Basis flavio (EFT WET-4)

Sectors

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	$(ar{d}_L \gamma^\mu s_L) (ar{d}_R \gamma_\mu s_R)$	\mathbf{C}
CSLR_sdsd	$(ar{d}_R s_L)(ar{d}_L s_R)$	\mathbf{C}

sdnunu

WC name	Operator	Type
CL_sdnuenue	$\frac{4G_F}{\sqrt{2}}V_{td}V_{ts}^*\frac{e^2}{16\pi^2}(\bar{s}_L\gamma^{\mu}d_L)(\bar{\nu}_e\gamma_{\mu}(1-\gamma_5)\nu_e)$	C
CL_sdnumunumu	$\frac{4G_F}{\sqrt{2}}V_{td}V_{ts}^* \frac{e^2}{16\pi^2}(\bar{s}_L\gamma^\mu d_L)(\bar{\nu}_\mu\gamma_\mu(1-\gamma_5)\nu_\mu)$	\mathbf{C}
CL_sdnutaunutau	$\frac{4G_F}{\sqrt{2}}V_{td}V_{ts}^*\frac{e^2}{16\pi^2}(\bar{s}_L\gamma^{\mu}d_L)(\bar{\nu}_{\tau}\gamma_{\mu}(1-\gamma_5)\nu_{\tau})$	\mathbf{C}
CL_sdnuenumu	$\frac{4G_F}{\sqrt{2}}V_{td}V_{ts}^*\frac{e^2}{16\pi^2}(\bar{s}_L\gamma^{\mu}d_L)(\bar{\nu}_{\mu}\gamma_{\mu}(1-\gamma_5)\nu_e)$	\mathbf{C}
CL_sdnumunue	$\frac{4G_F}{\sqrt{2}}V_{td}V_{ts}^*\frac{e^2}{16\pi^2}(\bar{s}_L\gamma^{\mu}d_L)(\bar{\nu}_e\gamma_{\mu}(1-\gamma_5)\nu_{\mu})$	\mathbf{C}
${\tt CL_sdnumunutau}$	$\frac{4G_F}{\sqrt{2}}V_{td}V_{ts}^*\frac{e^2}{16\pi^2}(\bar{s}_L\gamma^{\mu}d_L)(\bar{\nu}_{\tau}\gamma_{\mu}(1-\gamma_5)\nu_{\mu})$	\mathbf{C}
${\tt CL_sdnutaunumu}$	$\frac{4G_F}{\sqrt{2}}V_{td}V_{ts}^* \frac{e^2}{16\pi^2}(\bar{s}_L\gamma^{\mu}d_L)(\bar{\nu}_{\mu}\gamma_{\mu}(1-\gamma_5)\nu_{ au})$	\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	$\frac{4G_F}{\sqrt{2}}V_{td}V_{ts}^* \frac{e^2}{16\pi^2}(\bar{s}_L\gamma^{\mu}d_L)(\bar{\nu}_e\gamma_{\mu}(1-\gamma_5)\nu_{ au})$	\mathbf{C}
CR_sdnuenue	$\frac{4G_F}{\sqrt{2}}V_{td}V_{ts}^*\frac{e^2}{16\pi^2}(\bar{s}_R\gamma^{\mu}d_R)(\bar{\nu}_e\gamma_{\mu}(1-\gamma_5)\nu_e)$	\mathbf{C}
CR_sdnumunumu	$\frac{4G_F}{\sqrt{2}}V_{td}V_{ts}^*\frac{e^2}{16\pi^2}(\bar{s}_R\gamma^{\mu}d_R)(\bar{\nu}_{\mu}\gamma_{\mu}(1-\gamma_5)\nu_{\mu})$	\mathbf{C}
CR_sdnutaunutau	$\frac{4G_F}{\sqrt{2}}V_{td}V_{ts}^*\frac{e^2}{16\pi^2}(\bar{s}_R\gamma^{\mu}d_R)(\bar{\nu}_{\tau}\gamma_{\mu}(1-\gamma_5)\nu_{\tau})$	\mathbf{C}
CR_sdnuenumu	$\frac{4G_F}{\sqrt{2}}V_{td}V_{ts}^*\frac{e^2}{16\pi^2}(\bar{s}_R\gamma^{\mu}d_R)(\bar{\nu}_{\mu}\gamma_{\mu}(1-\gamma_5)\nu_e)$	\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	$\frac{4G_F}{\sqrt{2}}V_{td}V_{ts}^*\frac{e^2}{16\pi^2}(\bar{s}_R\gamma^\mu d_R)(\bar{\nu}_\mu\gamma_\mu(1-\gamma_5)\nu_ au)$	\mathbf{C}
CR_sdnuenutau	$\frac{4G_F}{\sqrt{2}}V_{td}V_{ts}^*\frac{e^2}{16\pi^2}(\bar{s}_R\gamma^{\mu}d_R)(\bar{\nu}_{\tau}\gamma_{\mu}(1-\gamma_5)\nu_e)$	\mathbf{C}

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

usenu

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

csenu

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

WC name	Operator	Type
CVR_scenutau	$-rac{4G_F}{\sqrt{2}}V_{cs}(ar{c}_R\gamma^\mu s_R)(ar{e}_L\gamma_\mu u_{ au L})$	C
CSR_scenutau	$-\frac{4G_F}{\sqrt{2}}V_{cs}(\bar{c}_L s_R)(\bar{e}_R \nu_{\tau L})$	\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	$\begin{split} &-\frac{4G_F}{\sqrt{2}}V_{cs}(\bar{c}_R\gamma^{\mu}s_R)(\bar{e}_L\gamma_{\mu}\nu_{\tau L})\\ &-\frac{4G_F}{\sqrt{2}}V_{cs}(\bar{c}_Ls_R)(\bar{e}_R\nu_{\tau L})\\ &-\frac{4G_F}{\sqrt{2}}V_{cs}(\bar{c}_Rs_L)(\bar{e}_R\nu_{\tau L})\\ &-\frac{4G_F}{\sqrt{2}}V_{cs}(\bar{c}_R\sigma^{\mu\nu}s_L)(\bar{e}_R\sigma_{\mu\nu}\nu_{\tau L}) \end{split}$	C

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	$-rac{4\check{G}_F}{\sqrt{2}}V_{cd}(\bar{c}_R\gamma^\mu d_R)(\bar{e}_L\gamma_\mu u_{eL})$	\mathbf{C}
CSR_dcenue	$-\frac{4G_F}{\sqrt{2}}V_{cd}(\bar{c}_Ld_R)(\bar{e}_R\nu_{eL})$	\mathbf{C}
CSL_dcenue	$-\frac{4G_F}{\sqrt{2}}V_{cd}(\bar{c}_Rd_L)(\bar{e}_R\nu_{eL})$	\mathbf{C}
CT_dcenue	$-rac{4ar{G_F}}{\sqrt{2}}V_{cd}(ar{c}_R\sigma^{\mu u}d_L)(ar{e}_R\sigma_{\mu u} u_{eL})$	\mathbf{C}
CVL_dcenumu	$-rac{4ar{G_F}}{\sqrt{2}}V_{cd}(ar{c}_L\gamma^\mu d_L)(ar{e}_L\gamma_\mu u_{\mu L})$	\mathbf{C}
CVR_dcenumu	$-rac{4ar{G_F}}{\sqrt{2}}V_{cd}(ar{c}_R\gamma^\mu d_R)(ar{e}_L\gamma_\mu u_{\mu L})$	\mathbf{C}
CSR_dcenumu	$-rac{4ar{G_F}}{\sqrt{2}}V_{cd}(ar{c}_Ld_R)(ar{e}_R u_{\mu L})$	\mathbf{C}
CSL_dcenumu	$-rac{4ar{G_F}}{\sqrt{2}}V_{cd}(ar{c}_Rd_L)(ar{e}_R u_{\mu L})$	\mathbf{C}
CT_dcenumu	$-rac{4ar{G_F}}{\sqrt{2}}V_{cd}(ar{c}_R\sigma^{\mu u}d_L)(ar{e}_R\sigma_{\mu u} u_{\mu L})$	\mathbf{C}
CVL_dcenutau	$-rac{4ar{G_F}}{\sqrt{2}}V_{cd}(ar{c}_L\gamma^\mu d_L)(ar{e}_L\gamma_\mu u_{ au L})$	\mathbf{C}
CVR_dcenutau	$-\frac{4G_F}{\sqrt{2}}V_{cd}(\bar{c}_R\gamma^\mu d_R)(\bar{e}_L\gamma_\mu u_{\tau L})$	\mathbf{C}
CSR_dcenutau	$-\frac{4\overset{\circ}{G_F}}{\sqrt{2}}V_{cd}(\bar{c}_Ld_R)(\bar{e}_R u_{ au L})$	\mathbf{C}
CSL_dcenutau	$-rac{4\overset{C}{C_{F}}}{\sqrt{2}}V_{cd}(\bar{c}_{R}d_{L})(\bar{e}_{R} u_{ au L})$	\mathbf{C}
CT_dcenutau	$-rac{4\widetilde{G}_F^2}{\sqrt{2}}V_{cd}(ar{c}_R\sigma^{\mu u}d_L)(ar{e}_R\sigma_{\mu u} u_{ au L})$	С

usmunu

WC name	Operator	Type
CVL_sumunue	$-rac{4G_F}{\sqrt{2}}V_{us}(ar{u}_L\gamma^\mu s_L)(ar{\mu}_L\gamma_\mu u_{eL})$	\overline{C}
CVR_sumunue	$-rac{4G_F^2}{\sqrt{2}}V_{us}(ar{u}_R\gamma^\mu s_R)(ar{\mu}_L\gamma_\mu u_{eL})$	\mathbf{C}
CSR_sumunue	$-\frac{4G_F}{5}V_{us}(\bar{u}_L s_R)(\bar{u}_R \nu_{eL})$	\mathbf{C}
CSL_sumunue	$-\frac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_R s_L)(\bar{\mu}_R \nu_{eL}) \\ -\frac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_R \sigma^{\mu\nu} s_L)(\bar{\mu}_R \sigma_{\mu\nu} \nu_{eL}) \\ -\frac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_L \gamma^{\mu} s_L)(\bar{\mu}_L \gamma_{\mu} \nu_{\mu L})$	\mathbf{C}
CT_sumunue	$-rac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_R\sigma^{\mu u}s_L)(\bar{\mu}_R\sigma_{\mu u} u_{eL})$	\mathbf{C}
$\mathtt{CVL_sumunumu}$	$-rac{4G_F}{\sqrt{2}}V_{us}(ar{u}_L\gamma^\mu s_L)(ar{\mu}_L\gamma_\mu u_{\mu L})$	\mathbf{C}
CVR_sumunumu	$-\frac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_R\gamma^{\mu}s_R)(\bar{\mu}_L\gamma_{\mu}\nu_{\mu L})$	\mathbf{C}
CSR_sumunumu	$-rac{4\overset{\sim}{\mathcal{G}_F}}{\sqrt{2}}V_{us}(ar{u}_Ls_R)(ar{\mu}_R u_{\mu L})$	\mathbf{C}

WC name	Operator	Type
CSL_sumunumu	$-\frac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_Rs_L)(\bar{\mu}_R\nu_{\mu L})$	С
CT_sumunumu	$-\frac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_R s_L)(\bar{\mu}_R \nu_{\mu L}) -\frac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_R \sigma^{\mu\nu} s_L)(\bar{\mu}_R \sigma_{\mu\nu} \nu_{\mu L})$	\mathbf{C}
CVL_sumunutau	$-\frac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_L\gamma^\mu s_L)(\bar{\mu}_L\gamma_\mu\nu_{\tau L})$	\mathbf{C}
CVR_sumunutau	$-rac{4G_F^c}{\sqrt{2}}V_{us}(\bar{u}_R\gamma^\mu s_R)(\bar{\mu}_L\gamma_\mu u_{\tau L})$	\mathbf{C}
CSR_sumunutau	$-rac{4ar{G}_F}{\sqrt{2}}V_{us}(ar{u}_L s_R)(ar{\mu}_R u_{ au L})$	\mathbf{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	$-\frac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_R\sigma^{\mu\nu}s_L)(\bar{\mu}_R\sigma_{\mu\nu}\nu_{\tau L})$	C

csmunu

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

${\tt cdmunu}$

WC name	Operator	Type
CVL_dcmunue	$-rac{4G_F}{\sqrt{2}}V_{cd}(ar{c}_L\gamma^\mu d_L)(ar{\mu}_L\gamma_\mu u_{eL})$	С
CVR_dcmunue	$-\frac{4G_F}{\sqrt{2}}V_{cd}(\bar{c}_R\gamma^\mu d_R)(\bar{\mu}_L\gamma_\mu\nu_{eL})$	\mathbf{C}
CSR_dcmunue	$-rac{4G_F}{\sqrt{2}}V_{cd}(ar{c}_Ld_R)(ar{\mu}_R u_{eL})$	\mathbf{C}
CSL_dcmunue	$-\frac{4G_F}{\sqrt{2}}V_{cd}(\bar{c}_Rd_L)(\bar{\mu}_R\nu_{eL})$	\mathbf{C}
CT_dcmunue	$-rac{4G_F^c}{\sqrt{2}}V_{cd}(ar{c}_R\sigma^{\mu u}d_L)(ar{\mu}_R\sigma_{\mu u} u_{eL})$	\mathbf{C}

WC name	Operator	Type
CVL_dcmunumu	$-\frac{4G_F}{\sqrt{2}}V_{cd}(\bar{c}_L\gamma^\mu d_L)(\bar{\mu}_L\gamma_\mu\nu_{\mu L})$	C
CVR_dcmunumu	$-rac{4\widetilde{Q}_F^2}{\sqrt{2}}V_{cd}(ar{c}_R\gamma^\mu d_R)(ar{\mu}_L\gamma_\mu u_{\mu L})$	\mathbf{C}
CSR_dcmunumu	$-rac{4\ddot{G_F}}{\sqrt{2}}V_{cd}(\bar{c}_Ld_R)(\bar{\mu}_R u_{\mu L})$	\mathbf{C}
CSL_dcmunumu	$-rac{4\widetilde{G_F}}{\sqrt{2}}V_{cd}(ar{c}_Rd_L)(ar{\mu}_R u_{\mu L})$	\mathbf{C}
CT_dcmunumu	$-rac{4G_F}{\sqrt{2}}V_{cd}(ar{c}_R\sigma^{\mu u}d_L)(ar{\mu}_R\sigma_{\mu u} u_{\mu L})$	\mathbf{C}
CVL_dcmunutau	$-\frac{4G_F}{\sqrt{2}}V_{cd}(\bar{c}_L\gamma^\mu d_L)(\bar{\mu}_L\gamma_\mu\nu_{\tau L})$	\mathbf{C}
CVR_dcmunutau	$-\frac{4G_F}{\sqrt{2}}V_{cd}(\bar{c}_R\gamma^\mu d_R)(\bar{\mu}_L\gamma_\mu\nu_{\tau L})$	\mathbf{C}
CSR_dcmunutau	$-\frac{4G_F}{\sqrt{2}}V_{cd}(\bar{c}_Ld_R)(\bar{\mu}_R\nu_{\tau L})$	\mathbf{C}
CSL_dcmunutau	$-\frac{4G_F}{\sqrt{2}}V_{cd}(\bar{c}_Rd_L)(\bar{\mu}_R\nu_{\tau L})$	\mathbf{C}
CT_dcmunutau	$-\frac{4\tilde{G}_F}{\sqrt{2}}V_{cd}(\bar{c}_R\sigma^{\mu\nu}d_L)(\bar{\mu}_R\sigma_{\mu\nu}\nu_{\tau L})$	С

${\tt ustaunu}$

WC name	Operator	Type
CVL_sutaunue	$-\frac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_L\gamma^{\mu}s_L)(\bar{\tau}_L\gamma_{\mu}\nu_{eL})$	
CVR_sutaunue	$-\frac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_R\gamma^{\mu}s_R)(\bar{\tau}_L\gamma_{\mu}\nu_{eL})$	\mathbf{C}
CSR_sutaunue	$-\frac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_L s_R)(\bar{\tau}_R \nu_{eL})$	\mathbf{C}
CSL_sutaunue	$-\frac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_Rs_L)(\bar{\tau}_R\nu_{eL})$	\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	$-rac{4\widetilde{G}_F}{\sqrt{2}}V_{us}(\bar{u}_L\gamma^\mu s_L)(\bar{ au}_L\gamma_\mu u_{\mu L})$	\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	$-rac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_R\sigma^{\mu u}s_L)(\bar{ au}_R\sigma_{\mu u} u_{\mu L})$	\mathbf{C}
CVL_sutaunutau	$-rac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_L\gamma^\mu s_L)(\bar{ au}_L\gamma_\mu u_{ au L})$	\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	$-\frac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_Rs_L)(\bar{\tau}_R\nu_{\tau L})$	\mathbf{C}
CT_sutaunutau	$-\frac{4\tilde{G}_F}{\sqrt{2}}V_{us}(\bar{u}_R\sigma^{\mu\nu}s_L)(\bar{\tau}_R\sigma_{\mu\nu}\nu_{\tau L})$	C

${\tt cstaunu}$

WC name	Operator	Type
CVL_sctaunue	$-\frac{4G_F}{\sqrt{2}}V_{cs}(\bar{c}_L\gamma^{\mu}s_L)(\bar{\tau}_L\gamma_{\mu}\nu_{eL})$	С
CVR_sctaunue	$-\frac{4G_F}{\sqrt{2}}V_{cs}(\bar{c}_L\gamma^{\mu}s_L)(\bar{\tau}_L\gamma_{\mu}\nu_{eL}) -\frac{4G_F}{\sqrt{2}}V_{cs}(\bar{c}_R\gamma^{\mu}s_R)(\bar{\tau}_L\gamma_{\mu}\nu_{eL})$	\mathbf{C}

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

cdtaunu

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

udenu

WC name	Operator	Type
CVL_duenue	$-\frac{4G_F}{\sqrt{2}}V_{ud}(\bar{u}_L\gamma^{\mu}d_L)(\bar{e}_L\gamma_{\mu}\nu_{eL})$	C
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	$-\frac{4\check{G}_F}{\sqrt{2}}V_{ud}(\bar{u}_Ld_R)(\bar{e}_R\nu_{eL})$	\mathbf{C}
CSL_duenue	$-\frac{4\check{G}_F}{\sqrt{2}}V_{ud}(\bar{u}_Rd_L)(\bar{e}_R\nu_{eL})$	\mathbf{C}
CT_duenue	$-rac{4reve{Q_F}}{\sqrt{2}}V_{ud}(ar{u}_R\sigma^{\mu u}d_L)(ar{e}_R\sigma_{\mu u} u_{eL})$	\mathbf{C}
CVL_duenumu	$-rac{4\widetilde{G}_F^2}{\sqrt{2}}V_{ud}(\bar{u}_L\gamma^\mu d_L)(\bar{e}_L\gamma_\mu u_{\mu L})$	\mathbf{C}
CVR_duenumu	$-rac{4\overset{\sim}{Q_F}}{\sqrt{2}}V_{ud}(ar{u}_R\gamma^\mu d_R)(ar{e}_L\gamma_\mu u_{\mu L})$	\mathbf{C}
CSR_duenumu	$-\frac{4\check{G_F}}{\sqrt{2}}V_{ud}(\bar{u}_Ld_R)(\bar{e}_R u_{\mu L})$	\mathbf{C}
CSL_duenumu	$-rac{4ar{G_F}}{\sqrt{2}}V_{ud}(ar{u}_Rd_L)(ar{e}_R u_{\mu L})$	\mathbf{C}
CT_duenumu	$-rac{4ar{G_F}}{\sqrt{2}}V_{ud}(ar{u}_R\sigma^{\mu u}d_L)(ar{e}_R\sigma_{\mu u} u_{\mu L})$	\mathbf{C}
CVL_duenutau	$-rac{4ar{G_F}}{\sqrt{2}}V_{ud}(ar{u}_L\gamma^\mu d_L)(ar{e}_L\gamma_\mu u_{ au L})$	\mathbf{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	$-\frac{4\tilde{G}_{F}^{c}}{\sqrt{2}}V_{ud}(\bar{u}_{L}d_{R})(\bar{e}_{R}\nu_{\tau L})$	\mathbf{C}
CSL_duenutau	$-\frac{4\overset{\leftarrow}{G_F}}{\sqrt{2}}V_{ud}(\bar{u}_Rd_L)(\bar{e}_R\nu_{\tau L})$	\mathbf{C}
CT_duenutau	$-rac{4ar{G}_F^c}{\sqrt{2}}V_{ud}(ar{u}_R\sigma^{\mu u}d_L)(ar{e}_R\sigma_{\mu u} u_{ au L})$	\mathbf{C}

${\tt udmunu}$

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

udtaunu

WC name	Operator	Type
CVL_dutaunue	$-\frac{4G_F}{\sqrt{2}}V_{ud}(\bar{u}_L\gamma^\mu d_L)(\bar{\tau}_L\gamma_\mu\nu_{eL})$	C
CVR_dutaunue	$-\frac{4\widetilde{G}_F}{\sqrt{2}}V_{ud}(\bar{u}_R\gamma^\mu d_R)(\bar{\tau}_L\gamma_\mu\nu_{eL})$	\mathbf{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}
$\mathtt{CVL_dutaunumu}$	$-\frac{4G_F}{\sqrt{2}}V_{ud}(\bar{u}_L\gamma^\mu d_L)(\bar{\tau}_L\gamma_\mu\nu_{\mu L})$	\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}
${\tt CVL_dutaunutau}$	$-\frac{4G_F}{\sqrt{2}}V_{ud}(\bar{u}_L\gamma^\mu d_L)(\bar{\tau}_L\gamma_\mu\nu_{\tau L})$	\mathbf{C}
CVR_dutaunutau	$-\frac{4G_F}{\sqrt{2}}V_{ud}(\bar{u}_R\gamma^\mu d_R)(\bar{\tau}_L\gamma_\mu\nu_{\tau L})$	\mathbf{C}
CSR_dutaunutau	$-\frac{4G_F}{\sqrt{2}}V_{ud}(\bar{u}_Ld_R)(\bar{\tau}_R\nu_{\tau L})$	\mathbf{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	$-\frac{4\tilde{V}_{F}^{2}}{\sqrt{2}}V_{ud}(\bar{u}_{R}\sigma^{\mu\nu}d_{L})(\bar{\tau}_{R}\sigma_{\mu\nu}\nu_{\tau L})$	С