Basis Bern (EFT WET-3)

Sectors

The effective Lagrangian is defined as

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

udenu

WC name	Operator	Type
1udee	$\frac{4G_F}{\sqrt{2}}(\bar{u}P_R\gamma^\mu d)(\bar{e}\gamma_\mu\nu_e)$	C
5udee	$\frac{4\overleftarrow{Q}_F}{\sqrt{2}}(\bar{u}P_Rd)(\bar{e}\nu_e)$	$^{\mathrm{C}}$
1pudee	$\frac{4\overleftarrow{G_F}}{\sqrt{2}}(\bar{u}P_L\gamma^\mu d)(\bar{e}\gamma_\mu\nu_e)$	\mathbf{C}
5pudee	$\frac{4\overleftarrow{G}_F}{\sqrt{2}}(\bar{u}P_Ld)(\bar{e}\nu_e)$	\mathbf{C}
7pudee	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{u}P_L\sigma^{\mu\nu}d)(\bar{e}\sigma_{\mu\nu}\nu_e)$	\mathbf{C}
1udemu	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{u}P_R\gamma^\mu d)(\bar{e}\gamma_\mu\nu_\mu)$	\mathbf{C}
5udemu	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{u}P_Rd)(\bar{e}\nu_\mu)$	\mathbf{C}
1pudemu	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{u}P_L\gamma^\mu d)(\bar{e}\gamma_\mu\nu_\mu)$	\mathbf{C}
5pudemu	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{u}P_Ld)(\bar{e}\nu_\mu)$	\mathbf{C}
7pudemu	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{u}P_L\sigma^{\mu\nu}d)(\bar{e}\sigma_{\mu\nu}\nu_{\mu})$	\mathbf{C}
1udetau	$\frac{4\overleftarrow{G_F}}{\sqrt{2}}(\bar{u}P_R\gamma^\mu d)(\bar{e}\gamma_\mu \nu_ au)$	\mathbf{C}
5udetau	$\frac{4\overleftarrow{G_F}}{\sqrt{2}}(\bar{u}P_Rd)(\bar{e}\nu_{\tau})$	\mathbf{C}
1pudetau	$\frac{4\overleftarrow{G_F}}{\sqrt{2}}(\bar{u}P_L\gamma^\mu d)(\bar{e}\gamma_\mu\nu_ au)$	\mathbf{C}
5pudetau	$\frac{4\overleftarrow{Q}_F^c}{\sqrt{2}}(\bar{u}P_Ld)(\bar{e}\nu_{\tau})$	\mathbf{C}
7pudetau	$\frac{4\tilde{Q}_F^2}{\sqrt{2}}(\bar{u}P_L\sigma^{\mu\nu}d)(\bar{e}\sigma_{\mu\nu}\nu_\tau)$	$^{\mathrm{C}}$

udmunu

WC name	Operator	Type
1udmue	$\frac{4G_F}{\sqrt{2}}(\bar{u}P_R\gamma^\mu d)(\bar{\mu}\gamma_\mu\nu_e)$	C
5udmue	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{u}P_Rd)(\bar{\mu}\nu_e)$	\mathbf{C}
1pudmue	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{u}P_L\gamma^\mu d)(\bar{\mu}\gamma_\mu\nu_e)$	\mathbf{C}
5pudmue	$\frac{4G_F}{\sqrt{2}}(\bar{u}P_Ld)(\bar{\mu}\nu_e)$	\mathbf{C}
7pudmue	$\frac{4G_F}{\sqrt{2}}(\bar{u}P_L\sigma^{\mu\nu}d)(\bar{\mu}\sigma_{\mu\nu}\nu_e)$	\mathbf{C}
1udmumu	$\frac{4\check{G_F}}{G}(\bar{u}P_B\gamma^\mu d)(\bar{\mu}\gamma_\mu\nu_\mu)$	\mathbf{C}
5udmumu	$rac{4G_F}{\sqrt{2}}(ar{u}P_Rd)(ar{\mu} u_\mu) \ rac{4G_F}{\sqrt{2}}(ar{u}P_L\gamma^\mu d)(ar{\mu}\gamma_\mu u_\mu)$	\mathbf{C}
1pudmumu	$\frac{4G_F}{\sqrt{2}}(\bar{u}P_L\gamma^\mu d)(\bar{\mu}\gamma_\mu\nu_\mu)$	\mathbf{C}

WC name	Operator	Type
5pudmumu	$\frac{4G_F}{\sqrt{2}}(\bar{u}P_L d)(\bar{\mu}\nu_{\mu})$ $\frac{4G_F}{\sqrt{2}}(\bar{u}P_L \sigma^{\mu\nu} d)(\bar{\mu}\sigma_{\mu\nu}\nu_{\mu})$ $\frac{4G_F}{\sqrt{2}}(\bar{u}P_R \gamma^{\mu} d)(\bar{\mu}\gamma_{\mu}\nu_{\tau})$ $\frac{4G_F}{\sqrt{2}}(\bar{u}P_R d)(\bar{\mu}\nu_{\tau})$	C
7pudmumu	$\frac{4\check{G}_F}{\sqrt{2}}(\bar{u}P_L\sigma^{\mu\nu}d)(\bar{\mu}\sigma_{\mu\nu}\nu_{\mu})$	$^{\mathrm{C}}$
1udmutau	$\frac{4\check{G}_F}{\sqrt{2}}(\bar{u}P_R\gamma^\mu d)(\bar{\mu}\gamma_\mu u_ au)$	$^{\mathrm{C}}$
5udmutau	$\frac{4\check{G}_F}{\sqrt{2}}(\bar{u}P_Rd)(\bar{\mu}\nu_{ au})$	$^{\mathrm{C}}$
1pudmutau	$\frac{4G_F}{\sqrt{2}}(\bar{u}P_L\gamma^\mu d)(\bar{\mu}\gamma_\mu\nu_\tau)$	$^{\mathrm{C}}$
5pudmutau	$\frac{4\check{G}_F}{\sqrt{2}}(\bar{u}P_Ld)(\bar{\mu} u_{ au})$	\mathbf{C}
7pudmutau	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{u}P_L d)(\bar{\mu}\nu_{\tau})$ $\frac{4G_F}{\sqrt{2}}(\bar{u}P_L \sigma^{\mu\nu} d)(\bar{\mu}\sigma_{\mu\nu}\nu_{\tau})$	\mathbf{C}

sdsd

WC name	Operator	Type
1dsds	$\frac{4G_F}{\sqrt{2}}(\bar{d}\gamma_\mu P_L s)(\bar{d}\gamma^\mu P_L s)$	\overline{C}
5dsds	$\frac{4G_F}{\sqrt{2}}(\bar{d}\gamma_{\mu}P_Ls)(\bar{d}\gamma^{\mu}P_Ls)$ $\frac{4G_F}{\sqrt{2}}(\bar{d}_{\alpha}P_Ls_{\beta})(\bar{d}_{\beta}P_Rs_{\alpha})$	\mathbf{C}
2dsds	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{d}P_Ls)(\bar{d}P_Ls)$	\mathbf{C}
1pdsds	$\frac{\frac{4G_F}{\sqrt{2}}(\bar{d}P_Ls)(\bar{d}P_Ls)}{\frac{4G_F}{\sqrt{2}}(\bar{d}\gamma_{\mu}P_Rs)(\bar{d}\gamma^{\mu}P_Rs)}$	\mathbf{C}
3dsds	$\frac{4\ddot{G_F}}{\sqrt{2}}(\bar{d}_{lpha}P_Ls_{eta})(\bar{d}_{eta}P_Ls_{lpha})$	\mathbf{C}
2pdsds	$\frac{4\ddot{G_F}}{\sqrt{2}}(\bar{d}P_Rs)(\bar{d}P_Rs)$	\mathbf{C}
4dsds	$rac{4G_F}{\sqrt{2}}(ar{d}_lpha P_L s_eta)(ar{d}_eta P_L s_lpha) \ rac{4G_F}{\sqrt{2}}(ar{d} P_R s)(ar{d} P_R s) \ rac{4G_F}{\sqrt{2}}(ar{d} P_L s)(ar{d} P_L s)(ar{d} P_R s) \ rac{4G_F}{\sqrt{2}}(ar{d} P_L s)(ar{d} P_L s)(ar{d$	\mathbf{C}
3pdsds	$rac{4reve{G_F}}{\sqrt{2}}(ar{d}_lpha P_R s_eta)(ar{d}_eta P_R s_lpha)$	\mathbf{C}

usenu

WC name	Operator	Type
1usee	$\frac{4G_F}{\sqrt{2}}(\bar{u}P_R\gamma^{\mu}s)(\bar{e}\gamma_{\mu}\nu_e)$	С
5usee	$\frac{4\overleftarrow{Q}_F}{\sqrt{2}}(\bar{u}P_Rs)(\bar{e}\nu_e)$	\mathbf{C}
1pusee	$\frac{4\overleftarrow{G_F}}{\sqrt{2}}(\bar{u}P_L\gamma^{\mu}s)(\bar{e}\gamma_{\mu}\nu_e)$	\mathbf{C}
5pusee	$\frac{4\overleftarrow{G_F}}{\sqrt{2}}(\bar{u}P_Ls)(\bar{e}\nu_e)$	\mathbf{C}
7pusee	$\frac{4\overleftarrow{G_F}}{\sqrt{2}}(\bar{u}P_L\sigma^{\mu\nu}s)(\bar{e}\sigma_{\mu\nu}\nu_e)$	\mathbf{C}
1usemu	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{u}P_R\gamma^{\mu}s)(\bar{e}\gamma_{\mu}\nu_{\mu})$	\mathbf{C}
5usemu	$\frac{4\overleftarrow{G_F}}{\sqrt{2}}(\bar{u}P_Rs)(\bar{e}\nu_\mu)$	\mathbf{C}
1pusemu	$\frac{4\overleftarrow{G_F}}{\sqrt{2}}(\bar{u}P_L\gamma^{\mu}s)(\bar{e}\gamma_{\mu}\nu_{\mu})$	\mathbf{C}
5pusemu	$\frac{4\overleftarrow{G_F}}{\sqrt{2}}(\bar{u}P_Ls)(\bar{e}\nu_\mu)$	\mathbf{C}
7pusemu	$\frac{4 \overleftarrow{G}_F}{\sqrt{2}} (\bar{u} P_L \sigma^{\mu\nu} s) (\bar{e} \sigma_{\mu\nu} \nu_{\mu})$	\mathbf{C}
1usetau	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{u}P_R\gamma^\mu s)(\bar{e}\gamma_\mu \nu_ au)$	\mathbf{C}
5usetau	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{u}P_Rs)(\bar{e}\nu_{\tau})$	\mathbf{C}
1pusetau	$rac{4 \tilde{Q}_F^2}{\sqrt{2}} (ar{u} P_L \gamma^\mu s) (ar{e} \gamma_\mu u_ au)$	\mathbf{C}

WC name	Operator	Type
5pusetau	$\frac{4G_F}{\sqrt{2}}(\bar{u}P_L s)(\bar{e}\nu_{\tau})$	С
7pusetau	$\frac{4\check{G}_F}{\sqrt{2}}(\bar{u}P_L\sigma^{\mu\nu}s)(\bar{e}\sigma_{\mu\nu}\nu_{\tau})$	С

usmunu

WC name	Operator	Type
1usmue	$\frac{4G_F}{\sqrt{2}}(\bar{u}P_R\gamma^{\mu}s)(\bar{\mu}\gamma_{\mu}\nu_e)$	
5usmue	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{u}P_Rs)(\bar{\mu}\nu_e)$	$^{\mathrm{C}}$
1pusmue	$\frac{4 \tilde{G}_F}{\sqrt{2}} (\bar{u} P_L \gamma^\mu s) (\bar{\mu} \gamma_\mu \nu_e)$	\mathbf{C}
5pusmue	$\frac{4 \tilde{G}_F}{\sqrt{2}} (\bar{u} P_L s) (\bar{\mu} \nu_e)$	\mathbf{C}
7pusmue	$\frac{4\widetilde{G}_F}{\sqrt{2}}(\bar{u}P_L\sigma^{\mu\nu}s)(\bar{\mu}\sigma_{\mu\nu}\nu_e)$	\mathbf{C}
1usmumu	$\frac{4\widetilde{G}_F}{\sqrt{2}}(\bar{u}P_R\gamma^\mu s)(\bar{\mu}\gamma_\mu\nu_\mu)$	\mathbf{C}
5usmumu	$\frac{4 G_F}{\sqrt{2}} (\bar{u} P_R s) (\bar{\mu} \nu_{\mu})$	\mathbf{C}
1pusmumu	$\frac{4 \overleftarrow{G_F}}{\sqrt{2}} (\bar{u} P_L \gamma^\mu s) (\bar{\mu} \gamma_\mu \nu_\mu)$	$^{\mathrm{C}}$
5pusmumu	$\frac{4 G_F}{\sqrt{2}} (\bar{u} P_L s) (\bar{\mu} \nu_\mu)$	\mathbf{C}
7pusmumu	$\frac{4\widetilde{G}_F}{\sqrt{2}}(\bar{u}P_L\sigma^{\mu\nu}s)(\bar{\mu}\sigma_{\mu\nu}\nu_{\mu})$	\mathbf{C}
1usmutau	$\frac{4\widetilde{G}_F}{\sqrt{2}}(\bar{u}P_R\gamma^{\mu}s)(\bar{\mu}\gamma_{\mu}\nu_{\tau})$	\mathbf{C}
5usmutau	$\frac{4 \overset{\leftarrow}{N_T}}{\sqrt{2}} (\bar{u} P_R s) (\bar{\mu} \nu_{\tau})$	\mathbf{C}
1pusmutau	$\frac{4\overset{Q^{\prime}}{\sqrt{2}}}{\sqrt{2}}(\bar{u}P_{L}\gamma^{\mu}s)(\bar{\mu}\gamma_{\mu} u_{ au})$	$^{\mathrm{C}}$
5pusmutau	$\frac{4\overset{C}{C_F}}{\sqrt{2}}(\bar{u}P_Ls)(\bar{\mu} u_{ au})$	$^{\mathrm{C}}$
7pusmutau	$\frac{4\widetilde{G}_F}{\sqrt{2}}(\bar{u}P_L\sigma^{\mu\nu}s)(\bar{\mu}\sigma_{\mu\nu}\nu_{ au})$	\mathbf{C}

sd

WC name	Operator	Type
7gammads	$\frac{4G_F}{\sqrt{2}}\frac{e}{q^2}m_s(\bar{d}P_R\sigma_{\mu\nu}s)F^{\mu\nu}$	C
8gds	$rac{4G_F}{\sqrt{2}}rac{g_s^2}{g_s^2}m_s(ar{d}P_R\sigma_{\mu u}s)F^{\mu u} \ rac{4G_F}{\sqrt{2}}rac{1}{g_s}m_s(ar{d}P_R\sigma_{\mu u}T^As)G_A^{\mu u}$	$^{\mathrm{C}}$
7pgammads	$\frac{4G_F}{\sqrt{2}}rac{e}{g_s^2}m_s(ar{d}P_L\sigma_{\mu u}s)F^{\mu u}$	$^{\mathrm{C}}$
8pgds	$rac{4 ilde{\mathcal{G}_F}}{\sqrt{2}}rac{ ilde{J}_s}{g_s}m_s(ar{d}P_L\sigma_{\mu u}T^As)G_A^{\mu u}$	$^{\mathrm{C}}$
1dsuu	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_R\gamma_\mu s)(\bar{u}\gamma^\mu u)$	$^{\mathrm{C}}$
2dsuu	$\frac{\frac{4G_F}{\sqrt{2}}(\bar{d}P_R\gamma_\mu T^A s)(\bar{u}\gamma^\mu T^A u)}{\frac{4G_F}{\sqrt{2}}(\bar{d}P_R\gamma_{\mu\nu\rho}s)(\bar{u}\gamma^{\mu\nu\rho}u)}$	$^{\mathrm{C}}$
3dsuu	$\frac{4\check{G}_F}{\sqrt{2}}(\bar{d}P_R\gamma_{\mu\nu\rho}s)(\bar{u}\gamma^{\mu\nu\rho}u)$	\mathbf{C}
4dsuu	$\frac{\sqrt{2}}{\sqrt{2}}(\bar{d}P_R\gamma_{\mu\nu\rho}T^As)(\bar{u}\gamma^{\mu\nu\rho}T^Au)$	\mathbf{C}
5dsuu	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_Rs)(\bar{u}u)$	\mathbf{C}
6dsuu	$\frac{4\check{G}_F}{\sqrt{2}}(\bar{d}P_RT^As)(\bar{u}T^Au)$	\mathbf{C}
7dsuu	$\frac{{}^{4G_F}_{G}(\bar{d}P_RT^As)(\bar{u}T^Au)}{{}^{4G_F}_{\sqrt{2}}(\bar{d}P_R\sigma^{\mu\nu}s)(\bar{u}\sigma_{\mu\nu}u)}$	$^{\mathrm{C}}$

WC name	Operator	Тур
8dsuu	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_R\sigma^{\mu\nu}T^As)(\bar{u}\sigma_{\mu\nu}T^Au)$	C
9dsuu	$\frac{4Q_F^2}{\sqrt{2}}(\bar{d}P_R\gamma_{\mu\nu\rho\sigma}s)(\bar{u}\gamma^{\mu\nu\rho\sigma}u)$	$^{\mathrm{C}}$
10dsuu	$\frac{\frac{4\ddot{G}_F}{\sqrt{2}}(\bar{d}P_R\gamma_{\mu\nu\rho\sigma}s)(\bar{u}\gamma^{\mu\nu\rho\sigma}u)}{\frac{4G_F}{\sqrt{2}}(\bar{d}P_R\gamma_{\mu\nu\rho\sigma}T^As)(\bar{u}\gamma^{\mu\nu\rho\sigma}T^Au)}$	\mathbf{C}
1pdsuu	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_L\gamma_\mu s)(\bar{u}\gamma^\mu u)$	\mathbf{C}
2pdsuu	$\frac{4G_F}{\sqrt{2}}(dP_L\gamma_\mu T^A s)(\bar{u}\gamma^\mu T^A u)$	\mathbf{C}
3pdsuu	$\frac{4G_F}{\sqrt{s}}(\bar{d}P_L\gamma_{\mu\nu\rho}s)(\bar{u}\gamma^{\mu\nu\rho}u)$	$^{\mathrm{C}}$
4pdsuu	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_L\gamma_{\mu\nu\rho}T^As)(\bar{u}\gamma^{\mu\nu\rho}T^Au)$	\mathbf{C}
5pdsuu	$\frac{4\tilde{Q}_F}{\sqrt{2}}(\bar{d}P_Ls)(\bar{u}u)$	\mathbf{C}
6pdsuu	$\frac{4\tilde{Q}_F^2}{\sqrt{2}}(\bar{d}P_LT^As)(\bar{u}T^Au)$	\mathbf{C}
7pdsuu	$\frac{4\tilde{Q}_{F}^{F}}{\sqrt{2}}(\bar{d}P_{L}\sigma^{\mu\nu}s)(\bar{u}\sigma_{\mu\nu}u)$	\mathbf{C}
8pdsuu	$\frac{4Q_F^2}{\sqrt{2}}(\bar{d}P_L\sigma^{\mu\nu}T^As)(\bar{u}\sigma_{\mu\nu}T^Au)$	\mathbf{C}
9pdsuu	$\frac{\frac{4G_F}{\sqrt{2}}(\bar{d}P_L\sigma^{\mu\nu}T^As)(\bar{u}\sigma_{\mu\nu}T^Au)}{\frac{4G_F}{\sqrt{2}}(\bar{d}P_L\gamma_{\mu\nu\rho\sigma}s)(\bar{u}\gamma^{\mu\nu\rho\sigma}u)}$ $\frac{4G_F}{\sqrt{2}}(\bar{d}P_L\gamma_{\mu\nu\rho\sigma}T^As)(\bar{u}\gamma^{\mu\nu\rho\sigma}T^Au)$	$^{\mathrm{C}}$
10pdsuu	$\frac{4G_F^2}{\sqrt{2}}(\bar{d}P_L\gamma_{\mu\nu\rho\sigma}T^As)(\bar{u}\gamma^{\mu\nu\rho\sigma}T^Au)$	$^{\mathrm{C}}$
1dsss	$\frac{4Q_F^2}{\sqrt{2}}(\bar{d}P_R\gamma_\mu s)(\bar{s}\gamma^\mu s)$	$^{\mathrm{C}}$
3dsss	$\frac{4Q_F^2}{\sqrt{2}}(\bar{d}P_R\gamma_{\mu\nu\rho}s)(\bar{s}\gamma^{\mu\nu\rho}s)$	\mathbf{C}
5dsss	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_Rs)(\bar{s}s)$	\mathbf{C}
7dsss	$\frac{4Q_F^2}{\sqrt{2}}(\bar{d}P_R\sigma^{\mu\nu}s)(\bar{s}\sigma_{\mu\nu}s)$	\mathbf{C}
9dsss	$\frac{4G_F^2}{\sqrt{2}}(\bar{d}P_R\gamma_{\mu\nu\rho\sigma}s)(\bar{s}\gamma^{\mu\nu\rho\sigma}s)$	\mathbf{C}
1pdsss	$\frac{\frac{4G_F}{\sqrt{2}}(\bar{d}P_R\sigma^{\mu\nu}s)(\bar{s}\sigma_{\mu\nu}s)}{\frac{4G_F}{\sqrt{2}}(\bar{d}P_R\gamma_{\mu\nu\rho\sigma}s)(\bar{s}\gamma^{\mu\nu\rho\sigma}s)}$ $\frac{\frac{4G_F}{\sqrt{2}}(\bar{d}P_L\gamma_{\mu}s)(\bar{s}\gamma^{\mu}s)}{\sqrt{2}(\bar{d}P_L\gamma_{\mu}s)(\bar{s}\gamma^{\mu}s)}$	\mathbf{C}
3pdsss	$rac{4 \stackrel{Q^2}{G_F}}{\sqrt{2}} (ar{d} P_L \gamma_{\mu u ho} s) (ar{s} \gamma^{\mu u ho} s)$	\mathbf{C}
5pdsss	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_L s)(\bar{s}s)$	\mathbf{C}
7pdsss	$\frac{\frac{4G_F}{\sqrt{2}}(\bar{d}P_L\sigma^{\mu\nu}s)(\bar{s}\sigma_{\mu\nu}s)}{\frac{4G_F}{\sqrt{2}}(\bar{d}P_L\gamma_{\mu\nu\rho\sigma}s)(\bar{s}\gamma^{\mu\nu\rho\sigma}s)}$	\mathbf{C}
9pdsss	$\frac{4\vec{Q}_F}{\sqrt{2}}(\bar{d}P_L\gamma_{\mu\nu\rho\sigma}s)(\bar{s}\gamma^{\mu\nu\rho\sigma}s)$	\mathbf{C}
1dsdd	$\frac{4\overset{Q^{\prime}}{G_{F}}}{\sqrt{2}}(ar{d}\gamma_{\mu}P_{L}s)(ar{d}\gamma^{\mu}d)$	\mathbf{C}
1pdsdd	$rac{4ar{Q}_F^2}{\sqrt{2}}(ar{d}\gamma_\mu P_R s)(ar{d}\gamma^\mu d)$	\mathbf{C}
3dsdd	$\frac{4\overleftarrow{Q_F}}{\sqrt{2}}(\bar{d}\gamma_{\mu\nu\rho}P_Ls)(\bar{d}\gamma^{\mu\nu\rho}d)$	\mathbf{C}
3pdsdd	$\frac{4\overleftarrow{Q_F}}{\sqrt{2}}(\bar{d}\gamma_{\mu\nu\rho}P_Rs)(\bar{d}\gamma^{\mu\nu\rho}d)$	\mathbf{C}
5dsdd	$ \begin{array}{l} \frac{-\frac{1}{\sqrt{2}}(dP_L\gamma_{\mu\nu\rho\sigma}s)(s\gamma^{\mu\nu\rho\sigma}s)}{\frac{4G_F}{\sqrt{2}}(\bar{d}\gamma_{\mu}P_Ls)(\bar{d}\gamma^{\mu}d)} \\ \frac{4G_F}{\sqrt{2}}(\bar{d}\gamma_{\mu}P_Rs)(\bar{d}\gamma^{\mu}d) \\ \frac{4G_F}{\sqrt{2}}(\bar{d}\gamma_{\mu\nu\rho}P_Ls)(\bar{d}\gamma^{\mu\nu\rho}d) \\ \frac{4G_F}{\sqrt{2}}(\bar{d}\gamma_{\mu\nu\rho}P_Rs)(\bar{d}\gamma^{\mu\nu\rho}d) \\ \frac{4G_F}{\sqrt{2}}(\bar{d}P_Ls)(\bar{d}d) \\ \frac{4G_F}{\sqrt{2}}(\bar{d}P_Ls)(\bar{d}d) \end{array} $	\mathbf{C}
5pdsdd	$\frac{4\overset{YG_F}{G_F}}{\sqrt{2}}(\bar{d}P_Rs)(\bar{d}d)$	\mathbf{C}
7dsdd	$\frac{4\tilde{\mathbf{Y}}_{F}^{\sigma}}{\sqrt{2}}(\bar{d}\sigma^{\mu\nu}P_{L}s)(\bar{d}\sigma_{\mu\nu}d)$	\mathbf{C}
7pdsdd	$\frac{\frac{4G_F}{\sqrt{2}}(\bar{d}\sigma^{\mu\nu}P_Rs)(\bar{d}\sigma_{\mu\nu}d)}{\frac{4G_F}{\sqrt{2}}(\bar{d}\gamma_{\mu\nu\rho\sigma}P_Ls)(\bar{d}\gamma^{\mu\nu\rho\sigma}d)}$	\mathbf{C}
9dsdd	$\frac{4G_F}{\sqrt{2}}(\bar{d}\gamma_{\mu\nu\rho\sigma}P_Ls)(\bar{d}\gamma^{\mu\nu\rho\sigma}d)$	\mathbf{C}
9pdsdd	$\frac{4G_F}{\sqrt{2}}(d\gamma_{\mu\nu\rho\sigma}P_Rs)(d\gamma^{\mu\nu\rho\sigma}d)$	\mathbf{C}
1dsee	$ \frac{\frac{4G_F}{\sqrt{2}}(\bar{d}P_R\gamma_{\mu}s)(\bar{e}\gamma^{\mu}e)}{\frac{4G_F}{\sqrt{2}}(\bar{d}P_L\gamma_{\mu}s)(\bar{e}\gamma^{\mu}e)} \\ \frac{\frac{4G_F}{\sqrt{2}}(\bar{d}P_R\gamma_{\mu\nu\rho}s)(\bar{e}\gamma^{\mu\nu\rho}e)}{\frac{4G_F}{\sqrt{2}}(\bar{d}P_L\gamma_{\mu\nu\rho}s)(\bar{e}\gamma^{\mu\nu\rho}e)} \\ \frac{4G_F}{\sqrt{2}}(\bar{d}P_L\gamma_{\mu\nu\rho}s)(\bar{e}\gamma^{\mu\nu\rho}e) $	\mathbf{C}
1pdsee	$rac{4\check{G}_F^c}{\sqrt{2}}(ar{d}P_L\gamma_\mu s)(ar{e}\gamma^\mu e)$	\mathbf{C}
3dsee	$\frac{4\overleftarrow{Q_F}}{\sqrt{2}}(\bar{d}P_R\gamma_{\mu\nu\rho}s)(\bar{e}\gamma^{\mu\nu\rho}e)$	\mathbf{C}
3pdsee	$\frac{4\overset{\circ}{G_F}}{(\bar{d}P_I\gamma_{s})}(\bar{e}\gamma^{\mu\nu\rho}e)$	$^{\mathrm{C}}$

WC name	Operator	Type
5dsee	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_Rs)(\bar{e}e)$	C
5pdsee	$\frac{4\overset{AG_F}{f}}{\sqrt{2}}(\bar{d}P_Ls)(\bar{e}e)$	\mathbf{C}
7dsee	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{d}P_R\sigma^{\mu\nu}s)(\bar{e}\sigma_{\mu\nu}e)$	\mathbf{C}
7pdsee	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{d}P_L\sigma^{\mu\nu}s)(\bar{e}\sigma_{\mu\nu}e)$	\mathbf{C}
9dsee	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{d}P_R\gamma_{\mu\nu\rho\sigma}s)(\bar{e}\gamma^{\mu\nu\rho\sigma}e)$	$^{\mathrm{C}}$
9pdsee	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_L\gamma_{\mu\nu\rho\sigma}s)(\bar{e}\gamma^{\mu\nu\rho\sigma}e)$	$^{\mathrm{C}}$
1dsmumu	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{d}P_R\gamma_\mu s)(\bar{\mu}\gamma^\mu\mu)$	$^{\mathrm{C}}$
1pdsmumu	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_L\gamma_\mu s)(\bar{\mu}\gamma^\mu\mu)$	$^{\mathrm{C}}$
3dsmumu	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_R\gamma_{\mu\nu\rho}s)(\bar{\mu}\gamma^{\mu\nu\rho}\mu)$	$^{\mathrm{C}}$
3pdsmumu	$\frac{4\tilde{Q}_F}{\sqrt{2}}(\bar{d}P_L\gamma_{\mu\nu\rho}s)(\bar{\mu}\gamma^{\mu\nu\rho}\mu)$	$^{\mathrm{C}}$
5dsmumu	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_Rs)(\bar{\mu}\mu)$	$^{\mathrm{C}}$
5pdsmumu	$\frac{4\ddot{G}_F}{\sqrt{2}}(\bar{d}P_Ls)(\bar{\mu}\mu)$	$^{\mathrm{C}}$
7dsmumu	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_R\sigma^{\mu\nu}s)(\bar{\mu}\sigma_{\mu\nu}\mu)$	$^{\mathrm{C}}$
7pdsmumu	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{d}P_L\sigma^{\mu\nu}s)(\bar{\mu}\sigma_{\mu\nu}\mu)$	$^{\mathrm{C}}$
9dsmumu	$\frac{4\tilde{Q}_F}{\sqrt{2}}(\bar{d}P_R\gamma_{\mu\nu\rho\sigma}s)(\bar{\mu}\gamma^{\mu\nu\rho\sigma}\mu)$	$^{\mathrm{C}}$
9pdsmumu	$\frac{4\overleftarrow{G}_F}{\sqrt{2}}(\bar{d}P_L\gamma_{\mu\nu\rho\sigma}s)(\bar{\mu}\gamma^{\mu\nu\rho\sigma}\mu)$	C

sdmue

WC name	Operator	Type
1dsemu	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_R\gamma_\mu s)(\bar{e}\gamma^\mu\mu)$	C
1pdsemu	$\frac{\frac{4G_F^2}{\sqrt{2}}(\bar{d}P_L\gamma_\mu s)(\bar{e}\gamma^\mu\mu)}{\frac{4G_F^2}{\sqrt{2}}(\bar{d}P_R\gamma_{\mu\nu\rho}s)(\bar{e}\gamma^{\mu\nu\rho}\mu)}$ $\frac{\frac{4G_F}{\sqrt{2}}(\bar{d}P_L\gamma_{\mu\nu\rho}s)(\bar{e}\gamma^{\mu\nu\rho}\mu)}{\frac{4G_F^2}{\sqrt{2}}(\bar{d}P_L\gamma_{\mu\nu\rho}s)(\bar{e}\gamma^{\mu\nu\rho}\mu)}$	\mathbf{C}
3dsemu	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{d}P_R\gamma_{\mu\nu\rho}s)(\bar{e}\gamma^{\mu\nu\rho}\mu)$	\mathbf{C}
3pdsemu	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{d}P_L\gamma_{\mu\nu\rho}s)(\bar{e}\gamma^{\mu\nu\rho}\mu)$	\mathbf{C}
5dsemu	$\frac{4\overset{.}{G}_{F}}{\sqrt{2}}(\bar{d}P_{R}s)(\bar{e}\mu)$	$^{\mathrm{C}}$
5pdsemu	$\frac{4\check{G}_F}{\sqrt{2}}(\bar{d}P_Ls)(\bar{e}\mu)$	\mathbf{C}
7dsemu	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_R\sigma^{\mu\nu}s)(\bar{e}\sigma_{\mu\nu}\mu)$	\mathbf{C}
7pdsemu	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{d}P_L\sigma^{\mu\nu}s)(\bar{e}\sigma_{\mu\nu}\mu)$	\mathbf{C}
9dsemu	$\frac{4\check{G}_F}{\sqrt{2}}(\bar{d}P_R\gamma_{\mu\nu\rho\sigma}s)(\bar{e}\gamma^{\mu\nu\rho\sigma}\mu)$	$^{\mathrm{C}}$
9pdsemu	$ \frac{\frac{4\ddot{G}_{F}}{\sqrt{2}}(\bar{d}P_{L}\sigma^{\mu\nu}s)(\bar{e}\sigma_{\mu\nu}\mu)}{\frac{4\ddot{G}_{F}}{\sqrt{2}}(\bar{d}P_{R}\gamma_{\mu\nu\rho\sigma}s)(\bar{e}\gamma^{\mu\nu\rho\sigma}\mu)} \\ \frac{4\ddot{G}_{F}}{\sqrt{2}}(\bar{d}P_{L}\gamma_{\mu\nu\rho\sigma}s)(\bar{e}\gamma^{\mu\nu\rho\sigma}\mu) $	$^{\mathrm{C}}$

sdemu

WC name	Operator	Type
1dsmue	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_R\gamma_\mu s)(\bar{\mu}\gamma^\mu e)$	C
1pdsmue	$rac{4reve{Q}_F^2}{\sqrt{2}}(ar{d}P_L\gamma_\mu s)(ar{\mu}\gamma^\mu e)$	\mathbf{C}

WC name	Operator	Type
3dsmue	$\frac{\frac{4G_F}{\sqrt{2}}(\bar{d}P_R\gamma_{\mu\nu\rho}s)(\bar{\mu}\gamma^{\mu\nu\rho}e)}{\frac{4G_F}{\sqrt{2}}(\bar{d}P_L\gamma_{\mu\nu\rho}s)(\bar{\mu}\gamma^{\mu\nu\rho}e)}$	С
3pdsmue	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{d}P_L\gamma_{\mu\nu\rho}s)(\bar{\mu}\gamma^{\mu\nu\rho}e)$	\mathbf{C}
5dsmue	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_R s)(\bar{\mu}e)$	\mathbf{C}
5pdsmue	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{d}P_Ls)(\bar{\mu}e)$	\mathbf{C}
7dsmue	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{d}P_R\sigma^{\mu\nu}s)(\bar{\mu}\sigma_{\mu\nu}e)$	\mathbf{C}
7pdsmue	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{d}P_L\sigma^{\mu\nu}s)(\bar{\mu}\sigma_{\mu\nu}e)$	\mathbf{C}
9dsmue	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{d}P_R\gamma_{\mu\nu\rho\sigma}s)(\bar{\mu}\gamma^{\mu\nu\rho\sigma}e)$	\mathbf{C}
9pdsmue	$ \frac{4G_F}{\sqrt{2}}(\bar{d}P_L s)(\bar{\mu}e) \frac{4G_F}{\sqrt{2}}(\bar{d}P_R \sigma^{\mu\nu} s)(\bar{\mu}\sigma_{\mu\nu}e) \frac{4G_F}{\sqrt{2}}(\bar{d}P_L \sigma^{\mu\nu} s)(\bar{\mu}\sigma_{\mu\nu}e) \frac{4G_F}{\sqrt{2}}(\bar{d}P_L \sigma^{\mu\nu} s)(\bar{\mu}\gamma^{\mu\nu\rho\sigma}e) \frac{4G_F}{\sqrt{2}}(\bar{d}P_L \gamma_{\mu\nu\rho\sigma}s)(\bar{\mu}\gamma^{\mu\nu\rho\sigma}e) \frac{4G_F}{\sqrt{2}}(\bar{d}P_L \gamma_{\mu\nu\rho\sigma}s)(\bar{\mu}\gamma^{\mu\nu\rho\sigma}e) $	C

sdnunu

WC name	Operator	Type
nu1dsee	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_R\gamma_\mu s)(\bar{\nu}_e\gamma^\mu\nu_e)$	С
nu1pdsee	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_L\gamma_\mu s)(\bar{\nu}_e\gamma^\mu\nu_e)$	\mathbf{C}
nu1dsmumu	$rac{4reve{G_F}}{\sqrt{2}}(ar{d}P_R\gamma_\mu s)(ar{ u}_\mu\gamma^\mu u_\mu)$	\mathbf{C}
nu1pdsmumu	$\frac{4\ddot{G}_F}{\sqrt{2}}(\bar{d}P_L\gamma_\mu s)(\bar{\nu}_\mu\gamma^\mu\nu_\mu)$	\mathbf{C}
nu1dstautau	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_R\gamma_\mu s)(\bar{\nu}_\tau\gamma^\mu\nu_\tau)$	\mathbf{C}
nu1pdstautau	$\frac{4\check{G}_F}{\sqrt{2}}(\bar{d}P_L\gamma_\mu s)(\bar{ u}_ au\gamma^\mu u_ au)$	$^{\mathrm{C}}$
nu1dsemu	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_R\gamma_\mu s)(\bar{\nu}_e\gamma^\mu\nu_\mu)$	\mathbf{C}
nu1pdsemu	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{d}P_L\gamma_\mu s)(\bar{\nu}_e\gamma^\mu\nu_\mu)$	\mathbf{C}
nu1dsmue	$rac{4reve{G_F}}{\sqrt{2}}(ar{d}P_R\gamma_\mu s)(ar{ u}_\mu\gamma^\mu u_e)$	$^{\mathrm{C}}$
nu1pdsmue	$\frac{4\check{G}_F}{\sqrt{2}}(\bar{d}P_L\gamma_\mu s)(\bar{ u}_\mu\gamma^\mu u_e)$	$^{\mathrm{C}}$
nu1dsetau	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_R\gamma_\mu s)(\bar{\nu}_e\gamma^\mu\nu_ au)$	\mathbf{C}
nu1pdsetau	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_L\gamma_\mu s)(\bar{\nu}_e\gamma^\mu\nu_ au)$	\mathbf{C}
nu1dstaue	$rac{4reve{G_F}}{\sqrt{2}}(ar{d}P_R\gamma_\mu s)(ar{ u}_ au\gamma^\mu u_e)$	$^{\mathrm{C}}$
nu1pdstaue	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_L\gamma_\mu s)(\bar{\nu}_\tau\gamma^\mu\nu_e)$	\mathbf{C}
nu1dstaumu	$\frac{4\check{G}_F}{\sqrt{2}}(\bar{d}P_R\gamma_\mu s)(\bar{ u}_ au\gamma^\mu u_\mu)$	$^{\mathrm{C}}$
nu1pdstaumu	$rac{4reve{G_F}}{\sqrt{2}}(ar{d}P_L\gamma_\mu s)(ar{ u}_ au\gamma^\mu u_\mu)$	$^{\mathrm{C}}$
nu1dsmutau	$rac{4reve{G_F}}{\sqrt{2}}(ar{d}P_R\gamma_\mu s)(ar{ u}_\mu\gamma^\mu u_ au)$	$^{\mathrm{C}}$
nu1pdsmutau	$rac{4reve{G_F}}{\sqrt{2}}(ar{d}P_L\gamma_\mu s)(ar{ u}_\mu\gamma^\mu u_ au)$	$^{\mathrm{C}}$