

## Basis formflavor (EFT WET)

Basis used by the FormFlavor package

### Sectors

The effective Lagrangian is defined as

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

#### 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

WC name	Operator	Type
CVRR_sdsc	$(\bar{d}_R \gamma^\mu s_R)(\bar{d}_R \gamma_\mu s_R)$	C
CSLL_sdsc	$(\bar{d}_R s_L)(\bar{d}_R s_L)$	C
CSRR_sdsc	$(\bar{d}_L s_R)(\bar{d}_L s_R)$	C
CTLL_sdsc	$(\bar{d}_R \sigma^{\mu\nu} s_L)(\bar{d}_R \sigma_{\mu\nu} s_L)$	C
CTRR_sdsc	$(\bar{d}_L \sigma^{\mu\nu} s_R)(\bar{d}_L \sigma_{\mu\nu} s_R)$	C
CVLR_sdsc	$(\bar{d}_L \gamma^\mu s_L)(\bar{d}_R \gamma_\mu s_R)$	C
CSLR_sdsc	$(\bar{d}_R s_L)(\bar{d}_L s_R)$	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_sdn	$(\bar{d}_L \gamma^\mu s_L)(\bar{\nu}_L \gamma_\mu \nu_L)$	C
CVRL_sdn	$(\bar{d}_R \gamma^\mu s_R)(\bar{\nu}_L \gamma_\mu \nu_L)$	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