

Basis EOS (EFT WET)

Basis used by the EOS software as of version 0.4 or later. Neutrinos are in the flavour basis.

Sectors

The effective Lagrangian is defined as

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

sbsb

WC name	Operator	Type
sbsb::c1	$-\frac{4G_F}{\sqrt{2}}(V_{tb}V_{ts}^*)^2(\bar{s}_L\gamma^\mu b_L)(\bar{s}_L\gamma_\mu b_L)$	C
sbsb::c1'	$-\frac{4G_F}{\sqrt{2}}(V_{tb}V_{ts}^*)^2(\bar{s}_R\gamma^\mu b_R)(\bar{s}_R\gamma_\mu b_R)$	C
sbsb::c2	$-\frac{4G_F}{\sqrt{2}}(V_{tb}V_{ts}^*)^2(\bar{s}_R b_L)(\bar{s}_R b_L)$	C
sbsb::c2'	$-\frac{4G_F}{\sqrt{2}}(V_{tb}V_{ts}^*)^2(\bar{s}_L b_R)(\bar{s}_L b_R)$	C
sbsb::c3	$-\frac{4G_F}{\sqrt{2}}(V_{tb}V_{ts}^*)^2(\bar{s}_{\alpha R} b_{\beta L})(\bar{s}_{\beta R} b_{\alpha L})$	C
sbsb::c3'	$-\frac{4G_F}{\sqrt{2}}(V_{tb}V_{ts}^*)^2(\bar{s}_{\alpha L} b_{\beta R})(\bar{s}_{\beta L} b_{\alpha R})$	C
sbsb::c4	$-\frac{4G_F}{\sqrt{2}}(V_{tb}V_{ts}^*)^2(\bar{s}_R b_L)(\bar{s}_L b_R)$	C
sbsb::c5	$-\frac{4G_F}{\sqrt{2}}(V_{tb}V_{ts}^*)^2(\bar{s}_{\alpha R} b_{\beta L})(\bar{s}_{\beta L} b_{\alpha R})$	C

sbcu

WC name	Operator	Type
sbcu::c1	$\frac{4G_F}{\sqrt{2}}(\bar{s}P_R\gamma_\mu b)(\bar{c}\gamma^\mu u)$	C
sbcu::c2	$\frac{4G_F}{\sqrt{2}}(\bar{s}P_R\gamma_\mu T^A b)(\bar{c}\gamma^\mu T^A u)$	C
sbcu::c3	$\frac{4G_F}{\sqrt{2}}(\bar{s}P_R\gamma_{\mu\nu\rho} b)(\bar{c}\gamma^{\mu\nu\rho} u)$	C
sbcu::c4	$\frac{4G_F}{\sqrt{2}}(\bar{s}P_R\gamma_{\mu\nu\rho} T^A b)(\bar{c}\gamma^{\mu\nu\rho} T^A u)$	C
sbcu::c5	$\frac{4G_F}{\sqrt{2}}(\bar{s}P_R b)(\bar{c}u)$	C
sbcu::c6	$\frac{4G_F}{\sqrt{2}}(\bar{s}P_R T^A b)(\bar{c}T^A u)$	C
sbcu::c7	$\frac{4G_F}{\sqrt{2}}(\bar{s}P_R\sigma^{\mu\nu} b)(\bar{c}\sigma_{\mu\nu} u)$	C
sbcu::c8	$\frac{4G_F}{\sqrt{2}}(\bar{s}P_R\sigma^{\mu\nu} T^A b)(\bar{c}\sigma_{\mu\nu} T^A u)$	C
sbcu::c9	$\frac{4G_F}{\sqrt{2}}(\bar{s}P_R\gamma_{\mu\nu\rho\sigma} b)(\bar{c}\gamma^{\mu\nu\rho\sigma} u)$	C
sbcu::c10	$\frac{4G_F}{\sqrt{2}}(\bar{s}P_R\gamma_{\mu\nu\rho\sigma} T^A b)(\bar{c}\gamma^{\mu\nu\rho\sigma} T^A u)$	C
sbcu::c1'	$\frac{4G_F}{\sqrt{2}}(\bar{s}P_L\gamma_\mu b)(\bar{c}\gamma^\mu u)$	C
sbcu::c2'	$\frac{4G_F}{\sqrt{2}}(\bar{s}P_L\gamma_\mu T^A b)(\bar{c}\gamma^\mu T^A u)$	C

WC name	Operator	Type
sbcu::c3'	$\frac{4G_F}{\sqrt{2}} (\bar{s}P_L\gamma_{\mu\nu\rho}b)(\bar{c}\gamma^{\mu\nu\rho}u)$	C
sbcu::c4'	$\frac{4G_F}{\sqrt{2}} (\bar{s}P_L\gamma_{\mu\nu\rho}T^Ab)(\bar{c}\gamma^{\mu\nu\rho}T^Au)$	C
sbcu::c5'	$\frac{4G_F}{\sqrt{2}} (\bar{s}P_Lb)(\bar{c}u)$	C
sbcu::c6'	$\frac{4G_F}{\sqrt{2}} (\bar{s}P_LT^Ab)(\bar{c}T^Au)$	C
sbcu::c7'	$\frac{4G_F}{\sqrt{2}} (\bar{s}P_L\sigma^{\mu\nu}b)(\bar{c}\sigma_{\mu\nu}u)$	C
sbcu::c8'	$\frac{4G_F}{\sqrt{2}} (\bar{s}P_L\sigma^{\mu\nu}T^Ab)(\bar{c}\sigma_{\mu\nu}T^Au)$	C
sbcu::c9'	$\frac{4G_F}{\sqrt{2}} (\bar{s}P_L\gamma_{\mu\nu\rho\sigma}b)(\bar{c}\gamma^{\mu\nu\rho\sigma}u)$	C
sbcu::c10'	$\frac{4G_F}{\sqrt{2}} (\bar{s}P_L\gamma_{\mu\nu\rho\sigma}T^Ab)(\bar{c}\gamma^{\mu\nu\rho\sigma}T^Au)$	C

dbcu

WC name	Operator	Type
dbcu::c1	$\frac{4G_F}{\sqrt{2}} (\bar{d}P_R\gamma_\mu b)(\bar{c}\gamma^\mu u)$	C
dbcu::c2	$\frac{4G_F}{\sqrt{2}} (\bar{d}P_R\gamma_\mu T^Ab)(\bar{c}\gamma^\mu T^Au)$	C
dbcu::c3	$\frac{4G_F}{\sqrt{2}} (\bar{d}P_R\gamma_{\mu\nu\rho}b)(\bar{c}\gamma^{\mu\nu\rho}u)$	C
dbcu::c4	$\frac{4G_F}{\sqrt{2}} (\bar{d}P_R\gamma_{\mu\nu\rho}T^Ab)(\bar{c}\gamma^{\mu\nu\rho}T^Au)$	C
dbcu::c5	$\frac{4G_F}{\sqrt{2}} (\bar{d}P_Rb)(\bar{c}u)$	C
dbcu::c6	$\frac{4G_F}{\sqrt{2}} (\bar{d}P_RT^Ab)(\bar{c}T^Au)$	C
dbcu::c7	$\frac{4G_F}{\sqrt{2}} (\bar{d}P_R\sigma^{\mu\nu}b)(\bar{c}\sigma_{\mu\nu}u)$	C
dbcu::c8	$\frac{4G_F}{\sqrt{2}} (\bar{d}P_R\sigma^{\mu\nu}T^Ab)(\bar{c}\sigma_{\mu\nu}T^Au)$	C
dbcu::c9	$\frac{4G_F}{\sqrt{2}} (\bar{d}P_R\gamma_{\mu\nu\rho\sigma}b)(\bar{c}\gamma^{\mu\nu\rho\sigma}u)$	C
dbcu::c10	$\frac{4G_F}{\sqrt{2}} (\bar{d}P_R\gamma_{\mu\nu\rho\sigma}T^Ab)(\bar{c}\gamma^{\mu\nu\rho\sigma}T^Au)$	C
dbcu::c1'	$\frac{4G_F}{\sqrt{2}} (\bar{d}P_L\gamma_\mu b)(\bar{c}\gamma^\mu u)$	C
dbcu::c2'	$\frac{4G_F}{\sqrt{2}} (\bar{d}P_L\gamma_\mu T^Ab)(\bar{c}\gamma^\mu T^Au)$	C
dbcu::c3'	$\frac{4G_F}{\sqrt{2}} (\bar{d}P_L\gamma_{\mu\nu\rho}b)(\bar{c}\gamma^{\mu\nu\rho}u)$	C
dbcu::c4'	$\frac{4G_F}{\sqrt{2}} (\bar{d}P_L\gamma_{\mu\nu\rho}T^Ab)(\bar{c}\gamma^{\mu\nu\rho}T^Au)$	C
dbcu::c5'	$\frac{4G_F}{\sqrt{2}} (\bar{d}P_Lb)(\bar{c}u)$	C
dbcu::c6'	$\frac{4G_F}{\sqrt{2}} (\bar{d}P_LT^Ab)(\bar{c}T^Au)$	C
dbcu::c7'	$\frac{4G_F}{\sqrt{2}} (\bar{d}P_L\sigma^{\mu\nu}b)(\bar{c}\sigma_{\mu\nu}u)$	C
dbcu::c8'	$\frac{4G_F}{\sqrt{2}} (\bar{d}P_L\sigma^{\mu\nu}T^Ab)(\bar{c}\sigma_{\mu\nu}T^Au)$	C
dbcu::c9'	$\frac{4G_F}{\sqrt{2}} (\bar{d}P_L\gamma_{\mu\nu\rho\sigma}b)(\bar{c}\gamma^{\mu\nu\rho\sigma}u)$	C
dbcu::c10'	$\frac{4G_F}{\sqrt{2}} (\bar{d}P_L\gamma_{\mu\nu\rho\sigma}T^Ab)(\bar{c}\gamma^{\mu\nu\rho\sigma}T^Au)$	C

sb

WC name	Operator	Type
b->s::c1	$\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* (\bar{s}_L \gamma^\mu T^a c_L) (\bar{c}_L \gamma_\mu T^a b_L)$	R
b->s::c2	$\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* (\bar{s}_L \gamma^\mu c_L) (\bar{c}_L \gamma_\mu b_L)$	R
b->s::c3	$\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* (\bar{s}_L \gamma^\mu b_L) \sum_q (\bar{q} \gamma_\mu q)$	R
b->s::c4	$\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* (\bar{s}_L \gamma^\mu T^a b_L) \sum_q (\bar{q} \gamma_\mu T^a q)$	R
b->s::c5	$\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* (\bar{s}_L \gamma^{\mu_1} \gamma^{\mu_2} \gamma^{\mu_3} b_L) \sum_q (\bar{q} \gamma_{\mu_1} \gamma_{\mu_2} \gamma_{\mu_3} q)$	R
b->s::c6	$\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* (\bar{s}_L \gamma^{\mu_1} \gamma^{\mu_2} \gamma^{\mu_3} T^a b_L) \sum_q (\bar{q} \gamma_{\mu_1} \gamma_{\mu_2} \gamma_{\mu_3} T^a q)$	R
b->s::Re{c7}	$\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e}{16\pi^2} m_b (\bar{s}_L \sigma_{\mu\nu} b_R) F^{\mu\nu}$	R
b->s::Im{c7}	$\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e}{16\pi^2} m_b (\bar{s}_L \sigma_{\mu\nu} b_R) F^{\mu\nu}$	R
b->s::Re{c7'}	$\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e}{16\pi^2} m_b (\bar{s}_R \sigma_{\mu\nu} b_L) F^{\mu\nu}$	R
b->s::Im{c7'}	$\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e}{16\pi^2} m_b (\bar{s}_R \sigma_{\mu\nu} b_L) F^{\mu\nu}$	R
b->s::c8	$\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{g_s}{16\pi^2} m_b (\bar{s}_L \sigma_{\mu\nu} T^a b_R) G^{a\mu\nu}$	R
b->s::c8'	$\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{g_s}{16\pi^2} m_b (\bar{s}_R \sigma_{\mu\nu} T^a b_L) G^{a\mu\nu}$	R
b->see::Re{c9}	$\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e^2}{16\pi^2} (\bar{s}_L \gamma^\mu b_L) (\bar{e} \gamma_\mu e)$	R
b->see::Im{c9}	$\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e^2}{16\pi^2} (\bar{s}_L \gamma^\mu b_L) (\bar{e} \gamma_\mu e)$	R
b->see::Re{c9'}	$\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e^2}{16\pi^2} (\bar{s}_R \gamma^\mu b_R) (\bar{e} \gamma_\mu e)$	R
b->see::Im{c9'}	$\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e^2}{16\pi^2} (\bar{s}_R \gamma^\mu b_R) (\bar{e} \gamma_\mu e)$	R
b->see::Re{c10}	$\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e^2}{16\pi^2} (\bar{s}_L \gamma^\mu b_L) (\bar{e} \gamma_\mu \gamma_5 e)$	R
b->see::Im{c10}	$\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e^2}{16\pi^2} (\bar{s}_L \gamma^\mu b_L) (\bar{e} \gamma_\mu \gamma_5 e)$	R
b->see::Re{c10'}	$\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e^2}{16\pi^2} (\bar{s}_R \gamma^\mu b_R) (\bar{e} \gamma_\mu \gamma_5 e)$	R
b->see::Im{c10'}	$\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e^2}{16\pi^2} (\bar{s}_R \gamma^\mu b_R) (\bar{e} \gamma_\mu \gamma_5 e)$	R
b->see::Re{cS}	$\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e^2}{16\pi^2} m_b (\bar{s}_L b_R) (\bar{e} e)$	R
b->see::Im{cS}	$\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e^2}{16\pi^2} m_b (\bar{s}_L b_R) (\bar{e} e)$	R
b->see::Re{cS'}	$\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e^2}{16\pi^2} m_b (\bar{s}_R b_L) (\bar{e} e)$	R
b->see::Im{cS'}	$\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e^2}{16\pi^2} m_b (\bar{s}_R b_L) (\bar{e} e)$	R
b->see::Re{cP}	$\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e^2}{16\pi^2} m_b (\bar{s}_L b_R) (\bar{e} \gamma_5 e)$	R
b->see::Im{cP}	$\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e^2}{16\pi^2} m_b (\bar{s}_L b_R) (\bar{e} \gamma_5 e)$	R
b->see::Re{cP'}	$\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e^2}{16\pi^2} m_b (\bar{s}_R b_L) (\bar{e} \gamma_5 e)$	R
b->see::Im{cP'}	$\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e^2}{16\pi^2} m_b (\bar{s}_R b_L) (\bar{e} \gamma_5 e)$	R
b->see::Re{cT}	$\frac{4G_F}{\sqrt{2}} V_{ub} \frac{e^2}{16\pi^2} (\bar{s} \sigma_{\mu\nu} b) (\bar{e} \sigma_{\mu\nu} e)$	R
b->see::Im{cT}	$\frac{4G_F}{\sqrt{2}} V_{ub} \frac{e^2}{16\pi^2} (\bar{s} \sigma_{\mu\nu} b) (\bar{e} \sigma_{\mu\nu} e)$	R
b->see::Re{cT5}	$\frac{4G_F}{\sqrt{2}} V_{ub} \frac{e^2}{16\pi^2} (\bar{s} \sigma_{\mu\nu} b) (\bar{e} \sigma_{\mu\nu} \gamma_5 e)$	R
b->see::Im{cT5}	$\frac{4G_F}{\sqrt{2}} V_{ub} \frac{e^2}{16\pi^2} (\bar{s} \sigma_{\mu\nu} b) (\bar{e} \sigma_{\mu\nu} \gamma_5 e)$	R
b->smumu::Re{c9}	$\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e^2}{16\pi^2} (\bar{s}_L \gamma^\mu b_L) (\bar{\mu} \gamma_\mu \mu)$	R
b->smumu::Im{c9}	$\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e^2}{16\pi^2} (\bar{s}_L \gamma^\mu b_L) (\bar{\mu} \gamma_\mu \mu)$	R
b->smumu::Re{c9'}	$\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e^2}{16\pi^2} (\bar{s}_R \gamma^\mu b_R) (\bar{\mu} \gamma_\mu \mu)$	R

WC name	Operator	Type
$b \rightarrow smumu : : \text{Im}\{c9'\}$	$\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e^2}{16\pi^2} (\bar{s}_R \gamma^\mu b_R) (\bar{\mu} \gamma_\mu \mu)$	R
$b \rightarrow smumu : : \text{Re}\{c10\}$	$\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e^2}{16\pi^2} (\bar{s}_L \gamma^\mu b_L) (\bar{\mu} \gamma_\mu \gamma_5 \mu)$	R
$b \rightarrow smumu : : \text{Im}\{c10\}$	$\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e^2}{16\pi^2} (\bar{s}_L \gamma^\mu b_L) (\bar{\mu} \gamma_\mu \gamma_5 \mu)$	R
$b \rightarrow smumu : : \text{Re}\{c10'\}$	$\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e^2}{16\pi^2} (\bar{s}_R \gamma^\mu b_R) (\bar{\mu} \gamma_\mu \gamma_5 \mu)$	R
$b \rightarrow smumu : : \text{Im}\{c10'\}$	$\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e^2}{16\pi^2} (\bar{s}_R \gamma^\mu b_R) (\bar{\mu} \gamma_\mu \gamma_5 \mu)$	R
$b \rightarrow smumu : : \text{Re}\{cS\}$	$\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e^2}{16\pi^2} m_b (\bar{s}_L b_R) (\bar{\mu} \mu)$	R
$b \rightarrow smumu : : \text{Im}\{cS\}$	$\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e^2}{16\pi^2} m_b (\bar{s}_L b_R) (\bar{\mu} \mu)$	R
$b \rightarrow smumu : : \text{Re}\{cS'\}$	$\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e^2}{16\pi^2} m_b (\bar{s}_R b_L) (\bar{\mu} \mu)$	R
$b \rightarrow smumu : : \text{Im}\{cS'\}$	$\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e^2}{16\pi^2} m_b (\bar{s}_R b_L) (\bar{\mu} \mu)$	R
$b \rightarrow smumu : : \text{Re}\{cP\}$	$\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e^2}{16\pi^2} m_b (\bar{s}_L b_R) (\bar{\mu} \gamma_5 \mu)$	R
$b \rightarrow smumu : : \text{Im}\{cP\}$	$\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e^2}{16\pi^2} m_b (\bar{s}_L b_R) (\bar{\mu} \gamma_5 \mu)$	R
$b \rightarrow smumu : : \text{Re}\{cP'\}$	$\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e^2}{16\pi^2} m_b (\bar{s}_R b_L) (\bar{\mu} \gamma_5 \mu)$	R
$b \rightarrow smumu : : \text{Im}\{cP'\}$	$\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e^2}{16\pi^2} m_b (\bar{s}_R b_L) (\bar{\mu} \gamma_5 \mu)$	R
$b \rightarrow smumu : : \text{Re}\{cT\}$	$\frac{4G_F}{\sqrt{2}} V_{ub} \frac{e^2}{16\pi^2} (\bar{s} \sigma_{\mu\nu} b) (\bar{\mu} \sigma_{\mu\nu} \mu)$	R
$b \rightarrow smumu : : \text{Im}\{cT\}$	$\frac{4G_F}{\sqrt{2}} V_{ub} \frac{e^2}{16\pi^2} (\bar{s} \sigma_{\mu\nu} b) (\bar{\mu} \sigma_{\mu\nu} \mu)$	R
$b \rightarrow smumu : : \text{Re}\{cT5\}$	$\frac{4G_F}{\sqrt{2}} V_{ub} \frac{e^2}{16\pi^2} (\bar{s} \sigma_{\mu\nu} b) (\bar{\mu} \sigma_{\mu\nu} \gamma_5 \mu)$	R
$b \rightarrow smumu : : \text{Im}\{cT5\}$	$\frac{4G_F}{\sqrt{2}} V_{ub} \frac{e^2}{16\pi^2} (\bar{s} \sigma_{\mu\nu} b) (\bar{\mu} \sigma_{\mu\nu} \gamma_5 \mu)$	R

cbenu

WC name	Operator	Type
$cbenu : : cVL$	$-\frac{4G_F}{\sqrt{2}} V_{cb} (\bar{c}_L \gamma^\mu b_L) (\bar{e}_L \gamma_\mu \nu_{eL})$	C
$cbenu : : cVR$	$-\frac{4G_F}{\sqrt{2}} V_{cb} (\bar{c}_R \gamma^\mu b_R) (\bar{e}_L \gamma_\mu \nu_{eL})$	C
$cbenu : : cSR$	$-\frac{4G_F}{\sqrt{2}} V_{cb} (\bar{c}_L b_R) (\bar{e}_R \nu_{eL})$	C
$cbenu : : cSL$	$-\frac{4G_F}{\sqrt{2}} V_{cb} (\bar{c}_R b_L) (\bar{e}_R \nu_{eL})$	C
$cbenu : : cT$	$-\frac{4G_F}{\sqrt{2}} V_{cb} (\bar{c}_R \sigma^{\mu\nu} b_L) (\bar{e}_R \sigma_{\mu\nu} \nu_{eL})$	C

cbmunu

WC name	Operator	Type
$cbmunumu : : cVL$	$-\frac{4G_F}{\sqrt{2}} V_{cb} (\bar{c}_L \gamma^\mu b_L) (\bar{\mu}_L \gamma_\mu \nu_{\mu L})$	C
$cbmunumu : : cVR$	$-\frac{4G_F}{\sqrt{2}} V_{cb} (\bar{c}_R \gamma^\mu b_R) (\bar{\mu}_L \gamma_\mu \nu_{\mu L})$	C
$cbmunumu : : cSR$	$-\frac{4G_F}{\sqrt{2}} V_{cb} (\bar{c}_L b_R) (\bar{\mu}_R \nu_{\mu L})$	C
$cbmunumu : : cSL$	$-\frac{4G_F}{\sqrt{2}} V_{cb} (\bar{c}_R b_L) (\bar{\mu}_R \nu_{\mu L})$	C

WC name	Operator	Type
cbmunumu::cT	$-\frac{4G_F}{\sqrt{2}}V_{cb}(\bar{c}_R\sigma^{\mu\nu}b_L)(\bar{\mu}_R\sigma_{\mu\nu}\nu_{\mu L})$	C

cbtaunu

WC name	Operator	Type
cbtaunutau::cVL	$-\frac{4G_F}{\sqrt{2}}V_{cb}(\bar{c}_L\gamma^\tau b_L)(\bar{\tau}_L\gamma_\tau\nu_{\tau L})$	C
cbtaunutau::cVR	$-\frac{4G_F}{\sqrt{2}}V_{cb}(\bar{c}_R\gamma^\tau b_R)(\bar{\tau}_L\gamma_\tau\nu_{\tau L})$	C
cbtaunutau::cSR	$-\frac{4G_F}{\sqrt{2}}V_{cb}(\bar{c}_L b_R)(\bar{\tau}_R\nu_{\tau L})$	C
cbtaunutau::cSL	$-\frac{4G_F}{\sqrt{2}}V_{cb}(\bar{c}_R b_L)(\bar{\tau}_R\nu_{\tau L})$	C
cbtaunutau::cT	$-\frac{4G_F}{\sqrt{2}}V_{cb}(\bar{c}_R\sigma^{\mu\nu}b_L)(\bar{\tau}_R\sigma_{\mu\nu}\nu_{\tau L})$	C

ubenu

WC name	Operator	Type
ubenu::cVL	$-\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_L\gamma^\mu b_L)(\bar{e}_L\gamma_\mu\nu_{eL})$	C
ubenu::cVR	$-\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_R\gamma^\mu b_R)(\bar{e}_L\gamma_\mu\nu_{eL})$	C
ubenu::cSR	$-\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_L b_R)(\bar{e}_R\nu_{eL})$	C
ubenu::cSL	$-\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_R b_L)(\bar{e}_R\nu_{eL})$	C
ubenu::cT	$-\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_R\sigma^{\mu\nu}b_L)(\bar{e}_R\sigma_{\mu\nu}\nu_{eL})$	C

ubmunu

WC name	Operator	Type
ubmunumu::cVL	$-\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_L\gamma^\mu b_L)(\bar{\mu}_L\gamma_\mu\nu_{\mu L})$	C
ubmunumu::cVR	$-\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_R\gamma^\mu b_R)(\bar{\mu}_L\gamma_\mu\nu_{\mu L})$	C
ubmunumu::cSR	$-\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_L b_R)(\bar{\mu}_R\nu_{\mu L})$	C
ubmunumu::cSL	$-\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_R b_L)(\bar{\mu}_R\nu_{\mu L})$	C
ubmunumu::cT	$-\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_R\sigma^{\mu\nu}b_L)(\bar{\mu}_R\sigma_{\mu\nu}\nu_{\mu L})$	C

ubtaunu

WC name	Operator	Type
ubtaunutau::cVL	$-\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_L\gamma^\tau b_L)(\bar{\tau}_L\gamma_\tau\nu_{\tau L})$	C
ubtaunutau::cVR	$-\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_R\gamma^\tau b_R)(\bar{\tau}_L\gamma_\tau\nu_{\tau L})$	C

WC name	Operator	Type
ubtaunutau::cSR	$-\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_L b_R)(\bar{\tau}_R \nu_{\tau L})$	C
ubtaunutau::cSL	$-\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_R b_L)(\bar{\tau}_R \nu_{\tau L})$	C
ubtaunutau::cT	$-\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_R \sigma^{\mu\nu} b_L)(\bar{\tau}_R \sigma_{\mu\nu} \nu_{\tau L})$	C