

## Basis flavio (EFT WET-3)

### Sectors

sdsd

WC name	Operator	Type
CVLL_sdsd	$(\bar{d}_L \gamma^\mu s_L)(\bar{d}_L \gamma_\mu s_L)$	C
CVRR_sdsd	$(\bar{d}_R \gamma^\mu s_R)(\bar{d}_R \gamma_\mu s_R)$	C
CSLL_sdsd	$(\bar{d}_R s_L)(\bar{d}_R s_L)$	C
CSRR_sdsd	$(\bar{d}_L s_R)(\bar{d}_L s_R)$	C
CTLL_sdsd	$(\bar{d}_R \sigma^{\mu\nu} s_L)(\bar{d}_R \sigma_{\mu\nu} s_L)$	C
CTRR_sdsd	$(\bar{d}_L \sigma^{\mu\nu} s_R)(\bar{d}_L \sigma_{\mu\nu} s_R)$	C
CVLR_sdsd	$(\bar{d}_L \gamma^\mu s_L)(\bar{d}_R \gamma_\mu s_R)$	C
CSLR_sdsd	$(\bar{d}_R s_L)(\bar{d}_L s_R)$	C

sdnunu

WC name	Operator	Type
CL_sdnueue	$\frac{4G_F}{\sqrt{2}} V_{td} V_{ts}^* \frac{e^2}{16\pi^2} (\bar{s}_L \gamma^\mu d_L)(\bar{\nu}_e \gamma_\mu (1 - \gamma_5) \nu_e)$	C
CL_sdnunumu	$\frac{4G_F}{\sqrt{2}} V_{td} V_{ts}^* \frac{e^2}{16\pi^2} (\bar{s}_L \gamma^\mu d_L)(\bar{\nu}_\mu \gamma_\mu (1 - \gamma_5) \nu_\mu)$	C
CL_sdnutaunutu	$\frac{4G_F}{\sqrt{2}} V_{td} V_{ts}^* \frac{e^2}{16\pi^2} (\bar{s}_L \gamma^\mu d_L)(\bar{\nu}_\tau \gamma_\mu (1 - \gamma_5) \nu_\tau)$	C
CL_sdnueumu	$\frac{4G_F}{\sqrt{2}} V_{td} V_{ts}^* \frac{e^2}{16\pi^2} (\bar{s}_L \gamma^\mu d_L)(\bar{\nu}_\mu \gamma_\mu (1 - \gamma_5) \nu_e)$	C
CL_sdnunue	$\frac{4G_F}{\sqrt{2}} V_{td} V_{ts}^* \frac{e^2}{16\pi^2} (\bar{s}_L \gamma^\mu d_L)(\bar{\nu}_e \gamma_\mu (1 - \gamma_5) \nu_\mu)$	C
CL_sdnunutu	$\frac{4G_F}{\sqrt{2}} V_{td} V_{ts}^* \frac{e^2}{16\pi^2} (\bar{s}_L \gamma^\mu d_L)(\bar{\nu}_\tau \gamma_\mu (1 - \gamma_5) \nu_\mu)$	C
CL_sdnutaunumu	$\frac{4G_F}{\sqrt{2}} V_{td} V_{ts}^* \frac{e^2}{16\pi^2} (\bar{s}_L \gamma^\mu d_L)(\bar{\nu}_\mu \gamma_\mu (1 - \gamma_5) \nu_\tau)$	C
CL_sdnueutu	$\frac{4G_F}{\sqrt{2}} V_{td} V_{ts}^* \frac{e^2}{16\pi^2} (\bar{s}_L \gamma^\mu d_L)(\bar{\nu}_\tau \gamma_\mu (1 - \gamma_5) \nu_e)$	C
CL_sdnutaunue	$\frac{4G_F}{\sqrt{2}} V_{td} V_{ts}^* \frac{e^2}{16\pi^2} (\bar{s}_L \gamma^\mu d_L)(\bar{\nu}_e \gamma_\mu (1 - \gamma_5) \nu_\tau)$	C
CR_sdnueue	$\frac{4G_F}{\sqrt{2}} V_{td} V_{ts}^* \frac{e^2}{16\pi^2} (\bar{s}_R \gamma^\mu d_R)(\bar{\nu}_e \gamma_\mu (1 - \gamma_5) \nu_e)$	C
CR_sdnunumu	$\frac{4G_F}{\sqrt{2}} V_{td} V_{ts}^* \frac{e^2}{16\pi^2} (\bar{s}_R \gamma^\mu d_R)(\bar{\nu}_\mu \gamma_\mu (1 - \gamma_5) \nu_\mu)$	C
CR_sdnutaunutu	$\frac{4G_F}{\sqrt{2}} V_{td} V_{ts}^* \frac{e^2}{16\pi^2} (\bar{s}_R \gamma^\mu d_R)(\bar{\nu}_\tau \gamma_\mu (1 - \gamma_5) \nu_\tau)$	C
CR_sdnueumu	$\frac{4G_F}{\sqrt{2}} V_{td} V_{ts}^* \frac{e^2}{16\pi^2} (\bar{s}_R \gamma^\mu d_R)(\bar{\nu}_\mu \gamma_\mu (1 - \gamma_5) \nu_e)$	C
CR_sdnunue	$\frac{4G_F}{\sqrt{2}} V_{td} V_{ts}^* \frac{e^2}{16\pi^2} (\bar{s}_R \gamma^\mu d_R)(\bar{\nu}_e \gamma_\mu (1 - \gamma_5) \nu_\mu)$	C
CR_sdnunutu	$\frac{4G_F}{\sqrt{2}} V_{td} V_{ts}^* \frac{e^2}{16\pi^2} (\bar{s}_R \gamma^\mu d_R)(\bar{\nu}_\tau \gamma_\mu (1 - \gamma_5) \nu_\mu)$	C
CR_sdnutaunumu	$\frac{4G_F}{\sqrt{2}} V_{td} V_{ts}^* \frac{e^2}{16\pi^2} (\bar{s}_R \gamma^\mu d_R)(\bar{\nu}_\mu \gamma_\mu (1 - \gamma_5) \nu_\tau)$	C
CR_sdnueutu	$\frac{4G_F}{\sqrt{2}} V_{td} V_{ts}^* \frac{e^2}{16\pi^2} (\bar{s}_R \gamma^\mu d_R)(\bar{\nu}_\tau \gamma_\mu (1 - \gamma_5) \nu_e)$	C

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

usenu

WC name	Operator	Type
CVL_suenue	$-\frac{4G_F}{\sqrt{2}} V_{us} (\bar{u}_L \gamma^\mu s_L) (\bar{e}_L \gamma_\mu \nu_{eL})$	C
CVR_suenue	$-\frac{4G_F}{\sqrt{2}} V_{us} (\bar{u}_R \gamma^\mu s_R) (\bar{e}_L \gamma_\mu \nu_{eL})$	C
CSR_suenue	$-\frac{4G_F}{\sqrt{2}} V_{us} (\bar{u}_L s_R) (\bar{e}_R \nu_{eL})$	C
CSL_suenue	$-\frac{4G_F}{\sqrt{2}} V_{us} (\bar{u}_R s_L) (\bar{e}_R \nu_{eL})$	C
CT_suenue	$-\frac{4G_F}{\sqrt{2}} V_{us} (\bar{u}_R \sigma^{\mu\nu} s_L) (\bar{e}_R \sigma_{\mu\nu} \nu_{eL})$	C
CVL_suenumu	$-\frac{4G_F}{\sqrt{2}} V_{us} (\bar{u}_L \gamma^\mu s_L) (\bar{e}_L \gamma_\mu \nu_{\mu L})$	C
CVR_suenumu	$-\frac{4G_F}{\sqrt{2}} V_{us} (\bar{u}_R \gamma^\mu s_R) (\bar{e}_L \gamma_\mu \nu_{\mu L})$	C
CSR_suenumu	$-\frac{4G_F}{\sqrt{2}} V_{us} (\bar{u}_L s_R) (\bar{e}_R \nu_{\mu L})$	C
CSL_suenumu	$-\frac{4G_F}{\sqrt{2}} V_{us} (\bar{u}_R s_L) (\bar{e}_R \nu_{\mu L})$	C
CT_suenumu	$-\frac{4G_F}{\sqrt{2}} V_{us} (\bar{u}_R \sigma^{\mu\nu} s_L) (\bar{e}_R \sigma_{\mu\nu} \nu_{\mu L})$	C
CVL_suenutau	$-\frac{4G_F}{\sqrt{2}} V_{us} (\bar{u}_L \gamma^\mu s_L) (\bar{e}_L \gamma_\mu \nu_{\tau L})$	C
CVR_suenutau	$-\frac{4G_F}{\sqrt{2}} V_{us} (\bar{u}_R \gamma^\mu s_R) (\bar{e}_L \gamma_\mu \nu_{\tau L})$	C
CSR_suenutau	$-\frac{4G_F}{\sqrt{2}} V_{us} (\bar{u}_L s_R) (\bar{e}_R \nu_{\tau L})$	C
CSL_suenutau	$-\frac{4G_F}{\sqrt{2}} V_{us} (\bar{u}_R s_L) (\bar{e}_R \nu_{\tau L})$	C
CT_suenutau	$-\frac{4G_F}{\sqrt{2}} V_{us} (\bar{u}_R \sigma^{\mu\nu} s_L) (\bar{e}_R \sigma_{\mu\nu} \nu_{\tau L})$	C

usmunu

WC name	Operator	Type
CVL_sumunue	$-\frac{4G_F}{\sqrt{2}} V_{us} (\bar{u}_L \gamma^\mu s_L) (\bar{\mu}_L \gamma_\mu \nu_{eL})$	C
CVR_sumunue	$-\frac{4G_F}{\sqrt{2}} V_{us} (\bar{u}_R \gamma^\mu s_R) (\bar{\mu}_L \gamma_\mu \nu_{eL})$	C
CSR_sumunue	$-\frac{4G_F}{\sqrt{2}} V_{us} (\bar{u}_L s_R) (\bar{\mu}_R \nu_{eL})$	C
CSL_sumunue	$-\frac{4G_F}{\sqrt{2}} V_{us} (\bar{u}_R s_L) (\bar{\mu}_R \nu_{eL})$	C
CT_sumunue	$-\frac{4G_F}{\sqrt{2}} V_{us} (\bar{u}_R \sigma^{\mu\nu} s_L) (\bar{\mu}_R \sigma_{\mu\nu} \nu_{eL})$	C
CVL_sumunumu	$-\frac{4G_F}{\sqrt{2}} V_{us} (\bar{u}_L \gamma^\mu s_L) (\bar{\mu}_L \gamma_\mu \nu_{\mu L})$	C
CVR_sumunumu	$-\frac{4G_F}{\sqrt{2}} V_{us} (\bar{u}_R \gamma^\mu s_R) (\bar{\mu}_L \gamma_\mu \nu_{\mu L})$	C
CSR_sumunumu	$-\frac{4G_F}{\sqrt{2}} V_{us} (\bar{u}_L s_R) (\bar{\mu}_R \nu_{\mu L})$	C
CSL_sumunumu	$-\frac{4G_F}{\sqrt{2}} V_{us} (\bar{u}_R s_L) (\bar{\mu}_R \nu_{\mu L})$	C
CT_sumunumu	$-\frac{4G_F}{\sqrt{2}} V_{us} (\bar{u}_R \sigma^{\mu\nu} s_L) (\bar{\mu}_R \sigma_{\mu\nu} \nu_{\mu L})$	C
CVL_sumunutau	$-\frac{4G_F}{\sqrt{2}} V_{us} (\bar{u}_L \gamma^\mu s_L) (\bar{\mu}_L \gamma_\mu \nu_{\tau L})$	C

WC name	Operator	Type
CVR_sumunutau	$-\frac{4G_F}{\sqrt{2}} V_{us} (\bar{u}_R \gamma^\mu s_R) (\bar{\mu}_L \gamma_\mu \nu_{\tau L})$	C
CSR_sumunutau	$-\frac{4G_F}{\sqrt{2}} V_{us} (\bar{u}_L s_R) (\bar{\mu}_R \nu_{\tau L})$	C
CSL_sumunutau	$-\frac{4G_F}{\sqrt{2}} V_{us} (\bar{u}_R s_L) (\bar{\mu}_R \nu_{\tau L})$	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

#### 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	$-\frac{4G_F}{\sqrt{2}} V_{ud} (\bar{u}_R \gamma^\mu d_R) (\bar{e}_L \gamma_\mu \nu_{eL})$	C
CSR_duenue	$-\frac{4G_F}{\sqrt{2}} V_{ud} (\bar{u}_L d_R) (\bar{e}_R \nu_{eL})$	C
CSL_duenue	$-\frac{4G_F}{\sqrt{2}} V_{ud} (\bar{u}_R d_L) (\bar{e}_R \nu_{eL})$	C
CT_duenue	$-\frac{4G_F}{\sqrt{2}} V_{ud} (\bar{u}_R \sigma^{\mu\nu} d_L) (\bar{e}_R \sigma_{\mu\nu} \nu_{eL})$	C
CVL_duenumu	$-\frac{4G_F}{\sqrt{2}} V_{ud} (\bar{u}_L \gamma^\mu d_L) (\bar{e}_L \gamma_\mu \nu_{\mu L})$	C
CVR_duenumu	$-\frac{4G_F}{\sqrt{2}} V_{ud} (\bar{u}_R \gamma^\mu d_R) (\bar{e}_L \gamma_\mu \nu_{\mu L})$	C
CSR_duenumu	$-\frac{4G_F}{\sqrt{2}} V_{ud} (\bar{u}_L d_R) (\bar{e}_R \nu_{\mu L})$	C
CSL_duenumu	$-\frac{4G_F}{\sqrt{2}} V_{ud} (\bar{u}_R d_L) (\bar{e}_R \nu_{\mu L})$	C
CT_duenumu	$-\frac{4G_F}{\sqrt{2}} V_{ud} (\bar{u}_R \sigma^{\mu\nu} d_L) (\bar{e}_R \sigma_{\mu\nu} \nu_{\mu L})$	C
CVL_duenutau	$-\frac{4G_F}{\sqrt{2}} V_{ud} (\bar{u}_L \gamma^\mu d_L) (\bar{e}_L \gamma_\mu \nu_{\tau L})$	C
CVR_duenutau	$-\frac{4G_F}{\sqrt{2}} V_{ud} (\bar{u}_R \gamma^\mu d_R) (\bar{e}_L \gamma_\mu \nu_{\tau L})$	C
CSR_duenutau	$-\frac{4G_F}{\sqrt{2}} V_{ud} (\bar{u}_L d_R) (\bar{e}_R \nu_{\tau L})$	C
CSL_duenutau	$-\frac{4G_F}{\sqrt{2}} V_{ud} (\bar{u}_R d_L) (\bar{e}_R \nu_{\tau L})$	C
CT_duenutau	$-\frac{4G_F}{\sqrt{2}} V_{ud} (\bar{u}_R \sigma^{\mu\nu} d_L) (\bar{e}_R \sigma_{\mu\nu} \nu_{\tau L})$	C

#### udmunu

WC name	Operator	Type
CVL_dumunue	$-\frac{4G_F}{\sqrt{2}} V_{ud} (\bar{u}_L \gamma^\mu d_L) (\bar{\mu}_L \gamma_\mu \nu_{eL})$	C
CVR_dumunue	$-\frac{4G_F}{\sqrt{2}} V_{ud} (\bar{u}_R \gamma^\mu d_R) (\bar{\mu}_L \gamma_\mu \nu_{eL})$	C
CSR_dumunue	$-\frac{4G_F}{\sqrt{2}} V_{ud} (\bar{u}_L d_R) (\bar{\mu}_R \nu_{eL})$	C
CSL_dumunue	$-\frac{4G_F}{\sqrt{2}} V_{ud} (\bar{u}_R d_L) (\bar{\mu}_R \nu_{eL})$	C
CT_dumunue	$-\frac{4G_F}{\sqrt{2}} V_{ud} (\bar{u}_R \sigma^{\mu\nu} d_L) (\bar{\mu}_R \sigma_{\mu\nu} \nu_{eL})$	C
CVL_dumunumu	$-\frac{4G_F}{\sqrt{2}} V_{ud} (\bar{u}_L \gamma^\mu d_L) (\bar{\mu}_L \gamma_\mu \nu_{\mu L})$	C
CVR_dumunumu	$-\frac{4G_F}{\sqrt{2}} V_{ud} (\bar{u}_R \gamma^\mu d_R) (\bar{\mu}_L \gamma_\mu \nu_{\mu L})$	C
CSR_dumunumu	$-\frac{4G_F}{\sqrt{2}} V_{ud} (\bar{u}_L d_R) (\bar{\mu}_R \nu_{\mu L})$	C

WC name	Operator	Type
CSL_dumunumu	$-\frac{4G_F}{\sqrt{2}}V_{ud}(\bar{u}_R d_L)(\bar{\mu}_R \nu_{\mu L})$	C
CT_dumunumu	$-\frac{4G_F}{\sqrt{2}}V_{ud}(\bar{u}_R \sigma^{\mu\nu} d_L)(\bar{\mu}_R \sigma_{\mu\nu} \nu_{\mu L})$	C
CVL_dumunutau	$-\frac{4G_F}{\sqrt{2}}V_{ud}(\bar{u}_L \gamma^\mu d_L)(\bar{\mu}_L \gamma_\mu \nu_{\tau L})$	C
CVR_dumunutau	$-\frac{4G_F}{\sqrt{2}}V_{ud}(\bar{u}_R \gamma^\mu d_R)(\bar{\mu}_L \gamma_\mu \nu_{\tau L})$	C
CSR_dumunutau	$-\frac{4G_F}{\sqrt{2}}V_{ud}(\bar{u}_L d_R)(\bar{\mu}_R \nu_{\tau L})$	C
CSL_dumunutau	$-\frac{4G_F}{\sqrt{2}}V_{ud}(\bar{u}_R d_L)(\bar{\mu}_R \nu_{\tau L})$	C
CT_dumunutau	$-\frac{4G_F}{\sqrt{2}}V_{ud}(\bar{u}_R \sigma^{\mu\nu} d_L)(\bar{\mu}_R \sigma_{\mu\nu} \nu_{\tau L})$	C