{e}_R\gamma_\mu e_R)$	R
$\begin{array}{cccc} \text{CVLR_mumuss} & \frac{4\widetilde{G}_F}{\sqrt{2}}(\bar{\mu}_L\gamma^\mu\mu_L)(\bar{s}_R\gamma_\mu s_R) & \text{R} \\ \text{CVLR_mumutautau} & \frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\gamma^\mu\mu_L)(\bar{\tau}_R\gamma_\mu\tau_R) & \text{R} \\ \text{CVLR_mumuuu} & \frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\gamma^\mu\mu_L)(\bar{u}_R\gamma_\mu u_R) & \text{R} \\ \text{CVLR_mutautaumu} & \frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\gamma^\mu\tau_L)(\bar{\tau}_R\gamma_\mu\mu_R) & \text{C} \\ \text{CVLR_ssee} & \frac{4G_F}{\sqrt{2}}(\bar{s}_L\gamma^\mu s_L)(\bar{e}_R\gamma_\mu e_R) & \text{R} \\ \end{array}$	CVLR_mumumumu	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{\mu}_L\gamma^\mu\mu_L)(\bar{\mu}_R\gamma_\mu\mu_R)$	R
$\begin{array}{ll} \text{CVLR_mumutautau} & \frac{4 \overleftarrow{G}_F}{\sqrt{2}} (\bar{\mu}_L \gamma^\mu \mu_L) (\bar{\tau}_R \gamma_\mu \tau_R) & \text{R} \\ \text{CVLR_mumuuu} & \frac{4 \overleftarrow{G}_F}{\sqrt{2}} (\bar{\mu}_L \gamma^\mu \mu_L) (\bar{u}_R \gamma_\mu u_R) & \text{R} \\ \text{CVLR_mutautaumu} & \frac{4 \overleftarrow{G}_F}{\sqrt{2}} (\bar{\mu}_L \gamma^\mu \tau_L) (\bar{\tau}_R \gamma_\mu \mu_R) & \text{C} \\ \text{CVLR_ssee} & \frac{4 \overleftarrow{G}_F}{\sqrt{2}} (\bar{s}_L \gamma^\mu s_L) (\bar{e}_R \gamma_\mu e_R) & \text{R} \\ \end{array}$	CVLR_mumuss	$\frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\gamma^\mu\mu_L)(\bar{s}_R\gamma_\mu s_R)$	R
CVLR_mumuuu $\frac{4\ddot{G}_F}{\sqrt{2}}(\bar{\mu}_L\gamma^\mu\mu_L)(\bar{u}_R\gamma_\mu u_R) \qquad \qquad R$ CVLR_mutautaumu $\frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\gamma^\mu\tau_L)(\bar{\tau}_R\gamma_\mu\mu_R) \qquad \qquad C$ CVLR_ssee $\frac{4G_F}{\sqrt{2}}(\bar{s}_L\gamma^\mu s_L)(\bar{e}_R\gamma_\mu e_R) \qquad \qquad R$	CVLR_mumutautau	$\frac{4G_F}{\sqrt{2}}(\bar{\mu}_L\gamma^\mu\mu_L)(\bar{\tau}_R\gamma_\mu\tau_R)$	R
CVLR_mutautaumu $\frac{4\ddot{G}_{F}^{*}}{\sqrt{2}}(\bar{\mu}_{L}\gamma^{\mu}\tau_{L})(\bar{\tau}_{R}\gamma_{\mu}\mu_{R})$ C CVLR_ssee $\frac{4\ddot{G}_{F}^{*}}{\sqrt{2}}(\bar{s}_{L}\gamma^{\mu}s_{L})(\bar{e}_{R}\gamma_{\mu}e_{R})$ R	CVLR_mumuuu	$\frac{4\ddot{G_F}}{\sqrt{2}}(\bar{\mu}_L\gamma^\mu\mu_L)(\bar{u}_R\gamma_\mu u_R)$	R
CVLR_ssee $\frac{4 \tilde{G}_F}{\sqrt{2}} (\bar{s}_L \gamma^\mu s_L) (\bar{e}_R \gamma_\mu e_R)$ R	CVLR_mutautaumu	$\frac{4\overleftarrow{\mathcal{G}_F}}{\sqrt{2}}(\bar{\mu}_L\gamma^\mu au_L)(\bar{ au}_R\gamma_\mu\mu_R)$	\mathbf{C}
	CVLR_ssee	$\frac{4\breve{G}_F}{\sqrt{2}}(\bar{s}_L\gamma^{\mu}s_L)(\bar{e}_R\gamma_{\mu}e_R)$	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	$\frac{4\widetilde{G}_F}{\sqrt{2}}(\bar{s}_L\gamma^{\mu}s_L)(\bar{\tau}_R\gamma_{\mu}\tau_R)$	R
CVLR_tautaucc	$\frac{4 \overleftarrow{G_F}}{\sqrt{2}} (\bar{\tau}_L \gamma^\mu \tau_L) (\bar{c}_R \gamma_\mu c_R)$	R
CVLR_tautaudd	$\frac{4\check{G}_F}{\sqrt{2}}(\bar{\tau}_L\gamma^\mu\tau_L)(\bar{d}_R\gamma_\mu d_R)$	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	$\frac{4G_F}{\sqrt{2}}(\bar{\tau}_L\gamma^\mu\tau_L)(\bar{\mu}_R\gamma_\mu\mu_R)$	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	$-\frac{4G_F}{\sqrt{2}}(ar{ au}_L\gamma^\mu au_L)(ar{ au}_R\gamma_\mu au_R)$	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	$\frac{4G_F}{\sqrt{2}}(\bar{c}_R\gamma^\mu c_R)(\bar{c}_R\gamma_\mu c_R)$	R
CVRR_dddd	$\frac{4G_F}{\sqrt{2}}(\bar{d}_R\gamma^\mu d_R)(\bar{d}_R\gamma_\mu d_R)$	R
CVRR_ddss	$\frac{4G_F}{\sqrt{2}}(\bar{d}_R\gamma^\mu d_R)(\bar{s}_R\gamma_\mu s_R)$	R
CVRR_dssd	$\frac{4G_F}{\sqrt{2}}(\bar{d}_R\gamma^\mu s_R)(\bar{s}_R\gamma_\mu d_R)$	R
CVRR_eecc	$\frac{4G_F}{\sqrt{2}}(\bar{e}_R\gamma^\mu e_R)(\bar{c}_R\gamma_\mu c_R)$	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	$\frac{4G_F}{\sqrt{2}}(\bar{e}_R\gamma^{\mu}e_R)(\bar{s}_R\gamma_{\mu}s_R)$	R
CVRR_eetautau	$\frac{4G_F}{\sqrt{2}}(\bar{e}_R\gamma^{\mu}e_R)(\bar{\tau}_R\gamma_{\mu}\tau_R)$	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	$rac{4G_F}{\sqrt{2}}(ar{\mu}_R\gamma^\mu\mu_R)(ar{ au}_R\gamma_\mu au_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	$rac{4G_F}{\sqrt{2}}(ar{ au}_R\gamma^\mu au_R)(ar{c}_R\gamma_\mu c_R)$	R
CVRR_tautaudd	$rac{4G_F}{\sqrt{2}}(ar{ au}_R\gamma^\mu au_R)(ar{d}_R\gamma_\mu d_R)$	R
CVRR_tautauss	$\frac{4G_F}{\sqrt{2}}(\bar{ au}_R\gamma^\mu au_R)(\bar{s}_R\gamma_\mu s_R)$	R
CVRR_tautautautau	$-rac{4G_F}{\sqrt{2}}(ar au_R\gamma^\mu au_R)(ar au_R\gamma_\mu au_R)$	R
CVRR_tautauuu	$\frac{4G_F}{\sqrt{2}}(ar{ au}_R\gamma^\mu au_R)(ar{u}_R\gamma_\mu u_R)$	R
CVRR_uccu	$\frac{4G_F}{\sqrt{2}}(ar{u}_R\gamma^\mu c_R)(ar{c}_R\gamma_\mu u_R)$	R
CVRR_uucc	$\frac{\sqrt{\hat{z}}}{\sqrt{\hat{z}}}(s_R\gamma^{\mu}s_R)(s_R\gamma_{\mu}s_R) \\ \frac{4G_F}{\sqrt{\hat{z}}}(\bar{\tau}_R\gamma^{\mu}\tau_R)(\bar{c}_R\gamma_{\mu}c_R) \\ \frac{4G_F}{\sqrt{\hat{z}}}(\bar{\tau}_R\gamma^{\mu}\tau_R)(\bar{d}_R\gamma_{\mu}d_R) \\ \frac{4G_F}{\sqrt{\hat{z}}}(\bar{\tau}_R\gamma^{\mu}\tau_R)(\bar{s}_R\gamma_{\mu}s_R) \\ \cdot \frac{4G_F}{\sqrt{\hat{z}}}(\bar{\tau}_R\gamma^{\mu}\tau_R)(\bar{\tau}_R\gamma_{\mu}\tau_R) \\ \frac{4G_F}{\sqrt{\hat{z}}}(\bar{\tau}_R\gamma^{\mu}\tau_R)(\bar{u}_R\gamma_{\mu}u_R) \\ \frac{4G_F}{\sqrt{\hat{z}}}(\bar{u}_R\gamma^{\mu}c_R)(\bar{c}_R\gamma_{\mu}u_R) \\ \frac{4G_F}{\sqrt{\hat{z}}}(\bar{u}_R\gamma^{\mu}u_R)(\bar{c}_R\gamma_{\mu}c_R) \\ \cdot \frac{4G_F}{\sqrt{\hat{z}}}(\bar{u}_R\gamma^{\mu}u_R)(\bar{c}_R\gamma_{\mu}c$	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	$\bar{e}_L \sigma^{\mu u} \mu_R F_{\mu u}$	C
Cgamma_emu	$ar{\mu}_L \sigma^{\mu u} e_R \dot{F}_{\mu u}$	$^{\mathrm{C}}$
CVLL_eemue	$(ar{e}_L \gamma^\mu e_L)(\dot{ar{e}}_L \gamma_\mu \mu_L)$	$^{\mathrm{C}}$
CVLL_muemumu	$(ar{e}_L \gamma^\mu \mu_L) (ar{\mu}_L \gamma_\mu \mu_L)$	$^{\mathrm{C}}$
CVLL_muetautau	$(ar{e}_L\gamma^\mu\mu_L)(ar{ au}_L\gamma_\mu au_L)$	$^{\mathrm{C}}$
CVLL_mueuu	$(ar{e}_L \gamma^\mu \mu_L) (ar{u}_L \gamma_\mu u_L)$	$^{\mathrm{C}}$
CVLL_muecc	$(ar{e}_L \gamma^\mu \mu_L) (ar{c}_L \gamma_\mu c_L)$	$^{\mathrm{C}}$
CVLL_muedd	$(ar{e}_L \gamma^\mu \mu_L) (ar{d}_L \gamma_\mu d_L)$	$^{\mathrm{C}}$
CVLL_muess	$(ar{e}_L \gamma^\mu \mu_L) (ar{s}_L \gamma_\mu s_L)$	$^{\mathrm{C}}$
CVRR_eemue	$(ar{e}_R\gamma^\mu e_R)(ar{e}_R\gamma_\mu\mu_R)$	$^{\mathrm{C}}$
CVRR_muemumu	$(ar{e}_R\gamma^\mu\mu_R)(ar{\mu}_R\gamma_\mu\mu_R)$	$^{\mathrm{C}}$
CVRR_muetautau	$(ar{e}_R\gamma^\mu\mu_R)(ar{ au}_R\gamma_\mu au_R)$	$^{\mathrm{C}}$
CVRR_mueuu	$(ar{e}_R\gamma^\mu\mu_R)(ar{u}_R\gamma_\mu u_R)$	$^{\mathrm{C}}$
CVRR_muecc	$(ar{e}_R\gamma^\mu\mu_R)(ar{c}_R\gamma_\mu c_R)$	$^{\mathrm{C}}$
CVRR_muedd	$(ar{e}_R \gamma^\mu \mu_R) (ar{d}_R \gamma_\mu d_R)$	$^{\mathrm{C}}$
CVRR_muess	$(ar{e}_R\gamma^\mu\mu_R)(ar{s}_R\gamma_\mu s_R)$	$^{\mathrm{C}}$
CVLR_eemue	$(ar{e}_L \gamma^\mu e_L) (ar{e}_R \gamma_\mu \mu_R)$	$^{\mathrm{C}}$
CVLR_mueee	$(ar{e}_L \gamma^\mu \mu_L) (ar{e}_R \gamma_\mu e_R)$	$^{\mathrm{C}}$
CVLR_muemumu	$(ar{e}_L \gamma^\mu \mu_L) (ar{\mu}_R \gamma_\mu \mu_R)$	$^{\mathrm{C}}$
CVLR_muetautau	$(ar{e}_L \gamma^\mu \mu_L) (ar{ au}_R \gamma_\mu au_R)$	$^{\mathrm{C}}$
CVLR_tauemutau	$(ar{e}_L \gamma^\mu au_L) (ar{ au}_R \gamma_\mu \mu_R)$	\mathbf{C}
CVLR_mumumue	$(ar{\mu}_L \gamma^\mu \mu_L) (ar{e}_R \gamma_\mu \mu_R)$	$^{\mathrm{C}}$
CVLR_taumuetau	$(ar{\mu}_L \gamma^\mu au_L) (ar{ au}_R \gamma_\mu e_R)$	\mathbf{C}
CVLR_tautaumue	$(ar au_L\gamma^\mu au_L)(ar e_R\gamma_\mu\mu_R)$	$^{\mathrm{C}}$
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	$(ar{e}_L \gamma^\mu \mu_L) (d_R \gamma_\mu d_R)$	$^{\mathrm{C}}$
CVLR_muess	$(ar{e}_L \gamma^\mu \mu_L) (ar{s}_R \gamma_\mu s_R)$	$^{\mathrm{C}}$
CVLR_uumue	$(ar{u}_L \gamma^\mu u_L) (ar{e}_R \gamma_\mu \mu_R)$	\mathbf{C}
CVLR_ccmue	$(\bar{c}_L \gamma^\mu c_L)(\bar{e}_R \gamma_\mu \mu_R)$	\mathbf{C}
CVLR_ddmue	$(ar{d}_L \gamma^\mu d_L) (ar{e}_R \gamma_\mu \mu_R)$	$^{\mathrm{C}}$
CVLR_ssmue	$(ar{s}_L \gamma^\mu s_L) (ar{e}_R \gamma_\mu \mu_R)$	$^{\mathrm{C}}$
CSRL_mueuu	$(ar{e}_L\mu_R)(ar{u}_Ru_L)$	$^{\mathrm{C}}$
CSRL_muecc	$(ar{e}_L\mu_R)(ar{c}_Rc_L)$	$^{\mathrm{C}}$
CSRL_emuuu	$(ar{\mu}_L e_R)(ar{u}_R u_L)$	$^{\mathrm{C}}$
CSRL_emucc	$(ar{\mu}_L e_R)(ar{c}_R c_L)$	\mathbf{C}
CSRL_muedd	$(ar{e}_L\mu_R)(ar{d}_Rd_L)$	\mathbf{C}

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

${\tt mutau}$

WC name	Operator	Type
Cgamma_taumu	$ar{\mu}_L \sigma^{\mu u} au_R F_{\mu u}$	C
Cgamma_mutau	$ar{ au}_L \sigma^{\mu u} \mu_R F_{\mu u}$	\mathbf{C}
CVLL_eetaumu	$(ar{e}_L \gamma^\mu e_L)(\dot{ar{\mu}}_L \gamma_\mu au_L)$	\mathbf{C}
CVLL_mumutaumu	$(\bar{\mu}_L \gamma^\mu \mu_L)(\bar{\mu}_L \dot{\gamma}_\mu au_L)$	\mathbf{C}
CVLL_taumutautau	$(\bar{\mu}_L \gamma^\mu au_L)(\bar{ au}_L \gamma_\mu au_L)$	\mathbf{C}
CVLL_taumuuu	$(ar{\mu}_L \gamma^\mu au_L)(ar{u}_L \gamma_\mu u_L)$	\mathbf{C}
CVLL_taumucc	$(ar{\mu}_L \gamma^\mu au_L) (ar{c}_L \gamma_\mu c_L)$	\mathbf{C}
CVLL_taumudd	$(ar{\mu}_L \gamma^\mu au_L) (ar{d}_L \gamma_\mu d_L)$	\mathbf{C}
CVLL_taumuss	$(\bar{\mu}_L \gamma^\mu au_L)(\bar{s}_L \gamma_\mu s_L)$	$^{\mathrm{C}}$
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	$(\bar{\mu}_R \gamma^\mu \tau_R)(\bar{\tau}_R \gamma_\mu \tau_R)$	C
CVRR_taumuuu	$(\bar{\mu}_R \gamma^\mu au_R)(\bar{u}_R \gamma_\mu u_R)$	\mathbf{C}
CVRR_taumucc	$(ar{\mu}_R \gamma^\mu au_R) (ar{c}_R \gamma_\mu c_R)$	\mathbf{C}
CVRR_taumudd	$(ar{\mu}_R \gamma^\mu au_R) (d_R \gamma_\mu d_R)$	\mathbf{C}
CVRR_taumuss	$(\bar{\mu}_R \gamma^\mu au_R) (\bar{s}_R \gamma_\mu s_R)$	\mathbf{C}
CVLR_eetaumu	$(ar{e}_L \gamma^\mu e_L) (ar{\mu}_R \gamma_\mu au_R)$	\mathbf{C}
CVLR_mueetau	$(\bar{e}_L \gamma^\mu \mu_L)(\bar{\tau}_R \gamma_\mu e_R)$	\mathbf{C}
CVLR_taueemu	$(\bar{e}_L \gamma^\mu au_L)(\bar{\mu}_R \gamma_\mu e_R)$	$^{\mathrm{C}}$
CVLR_mumutaumu	$(\bar{\mu}_L \gamma^\mu \mu_L)(\bar{\mu}_R \gamma_\mu \tau_R)$	$^{\mathrm{C}}$
CVLR_taumuee	$(\bar{\mu}_L \gamma^\mu au_L)(\bar{e}_R \gamma_\mu e_R)$	\mathbf{C}
CVLR_taumumumu	$(\bar{\mu}_L \gamma^\mu au_L)(\bar{\mu}_R \gamma_\mu \mu_R)$	\mathbf{C}
CVLR_taumutautau	$(\bar{\mu}_L \gamma^\mu au_L)(\bar{ au}_R \gamma_\mu au_R)$	\mathbf{C}
CVLR_tautautaumu	$(\bar{ au}_L \gamma^\mu au_L)(\bar{\mu}_R \gamma_\mu au_R)$	$^{\mathrm{C}}$
CVLR_taumuuu	$(\bar{\mu}_L \gamma^\mu \tau_L)(\bar{u}_R \gamma_\mu u_R)$	$^{\mathrm{C}}$
CVLR_taumucc	$(\bar{\mu}_L \gamma^\mu au_L)(\bar{c}_R \gamma_\mu c_R)$	$^{\mathrm{C}}$
CVLR_taumudd	$(ar{\mu}_L \gamma^\mu au_L) (d_R \gamma_\mu d_R)$	\mathbf{C}
CVLR_taumuss	$(\bar{\mu}_L \gamma^\mu au_L)(\bar{s}_R \gamma_\mu s_R)$	\mathbf{C}
CVLR_uutaumu	$(\bar{u}_L \gamma^\mu u_L)(\bar{\mu}_R \gamma_\mu \tau_R)$	\mathbf{C}
CVLR_cctaumu	$(\bar{c}_L \gamma^\mu c_L)(\bar{\mu}_R \gamma_\mu \tau_R)$	\mathbf{C}
CVLR_ddtaumu	$(d_L \gamma^\mu d_L)(\bar{\mu}_R \gamma_\mu au_R)$	\mathbf{C}
CVLR_sstaumu	$(\bar{s}_L \gamma^\mu s_L)(\bar{\mu}_R \gamma_\mu au_R)$	\mathbf{C}
CSRL_taumuuu	$(\bar{\mu}_L au_R)(\bar{u}_R u_L)$	\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	$(ar{e}_L e_R)(ar{\mu}_L au_R)$	$^{\mathrm{C}}$
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	$(\bar{\mu}_L au_R)(\bar{c}_L c_R)$	\mathbf{C}
CSRR_mutauuu	$(ar{ au}_L \mu_R)(ar{u}_L u_R)$	C
CSRR_mutaucc	$(ar{ au}_L\mu_R)(ar{c}_Lc_R)$	\mathbf{C}
CTRR_taumuuu	$(\bar{\mu}_L \sigma^{\mu\nu} \tau_R) (\bar{u}_L \sigma_{\mu\nu} u_R)$	\mathbf{C}
CTRR_taumucc	$(\bar{\mu}_L \sigma^{\mu\nu} au_R) (\bar{c}_L \sigma_{\mu\nu} c_R)$	\mathbf{C}
CTRR_mutauuu	$(\bar{ au}_L \sigma^{\mu u} \mu_R)(\bar{u}_L \sigma_{\mu u} u_R)$	\mathbf{C}

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

WC name	Operator	Type
CVLR_cctaue	$(ar{c}_L \gamma^\mu c_L) (ar{e}_R \gamma_\mu au_R)$	C
CVLR_ddtaue	$(ar{d}_L \gamma^\mu d_L) (ar{e}_R \gamma_\mu au_R)$	$^{\mathrm{C}}$
CVLR_sstaue	$(\bar{s}_L \gamma^\mu s_L)(\bar{e}_R \gamma_\mu au_R)$	$^{\mathrm{C}}$
CSRL_taueuu	$(ar{e}_L au_R)(ar{u}_Ru_L)$	$^{\mathrm{C}}$
CSRL_tauecc	$(ar{e}_L au_R)(ar{c}_Rc_L)$	\mathbf{C}
CSRL_etauuu	$(ar{ au}_L e_R)(ar{u}_R u_L)$	\mathbf{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	$(ar{ au}_L e_R)(ar{d}_R d_L)$	$^{\mathrm{C}}$
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	$(ar{e}_L au_R)(ar{\mu}_L\mu_R)$	\mathbf{C}
CSRR_tauetautau	$(ar{e}_L au_R)(ar{ au}_L au_R)$	\mathbf{C}
CSRR_emumutau	$(ar{\mu}_L e_R)(ar{ au}_L \mu_R)$	\mathbf{C}
CSRR_mumuetau	$(ar{\mu}_L \mu_R)(ar{ au}_L e_R)$	\mathbf{C}
CSRR_etautautau	$(ar{ au}_L e_R)(ar{ au}_L au_R)$	\mathbf{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	$(ar{ au}_L e_R)(ar{u}_L u_R)$	\mathbf{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	$(\bar{e}_L \sigma^{\mu\nu} au_R) (\bar{c}_L \sigma_{\mu\nu} c_R)$	\mathbf{C}
CTRR_etauuu	$(\bar{\tau}_L \sigma^{\mu\nu} e_R)(\bar{u}_L \sigma_{\mu\nu} u_R)$	\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	$(\bar{e}_L au_R)(d_L d_R)$	\mathbf{C}
CSRR_tauess	$(ar{e}_L au_R)(ar{s}_Ls_R)$	\mathbf{C}
CSRR_etaudd	$(ar{ au}_L e_R)(ar{d}_L d_R)$	\mathbf{C}
CSRR_etauss	$(ar{ au}_L e_R)(ar{s}_L s_{R})$	\mathbf{C}
CTRR_tauedd	$(ar{e}_L\sigma^{\mu u} au_R)(ar{d}_L\sigma_{\mu u}d_R)$	\mathbf{C}
CTRR_tauess	$(ar{e}_L\sigma^{\mu u} au_R)(ar{s}_L\sigma_{\mu u}s_R)$	\mathbf{C}
CTRR_etaudd	$(ar{ au}_L \sigma^{\mu u} e_R) (ar{d}_L \sigma_{\mu u} d_R)$	\mathbf{C}
CTRR_etauss	$(\bar{ au}_L \sigma^{\mu u} e_R) (\bar{s}_L \sigma_{\mu u} s_R)$	\mathbf{C}

${\tt nunumue}$

WC name	Operator	Type
CVLL_nuenuemue	$(\bar{ u}_{eL}\gamma^{\mu} u_{eL})(\bar{e}_{L}\gamma_{\mu}\mu_{L})$	С
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	$(\bar{ u}_{\mu L} \gamma^{\mu} u_{\mu L}) (\bar{e}_L \gamma_{\mu} \mu_L)$	С
CVLL_nutaunueemu	$(\bar{ u}_{eL}\gamma^{\mu} u_{ au L})(\bar{\mu}_{L}\gamma_{\mu}e_{L})$	$^{\mathrm{C}}$
CVLL_nutaunuemue	$(ar{ u}_{eL}\gamma^{\mu} u_{ au L})(ar{e}_{L}\gamma_{\mu}\mu_{L})$	$^{\mathrm{C}}$
CVLL_nutaunumuem	$\mathrm{u}\left(ar{ u}_{\mu L}\gamma^{\mu} u_{ au L} ight)(ar{\mu}_{L}\gamma_{\mu}e_{L})$	$^{\mathrm{C}}$
CVLL_nutaunumumu	e $(ar{ u}_{\mu L} \gamma^{\mu} u_{ au L}) (ar{e}_L \gamma_{\mu} \mu_L)$	$^{\mathrm{C}}$
CVLL_nutaunutaum	$\mathbf{u} (\bar{\nu}_{\tau L} \gamma^{\mu} \nu_{\tau L}) (\bar{e}_L \gamma_{\mu} \mu_L)$	$^{\mathrm{C}}$
CVLR_nuenuemue	$(\bar{ u}_{eL}\gamma^{\mu} u_{eL})(\bar{e}_{R}\gamma_{\mu}\mu_{R})$	$^{\mathrm{C}}$
CVLR_numunueemu	$(\bar{ u}_{eL}\gamma^{\mu} u_{\mu L})(\bar{\mu}_{R}\gamma_{\mu}e_{R})$	$^{\mathrm{C}}$
CVLR_numunuemue	$(\bar{\nu}_{eL}\gamma^{\mu}\nu_{\mu L})(\bar{e}_R\gamma_{\mu}\mu_R)$	$^{\mathrm{C}}$
CVLR_numunumumue	$(\bar{ u}_{\mu L} \gamma^{\mu} u_{\mu L}) (\bar{e}_R \gamma_{\mu} \mu_R)$	$^{\mathrm{C}}$
CVLR_nutaunueemu	$(\bar{ u}_{eL}\gamma^{\mu} u_{ au L})(\bar{\mu}_{R}\gamma_{\mu}e_{R})$	\mathbf{C}
CVLR_nutaunuemue	$(\bar{ u}_{eL}\gamma^{\mu} u_{ au L})(\bar{e}_{R}\gamma_{\mu}\mu_{R})$	\mathbf{C}
CVLR_nutaunumuem	$\mathrm{u}\left(ar{ u}_{\mu L}\gamma^{\mu} u_{ au L} ight)(ar{\mu}_{R}\gamma_{\mu}e_{R})$	$^{\mathrm{C}}$
CVLR_nutaunumumu	e $(ar{ u}_{\mu L} \gamma^{\mu} u_{ au L}) (ar{e}_R \gamma_{\mu} \mu_R)$	$^{\mathrm{C}}$
	\mathbf{u} e $ar{ u}_{ au L} \gamma^{\mu} u_{ au L}) (ar{e}_R \gamma_{\mu} \mu_R)$	С

nunumutau

WC name	Operator	Type
CVLL_nuenuetaumu	$(\bar{ u}_{eL}\gamma^{\mu} u_{eL})(\bar{\mu}_{L}\gamma_{\mu} au_{L})$	C
CVLL_numunuemuta	au $(ar{ u}_{eL}\gamma^{\mu} u_{\mu L})(ar{ au}_{L}\gamma_{\mu}\mu_{L})$	$^{\mathrm{C}}$
CVLL_numunuetaum	nu $(ar{ u}_{eL}\gamma^{\mu} u_{\mu L})(ar{\mu}_{L}\gamma_{\mu} au_{L})$	$^{\mathrm{C}}$
CVLL_numunumutau	$\min(ar u_{\mu L}\gamma^\mu u_{\mu L})(ar\mu_L\gamma_\mu au_L)$	$^{\mathrm{C}}$
	$ au(ar{ u}_{eL}\gamma^{\mu} u_{ au L})(ar{ au}_{L}\gamma_{\mu}\mu_{L})$	$^{\mathrm{C}}$
CVLL_nutaunuetau	$\min(ar{ u}_{eL}\gamma^{\mu} u_{ au L})(ar{\mu}_{L}\gamma_{\mu} au_{L})$	$^{\mathrm{C}}$
CVLL_nutaunumumu	rta $ar{m{v}}_{\mu L}\gamma^{\mu} u_{ au L})(ar{ au}_L\gamma_{\mu}\mu_L)$	$^{\mathrm{C}}$
	$\min(ar{m{v}}_{\mu L}\gamma^{\mu} u_{ au L})(ar{\mu}_{L}\gamma_{\mu} au_{L})$	$^{\mathrm{C}}$
CVLL_nutaunutaut	$ au(ar{m}\mu_L\gamma^\mu u_{ au L})(ar{\mu}_L\gamma_\mu au_L)$	$^{\mathrm{C}}$
CVLR_nuenuetaumu	$(ar{ u}_{eL}\gamma^{\mu} u_{eL})(ar{\mu}_{R}\gamma_{\mu} au_{R})$	$^{\mathrm{C}}$
CVLR_numunuemuta	au $(ar{ u}_{eL}\gamma^{\mu} u_{\mu L})(ar{ au}_{R}\gamma_{\mu}\mu_{R})$	$^{\mathrm{C}}$
CVLR_numunuetaum	nu $(ar{ u}_{eL}\gamma^{\mu} u_{\mu L})(ar{\mu}_{R}\gamma_{\mu} au_{R})$	\mathbf{C}
CVLR_numunumutau	$\min(ar{ u}_{\mu L}\gamma^{\mu} u_{\mu L})(ar{\mu}_{R}\gamma_{\mu} au_{R})$	\mathbf{C}
	$ au(ar{ u}_{eL}\gamma^{\mu} u_{ au L})(ar{ au}_{R}\gamma_{\mu}\mu_{R})$	$^{\mathrm{C}}$
CVLR_nutaunuetau	$\min(ar{ u}_{eL}\gamma^{\mu} u_{ au L})(ar{\mu}_{R}\gamma_{\mu} au_{R})$	$^{\mathrm{C}}$
CVLR_nutaunumumu	ita $ar{m{v}}_{\mu L}\gamma^{\mu} u_{ au L})(ar{ au}_R\gamma_{\mu}\mu_R)$	\mathbf{C}
	$\min(ar{m{v}}_{\mu L}\gamma^{\mu} u_{ au L})(ar{\mu}_{R}\gamma_{\mu} au_{R})$	$^{\mathrm{C}}$
CVLR_nutaunutaut	$ au(ar{p}_{\mu_L}\gamma^{\mu} u_{ au_L})(ar{\mu}_R\gamma_{\mu} au_R)$	C

nunutaue

WC name	Operator	Type
CVLL_nuenuetaue	$(\bar{ u}_{eL}\gamma^{\mu} u_{eL})(\bar{e}_{L}\gamma_{\mu} au_{L})$	С
CVLL_numunueeta	u $(ar{ u}_{eL}\gamma^{\mu} u_{\mu L})(ar{ au}_{L}\gamma_{\mu}e_{L})$	$^{\mathrm{C}}$
CVLL_numunuetau	e $(ar u_{eL}\gamma^\mu u_{\mu L})(ar e_L\gamma_\mu au_L)$	$^{\mathrm{C}}$
CVLL_numunumuta	ue $(ar{ u}_{\mu L} \gamma^{\mu} u_{\mu L}) (ar{e}_L \gamma_{\mu} au_L)$	$^{\mathrm{C}}$
CVLL_nutaunueet	au $(ar{ u}_{eL}\gamma^{\mu} u_{ au L})(ar{ au}_{L}\gamma_{\mu}e_{L})$	$^{\mathrm{C}}$
CVLL_nutaunueta	ue $(ar{ u}_{eL}\gamma^{\mu} u_{ au L})(ar{e}_{L}\gamma_{\mu} au_{L})$	$^{\mathrm{C}}$
CVLL_nutaunumue	$ au(ar u_{\mu L}\gamma^\mu u_{ au L})(ar au_L\gamma_\mu e_L)$	$^{\mathrm{C}}$
	$\mathtt{au}(ar{ u}_{\mu L}\gamma^{\mu} u_{ au L})(ar{e}_{L}\gamma_{\mu} au_{L})$	$^{\mathrm{C}}$
CVLL_nutaunutau	$ au(ar{m{e}}_{ au L}\gamma^{\mu} u_{ au L})(ar{e}_{L}\gamma_{\mu} au_{L})$	$^{\mathrm{C}}$
CVLR_nuenuetaue	$(ar{ u}_{eL}\gamma^{\mu} u_{eL})(ar{e}_{R}\gamma_{\mu} au_{R})$	$^{\mathrm{C}}$
CVLR_numunueeta	u $(ar{ u}_{eL}\gamma^{\mu} u_{\mu L})(ar{ au}_{R}\gamma_{\mu}e_{R})$	$^{\mathrm{C}}$
CVLR_numunuetau	e $(ar{ u}_{eL}\gamma^{\mu} u_{\mu L})(ar{e}_{R}\gamma_{\mu} au_{R})$	$^{\mathrm{C}}$
CVLR_numunumuta	ue $(ar{ u}_{\mu L} \gamma^{\mu} u_{\mu L}) (ar{e}_R \gamma_{\mu} au_R)$	$^{\mathrm{C}}$
CVLR_nutaunueet	au $(ar{ u}_{eL}\gamma^{\mu} u_{ au L})(ar{ au}_{R}\gamma_{\mu}e_{R})$	$^{\mathrm{C}}$
CVLR_nutaunueta	ue $(ar u_{eL}\gamma^\mu u_{ au L})(ar e_R\gamma_\mu au_R)$	$^{\mathrm{C}}$
CVLR_nutaunumue	$ au(ar u_{\mu L}\gamma^\mu u_{ au L})(ar au_R\gamma_\mu e_R)$	$^{\mathrm{C}}$
	$\mathrm{au}(ar{ u}_{\mu L}\gamma^{\mu} u_{ au L})(ar{e}_R\gamma_{\mu} au_R)$	$^{\mathrm{C}}$
	$ auar{m{artheta}}_{ au L} \gamma^{\mu} u_{ au L}) (ar{e}_R \gamma_{\mu} au_R)$	$^{\mathrm{C}}$

${\tt ffnunu}$

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	$rac{4 ilde{G}_F}{\sqrt{2}}(ar{ u}_{eL}\gamma^\mu u_{eL})(ar{d}_L\gamma_\mu d_L)$	R
CVLL_nuenueee	$rac{4reve{G_F}}{\sqrt{2}}(ar{ u}_{eL}\gamma^{\mu} u_{eL})(ar{e}_L\gamma_{\mu}e_L)$	R
CVLL_nuenuemumu	$rac{4 ar{G_F}}{\sqrt{2}} (ar{ u}_{eL} \gamma^\mu u_{eL}) (ar{\mu}_L \gamma_\mu \mu_L)$	R
CVLL_nuenuess	$rac{4ar{G_F}}{\sqrt{2}}(ar{ u}_{eL}\gamma^{\mu} u_{eL})(ar{s}_L\gamma_{\mu}s_L)$	R
CVLL_nuenuetauta	u $rac{4ar{G_F}}{\sqrt{2}}(ar{ u}_{eL}\gamma^{\mu} u_{eL})(ar{ au}_{L}\gamma_{\mu} au_{L})$	R
CVLL_nuenueuu	$rac{4 \check{G_F}}{\sqrt{2}} (ar{ u}_{eL} \gamma^\mu u_{eL}) (ar{u}_L \gamma_\mu u_L)$	R
CVLL_nuenumucc	$rac{4ar{G_F}}{\sqrt{2}}(ar{ u}_{eL}\gamma^{\mu} u_{\mu L})(ar{c}_L\gamma_{\mu}c_L)$	$^{\mathrm{C}}$
CVLL_nuenumudd	$rac{4ar{G_F}}{\sqrt{2}}(ar{ u}_{eL}\gamma^{\mu} u_{\mu L})(ar{d}_L\gamma_{\mu}d_L)$	$^{\mathrm{C}}$
CVLL_nuenumuee	$rac{4G_F}{\sqrt{2}}(ar{ u}_{eL}\gamma^{\mu} u_{\mu L})(ar{e}_L\gamma_{\mu}e_L)$	$^{\mathrm{C}}$
CVLL_nuenumumumu	$rac{4 G_F}{\sqrt{2}} (ar{ u}_{eL} \gamma^\mu u_{\mu L}) (ar{\mu}_L \gamma_\mu \mu_L)$	\mathbf{C}
CVLL_nuenumuss	$\frac{4\tilde{G_F}}{\sqrt{2}}(\bar{\nu}_{eL}\gamma^{\mu}\nu_{\mu L})(\bar{s}_L\gamma_{\mu}s_L)$	\mathbf{C}
CVLL_nuenumutaut	\mathbf{C}	
CVLL_nuenumuuu	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{\nu}_{eL}\gamma^{\mu}\nu_{\mu L})(\bar{u}_L\gamma_{\mu}u_L)$	\mathbf{C}
CVLL_nuenutaucc	$\frac{4\tilde{G}_F}{\sqrt{2}}(ar{ u}_{eL}\gamma^\mu u_{ au L})(ar{c}_L\gamma_\mu c_L)$	\mathbf{C}
CVLL_nuenutaudd	$rac{4ar{G}_F}{\sqrt{2}}(ar{ u}_{eL}\gamma^\mu u_{ au L})(ar{d}_L\gamma_\mu d_L)$	\mathbf{C}
CVLL_nuenutauee	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{\nu}_{eL}\gamma^{\mu}\nu_{\tau L})(\bar{e}_L\gamma_{\mu}e_L)$	$^{\mathrm{C}}$

WC name	Operator	Type
CVLL_nuenutaumumu	$1 \frac{4G_F}{\sqrt{2}} (\bar{ u}_{eL} \gamma^\mu u_{\tau L}) (\bar{\mu}_L \gamma_\mu \mu_L)$	C
CVLL_nuenutauss	$\frac{4\check{G_F}}{\sqrt{2}}(\bar{ u}_{eL}\gamma^{\mu} u_{\tau L})(\bar{s}_L\gamma_{\mu}s_L)$	\mathbf{C}
CVLL_nuenutautaut	$\tan \frac{AG_F}{\sqrt{2}}(ar{ u}_{eL}\gamma^{\mu} u_{ au L})(ar{ au}_{L}\gamma_{\mu} au_{L})$	\mathbf{C}
CVLL_nuenutauuu	$\frac{4\check{G}_F}{\sqrt{2}}(\bar{\nu}_{eL}\gamma^{\mu}\nu_{\tau L})(\bar{u}_L\gamma_{\mu}u_L)$	\mathbf{C}
CVLL_numunumucc	$rac{4reve{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	$rac{4ar{G_F}}{\sqrt{2}}(ar{ u}_{\mu L}\gamma^{\mu} u_{\mu L})(ar{e}_L\gamma_{\mu}e_L)$	R
CVLL_numunumumumumumumumumumumumumumumumumum	4G- /- " \ \ /- \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	R
CVLL_numunumuss	$rac{4ar{G}_F}{\sqrt{2}}(ar{ u}_{\mu L}\gamma^\mu u_{\mu L})(ar{s}_L\gamma_\mu s_L)$	R
CVLL_numunumutaut	$ au_{ocup \sqrt{2}}^{4ar{G_F}}(ar{ u}_{\mu L}\gamma^{\mu} u_{\mu L})(ar{ au}_{L}\gamma_{\mu} au_{L})$	R
CVLL_numunumuuu	$\frac{4 \overleftarrow{G_F}}{\sqrt{2}} (\bar{ u}_{\mu L} \gamma^{\mu} u_{\mu L}) (\bar{u}_L \gamma_{\mu} u_L)$	R
CVLL_numunutaucc	$\frac{4 \overleftarrow{G_F}}{\sqrt{2}} (\bar{ u}_{\mu L} \gamma^\mu u_{\tau L}) (\bar{c}_L \gamma_\mu c_L)$	\mathbf{C}
${\tt CVLL_numunutaudd}$	$rac{4ar{G_F}}{\sqrt{2}}(ar{ u}_{\mu L}\gamma^{\mu} u_{ au L})(ar{d}_L\gamma_{\mu}d_L)$	\mathbf{C}
CVLL_numunutauee	$\frac{4\check{G}_F}{\sqrt{2}}(\bar{ u}_{\mu L}\gamma^{\mu} u_{\tau L})(\bar{e}_L\gamma_{\mu}e_L)$	\mathbf{C}
CVLL_numunutaumur	$\sinrac{4ar{G_F}}{\sqrt{2}}(ar{ u}_{\mu L}\gamma^{\mu} u_{ au L})(ar{\mu}_{L}\gamma_{\mu}\mu_{L})$	\mathbf{C}
${\tt CVLL_numunutauss}$	$\frac{4\check{G}_F}{\sqrt{2}}(ar{ u}_{\mu L}\gamma^\mu u_{ au L})(ar{s}_L\gamma_\mu s_L)$	\mathbf{C}
CVLL_numunutautau	it $\frac{4C_F}{N}(ar{ u}_{\mu L}\gamma^\mu u_{ au L})(ar{ au}_L\gamma_\mu au_L)$	\mathbf{C}
CVLL_numunutauuu	$\frac{4\check{G}_F}{\sqrt{2}}(\bar{ u}_{\mu L}\gamma^{\mu} u_{ au L})(\bar{u}_L\gamma_{\mu}u_L)$	\mathbf{C}
CVLL_nutaunutauco	$pprox rac{4ar{G_F}}{\sqrt{2}}(ar{ u}_{ au L}\gamma^{\mu} u_{ au L})(ar{c}_L\gamma_{\mu}c_L)$	R
CVLL_nutaunutaudo	${ m d}rac{4ar{G_F}}{\sqrt{2}}(ar{ u}_{ au L}\gamma^{\mu} u_{ au L})(ar{d}_L\gamma_{\mu}d_L)$	R
CVLL_nutaunutaue	$=rac{4ar{G_F}}{\sqrt{2}}(ar{ u}_{ au L}\gamma^{\mu} u_{ au L})(ar{e}_L\gamma_{\mu}e_L)$	R
CVLL_nutaunutaum	$\frac{1}{2}\frac{A\bar{G_F}}{\sqrt{2}}(ar{ u}_{ au L}\gamma^{\mu} u_{ au L})(ar{\mu}_{L}\gamma_{\mu}\mu_{L})$	R
CVLL_nutaunutaus	s $rac{4ar{G_F}}{\sqrt{2}}(ar{ u}_{ au L}\gamma^{\mu} u_{ au L})(ar{s}_L\gamma_{\mu}s_L)$	R
CVLL_nutaunutauta	au $(ar{ u}_{ au L})$ $(ar{ u}_{ au L}\gamma^{\mu} u_{ au L})$	R
CVLL_nutaunutauu	$1 \frac{4 \overleftarrow{G_F}}{\sqrt{2}} (ar{ u}_{ au L} \gamma^\mu u_{ au L}) (ar{u}_L \gamma_\mu u_L)$	R
CVLR_nuenuecc	$\frac{4 ar{G_F}}{\sqrt{2}} (ar{ u}_{eL} \gamma^{\mu} u_{eL}) (ar{c}_R \gamma_{\mu} c_R)$	R
CVLR_nuenuedd	$\frac{4\check{G}_F}{\sqrt{2}}(ar{ u}_{eL}\gamma^{\mu} u_{eL})(ar{d}_R\gamma_{\mu}d_R)$	R
CVLR_nuenueee	$\frac{4\check{G}_F}{\sqrt{2}}(\bar{ u}_{eL}\gamma^{\mu} u_{eL})(\bar{e}_R\gamma_{\mu}e_R)$	R
CVLR_nuenuemumu	$\frac{4\check{G_F}}{\sqrt{2}}(\bar{ u}_{eL}\gamma^{\mu} u_{eL})(\bar{\mu}_R\gamma_{\mu}\mu_R)$	R
CVLR_nuenuess	$rac{4 \check{G}_F}{\sqrt{2}} (ar{ u}_{eL} \gamma^\mu u_{eL}) (ar{s}_R \gamma_\mu s_R)$	R
CVLR_nuenuetautau	$1 \frac{4G_F}{\sqrt{2}} (\bar{ u}_{eL} \gamma^\mu u_{eL}) (\bar{ au}_R \gamma_\mu au_R)$	R
CVLR_nuenueuu	$\frac{\frac{4G_F}{\sqrt{2}}(\bar{\nu}_{eL}\gamma^{\mu}\nu_{eL})(\bar{u}_R\gamma_{\mu}u_R)}{\frac{4G_F}{\sqrt{2}}(\bar{\nu}_{eL}\gamma^{\mu}\nu_{\mu L})(\bar{c}_R\gamma_{\mu}c_R)}$	R
CVLR_nuenumucc	$\frac{4\check{G}_{F}}{\sqrt{2}}(\bar{\nu}_{eL}\gamma^{\mu}\nu_{\mu L})(\bar{c}_{R}\gamma_{\mu}c_{R})$	\mathbf{C}
CVLR_nuenumudd	$rac{4 \widetilde{G}_F}{\sqrt{2}} (ar{ u}_{eL} \gamma^\mu u_{\mu L}) (ar{d}_R \gamma_\mu d_R)$	\mathbf{C}
CVLR_nuenumuee	$\frac{4G_F}{\sqrt{2}}(\bar{\nu}_{eL}\gamma^{\mu}\nu_{\mu L})(\bar{e}_R\gamma_{\mu}e_R)$	\mathbf{C}
CVLR_nuenumumumu	$\frac{4G_F^2}{\sqrt{2}}(ar{ u}_{eL}\gamma^\mu u_{\mu L})(ar{\mu}_R\gamma_\mu\mu_R)$	\mathbf{C}
CVLR_nuenumuss	$rac{4rac{rack{Y}_F}{\sqrt{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_nuenumutauta	C	
CVLR_nuenumuuu	$\frac{4\check{G}_F}{\sqrt{2}}(\bar{\nu}_{eL}\gamma^{\mu}\nu_{\mu L})(\bar{u}_R\gamma_{\mu}u_R)$	\mathbf{C}
CVLR_nuenutaucc	$\frac{4G_F}{\sqrt{2}}(\bar{\nu}_{eL}\gamma^{\mu}\nu_{\tau L})(\bar{c}_R\gamma_{\mu}c_R)$	\mathbf{C}
CVLR_nuenutaudd	$\frac{4 \check{G}_F}{\sqrt{2}} (\bar{ u}_{eL} \gamma^\mu u_{\tau L}) (\bar{d}_R \gamma_\mu d_R)$	\mathbf{C}
CVLR_nuenutauee	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{\nu}_{eL}\gamma^{\mu}\nu_{\tau L})(\bar{e}_R\gamma_{\mu}e_R)$	\mathbf{C}
CVLR_nuenutaumumu	$1 \frac{4 \widetilde{G_F}}{\sqrt{2}} (ar{ u}_{eL} \gamma^\mu u_{ au L}) (ar{\mu}_R \gamma_\mu \mu_R)$	\mathbf{C}
CVLR_nuenutauss	$\frac{4 \check{G}_F}{\sqrt{2}} (\bar{ u}_{eL} \gamma^\mu u_{ au L}) (\bar{s}_R \gamma_\mu s_R)$	\mathbf{C}
CVLR_nuenutautaut	$ au_{\sqrt{2}}^{AG_F}(ar{ u}_{eL}\gamma^{\mu} u_{ au L})(ar{ au}_{R}\gamma_{\mu} au_{R})$	\mathbf{C}
CVLR_nuenutauuu	$\frac{4G_F}{\sqrt{2}}(\bar{\nu}_{eL}\gamma^{\mu}\nu_{\tau L})(\bar{u}_R\gamma_{\mu}u_R)$	\mathbf{C}
CVLR_numunumucc	$\frac{4G_F}{\sqrt{2}}(ar{ u}_{\mu L}\gamma^\mu u_{\mu L})(ar{c}_R\gamma_\mu c_R)$	R
CVLR_numunumudd	$\frac{4\ddot{G}_F}{\sqrt{2}}(\bar{\nu}_{\mu L}\gamma^{\mu}\nu_{\mu L})(\bar{d}_R\gamma_{\mu}d_R)$	R
CVLR_numunumuee	$\frac{4\check{G}_{F}}{\sqrt{2}}(\bar{ u}_{\mu L}\gamma^{\mu} u_{\mu L})(\bar{e}_{R}\gamma_{\mu}e_{R})$	R
CVLR_numunumumumumumumumumumumumumumumumumum	i $rac{4 ar{G_F}}{\sqrt{2}} (ar{ u}_{\mu L} \gamma^\mu u_{\mu L}) (ar{\mu}_R \gamma_\mu \mu_R)$	R
CVLR_numunumuss	$\frac{4G_F^c}{\sqrt{2}}(ar{ u}_{\mu L}\gamma^\mu u_{\mu L})(ar{s}_R\gamma_\mu s_R)$	R
CVLR_numunumutaut	ta $rac{4G_F}{\sqrt{2}}(ar{ u}_{\mu L}\gamma^\mu u_{\mu L})(ar{ au}_R\gamma_\mu au_R)$	R
CVLR_numunumuuu	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{\nu}_{\mu L}\gamma^{\mu}\nu_{\mu L})(\bar{u}_R\gamma_{\mu}u_R)$	R
CVLR_numunutaucc	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{\nu}_{\mu L}\gamma^{\mu}\nu_{\tau L})(\bar{c}_R\gamma_{\mu}c_R)$	\mathbf{C}
CVLR_numunutaudd	$\frac{4\ddot{G_F}}{\sqrt{2}}(ar{ u}_{\mu L}\gamma^{\mu} u_{ au L})(ar{d}_R\gamma_{\mu}d_R)$	\mathbf{C}
CVLR_numunutauee	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{\nu}_{\mu L}\gamma^{\mu}\nu_{\tau L})(\bar{e}_R\gamma_{\mu}e_R)$	\mathbf{C}
CVLR_numunutaumur	$\minrac{4ar{G_F}}{\sqrt{2}}(ar{ u}_{\mu L}\gamma^{\mu} u_{ au L})(ar{\mu}_R\gamma_{\mu}\mu_R)$	\mathbf{C}
${\tt CVLR_numunutauss}$	$rac{4ar{G_F}}{\sqrt{2}}(ar{ u}_{\mu L}\gamma^{\mu} u_{ au L})(ar{s}_R\gamma_{\mu}s_R)$	\mathbf{C}
CVLR_numunutautau	it $\frac{4 ar{ au_F}}{2} (ar{ u}_{\mu L} \gamma^\mu u_{ au L}) (ar{ au}_R \gamma_\mu au_R)$	\mathbf{C}
CVLR_numunutauuu	$\frac{4G_F}{\sqrt{2}}(\bar{\nu}_{\mu L}\gamma^{\mu}\nu_{\tau L})(\bar{u}_R\gamma_{\mu}u_R)$	\mathbf{C}
CVLR_nutaunutauco	$\simeq rac{4ar{G_F}}{\sqrt{2}}(ar{ u}_{ au L}\gamma^{\mu} u_{ au L})(ar{c}_R\gamma_{\mu}c_R)$	R
CVLR_nutaunutaudo	$\mathrm{d}rac{4ar{G_F}}{\sqrt{2}}(ar{ u}_{ au L}\gamma^\mu u_{ au L})(ar{d}_R\gamma_\mu d_R)$	R
CVLR_nutaunutaue	$=rac{4G_F^c}{\sqrt{2}}(ar{ u}_{ au L}\gamma^\mu u_{ au L})(ar{e}_R\gamma_\mu e_R)$	R
CVLR_nutaunutaum	$\lim_{N \to \infty} \frac{AG_F}{\sqrt{2}} (ar{ u}_{ au L} \gamma^\mu u_{ au L}) (ar{\mu}_R \gamma_\mu \mu_R)$	R
CVLR_nutaunutauss	s $rac{4 ar{G_F}}{\sqrt{2}} (ar{ u}_{ au L} \gamma^{\mu} u_{ au L}) (ar{s}_R \gamma_{\mu} s_R)$	R
CVLR_nutaunutauta	au $(ar{ au_{ au L}})$ $(ar{ u}_{ au L}\gamma^{\mu} u_{ au L})(ar{ au}_{R}\gamma_{\mu} au_{R})$	${ m R}$
CVLR_nutaunutauu	1 $rac{4 \widetilde{G_F}}{\sqrt{2}} (ar{ u}_{ au L} \gamma^{\mu} u_{ au L}) (ar{u}_R \gamma_{\mu} u_R)$	\mathbf{R}