Basis `formflavor` (EFT `WET`)

Basis used by the FormFlavor package

Sectors

The effective Lagrangian is defined as

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

sbsb

WC name	Operator	Type
CVLL_bsbs	$(\bar{s}_L \gamma^\mu b_L)(\bar{s}_L \gamma_\mu b_L)$	C
CVRR_bsbs	$(\bar{s}_R \gamma^\mu b_R)(\bar{s}_R \gamma_\mu b_R)$	C
CSLL_bsbs	$(\bar{s}_R b_L)(\bar{s}_R b_L)$	C
CSRR_bsbs	$(\bar{s}_L b_R)(\bar{s}_L b_R)$	C
CTLL_bsbs	$(\bar{s}_R \sigma^{\mu\nu} b_L)(\bar{s}_R \sigma_{\mu\nu} b_L)$	C
CTRR_bsbs	$(\bar{s}_L \sigma^{\mu\nu} b_R)(\bar{s}_L \sigma_{\mu\nu} b_R)$	C
CVLR_bsbs	$(\bar{s}_L \gamma^\mu b_L)(\bar{s}_R \gamma_\mu b_R)$	C
CSLR_bsbs	$(\bar{s}_R b_L)(\bar{s}_L b_R)$	C

dbdb

WC name	Operator	Type
CVLL_bdbd	$(\bar{d}_L \gamma^\mu b_L)(\bar{d}_L \gamma_\mu b_L)$	C
CVRR_bdbd	$(\bar{d}_R \gamma^\mu b_R)(\bar{d}_R \gamma_\mu b_R)$	C
CSLL_bdbd	$(\bar{d}_R b_L)(\bar{d}_R b_L)$	C
CSRR_bdbd	$(\bar{d}_L b_R)(\bar{d}_L b_R)$	C
CTLL_bdbd	$(\bar{d}_R \sigma^{\mu\nu} b_L)(\bar{d}_R \sigma_{\mu\nu} b_L)$	C
CTRR_bdbd	$(\bar{d}_L \sigma^{\mu\nu} b_R)(\bar{d}_L \sigma_{\mu\nu} b_R)$	C
CVLR_bdbd	$(\bar{d}_L \gamma^\mu b_L)(\bar{d}_R \gamma_\mu b_R)$	C
CSLR_bdbd	$(\bar{d}_R b_L)(\bar{d}_L b_R)$	C

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

WC name	Operator	Type
`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

`cucu`

WC name	Operator	Type
`CVLL_cucu`	$(\bar{u}_L \gamma^{\mu} c_L)(\bar{u}_L \gamma_{\mu} c_L)$	C
`CVRR_cucu`	$(\bar{u}_R \gamma^{\mu} c_R)(\bar{u}_R \gamma_{\mu} c_R)$	C
`CSLL_cucu`	$(\bar{u}_R c_L)(\bar{u}_R c_L)$	C
`CSRR_cucu`	$(\bar{u}_L c_R)(\bar{u}_L c_R)$	C
`CTLL_cucu`	$(\bar{u}_R \sigma^{\mu\nu} c_L)(\bar{u}_R \sigma_{\mu\nu} c_L)$	C
`CTRR_cucu`	$(\bar{u}_L \sigma^{\mu\nu} c_R)(\bar{u}_L \sigma_{\mu\nu} c_R)$	C
`CVLR_cucu`	$(\bar{u}_L \gamma^{\mu} c_L)(\bar{u}_R \gamma_{\mu} c_R)$	C
`CSLR_cucu`	$(\bar{u}_R c_L)(\bar{u}_L c_R)$	C

`sb`

WC name	Operator	Type
`CVLL_bsmm`	$(\bar{s}_L \gamma^{\mu} b_L)(\bar{\mu}_L \gamma_{\mu} \mu_L)$	C
`CVRR_bsmm`	$(\bar{s}_R \gamma^{\mu} b_R)(\bar{\mu}_R \gamma_{\mu} \mu_R)$	C
`CVLR_bsmm`	$(\bar{s}_L \gamma^{\mu} b_L)(\bar{\mu}_R \gamma_{\mu} \mu_R)$	C
`CVRL_bsmm`	$(\bar{s}_R \gamma^{\mu} b_R)(\bar{\mu}_L \gamma_{\mu} \mu_L)$	C
`CSLL_bsmm`	$(\bar{s}_R b_L)(\bar{\mu}_R \mu_L)$	C
`CSRR_bsmm`	$(\bar{s}_L b_R)(\bar{\mu}_L \mu_R)$	C
`CSLR_bsmm`	$(\bar{s}_R b_L)(\bar{\mu}_L \mu_R)$	C
`CSRL_bsmm`	$(\bar{s}_L b_R)(\bar{\mu}_R \mu_L)$	C
`CTLL_bsmm`	$(\bar{s}_R \sigma^{\mu\nu} b_L)(\bar{\mu}_R \sigma_{\mu\nu} \mu_L)$	C
`CTRR_bsmm`	$(\bar{s}_L \sigma^{\mu\nu} b_R)(\bar{\mu}_L \sigma_{\mu\nu} \mu_R)$	C
`CAR_sb`	$e(\bar{s}_L \sigma^{\mu\nu} b_R) F_{\mu\nu}$	C
`CAL_sb`	$e(\bar{s}_R \sigma^{\mu\nu} b_L) F_{\mu\nu}$	C
`CGR_sb`	$g_s(\bar{s}_L \sigma^{\mu\nu} b_R) G_{\mu\nu}$	C
`CGL_sb`	$g_s(\bar{s}_R \sigma^{\mu\nu} b_L) G_{\mu\nu}$	C

`db`

WC name	Operator	Type
CVLL_bdmm	$(\bar{d}_L\gamma^\mu b_L)(\bar{\mu}_L\gamma_\mu\mu_L)$	C
CVRR_bdmm	$(\bar{d}_R\gamma^\mu b_R)(\bar{\mu}_R\gamma_\mu\mu_R)$	C
CVLR_bdmm	$(\bar{d}_L\gamma^\mu b_L)(\bar{\mu}_R\gamma_\mu\mu_R)$	C
CVRL_bdmm	$(\bar{d}_R\gamma^\mu b_R)(\bar{\mu}_L\gamma_\mu\mu_L)$	C
CSLL_bdmm	$(\bar{d}_R b_L)(\bar{\mu}_R\mu_L)$	C
CSRR_bdmm	$(\bar{d}_L b_R)(\bar{\mu}_L\mu_R)$	C
CSLR_bdmm	$(\bar{d}_R b_L)(\bar{\mu}_L\mu_R)$	C
CSRL_bdmm	$(\bar{d}_L b_R)(\bar{\mu}_R\mu_L)$	C
CTLL_bdmm	$(\bar{d}_R\sigma^{\mu\nu} b_L)(\bar{\mu}_R\sigma_{\mu\nu}\mu_L)$	C
CTRR_bdmm	$(\bar{d}_L\sigma^{\mu\nu} b_R)(\bar{\mu}_L\sigma_{\mu\nu}\mu_R)$	C
CAR_db	$e(\bar{d}_L\sigma^{\mu\nu} b_R)F_{\mu\nu}$	C
CAL_db	$e(\bar{d}_R\sigma^{\mu\nu} b_L)F_{\mu\nu}$	C
CGR_db	$g_s(\bar{d}_L\sigma^{\mu\nu} b_R)G_{\mu\nu}$	C
CGL_db	$g_s(\bar{d}_R\sigma^{\mu\nu} b_L)G_{\mu\nu}$	C

sdnunu

WC name	Operator	Type
CVLL_sdnn	$(\bar{d}_L\gamma^\mu s_L)(\bar{\nu}_L\gamma_\mu\nu_L)$	C
CVRL_sdnn	$(\bar{d}_R\gamma^\mu s_R)(\bar{\nu}_L\gamma_\mu\nu_L)$	C

dF=0

WC name	Operator	Type
CAR_dd	$e(\bar{d}_L\sigma^{\mu\nu} d_R)F_{\mu\nu}$	C
CAL_dd	$e(\bar{d}_R\sigma^{\mu\nu} d_L)F_{\mu\nu}$	C
CGR_dd	$g_s(\bar{d}_L\sigma^{\mu\nu} d_R)G_{\mu\nu}$	C
CGL_dd	$g_s(\bar{d}_R\sigma^{\mu\nu} d_L)G_{\mu\nu}$	C
CAR_uu	$e(\bar{u}_L\sigma^{\mu\nu} u_R)F_{\mu\nu}$	C
CAL_uu	$e(\bar{u}_R\sigma^{\mu\nu} u_L)F_{\mu\nu}$	C
CGR_uu	$g_s(\bar{u}_L\sigma^{\mu\nu} u_R)G_{\mu\nu}$	C
CGL_uu	$g_s(\bar{u}_R\sigma^{\mu\nu} u_L)G_{\mu\nu}$	C

mue

WC name	Operator	Type
CAR_em	$e(\bar{e}_L\sigma^{\mu\nu}\mu_R)F_{\mu\nu}$	C
CAL_em	$e(\bar{e}_R\sigma^{\mu\nu}\mu_L)F_{\mu\nu}$	C

mutau

WC name	Operator	Type
CAR_mt	$e(\bar{\mu}_L \sigma^{\mu\nu} \tau_R) F_{\mu\nu}$	C
CAL_mt	$e(\bar{\mu}_R \sigma^{\mu\nu} \tau_L) F_{\mu\nu}$	C

taue

WC name	Operator	Type
CAR_et	$e(\bar{e}_L \sigma^{\mu\nu} \tau_R) F_{\mu\nu}$	C
CAL_et	$e(\bar{e}_R \sigma^{\mu\nu} \tau_L) F_{\mu\nu}$	C