

# 1 By process

## 1.1 $HH \rightarrow HH$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
c3p11	-0.02352	-0.02352	0	0.0007129	0.0007129	0
c3p12	-0.02611	-0.02611	0	0.0007916	0.0007916	0
cdp	0.4212	0.4212	0	0.2287	0.2287	0
c111221	0.02352	0.02352	0	0.0007129	0.0007129	0
cp	0.4576	0.4576	0	0.5426	0.5426	0
cpDC	0.04125	0.04125	0	0.00441	0.00441	0
sm	0	0	0	0.09647	0.09647	0

## 1.2 $HH \rightarrow HHH$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
c3p11	$-2.481 \cdot 10^{-7}$	$-2.481 \cdot 10^{-7}$	0	$1.128 \cdot 10^{-8}$	$1.128 \cdot 10^{-8}$	0
c3p12	$-3.065 \cdot 10^{-7}$	$-3.065 \cdot 10^{-7}$	0	$1.393 \cdot 10^{-8}$	$1.393 \cdot 10^{-8}$	0
cdp	$-3.487 \cdot 10^{-6}$	$-3.487 \cdot 10^{-6}$	0	$2.229 \cdot 10^{-6}$	$2.229 \cdot 10^{-6}$	0
c111221	$2.481 \cdot 10^{-7}$	$2.481 \cdot 10^{-7}$	0	$1.128 \cdot 10^{-8}$	$1.128 \cdot 10^{-8}$	0
cp	$2.751 \cdot 10^{-6}$	$2.751 \cdot 10^{-6}$	0	$7.251 \cdot 10^{-5}$	$7.251 \cdot 10^{-5}$	0
cpDC	$2.366 \cdot 10^{-7}$	$2.366 \cdot 10^{-7}$	0	$5.364 \cdot 10^{-7}$	$5.364 \cdot 10^{-7}$	0
sm	0	0	0	$2.609 \cdot 10^{-8}$	$2.609 \cdot 10^{-8}$	0

## 1.3 $HH \rightarrow Ht\bar{t}$

interference

square

	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
c3pl1	$-2.661 \cdot 10^{-6}$	$-2.661 \cdot 10^{-6}$	0	$1.21 \cdot 10^{-7}$	$1.21 \cdot 10^{-7}$	0
c3pl2	$-3.605 \cdot 10^{-6}$	$-3.605 \cdot 10^{-6}$	0	$1.639 \cdot 10^{-7}$	$1.639 \cdot 10^{-7}$	0
cdp	$-2.305 \cdot 10^{-5}$	$-2.305 \cdot 10^{-5}$	0	$1.013 \cdot 10^{-5}$	$1.013 \cdot 10^{-5}$	0
cll1221	$2.661 \cdot 10^{-6}$	$2.661 \cdot 10^{-6}$	0	$1.21 \cdot 10^{-7}$	$1.21 \cdot 10^{-7}$	0
cp	$3.488 \cdot 10^{-5}$	$3.488 \cdot 10^{-5}$	0	$3.236 \cdot 10^{-5}$	$3.236 \cdot 10^{-5}$	0
cpDC	$4.392 \cdot 10^{-6}$	$4.392 \cdot 10^{-6}$	0	$8.214 \cdot 10^{-7}$	$8.214 \cdot 10^{-7}$	0
ctp	$1.359 \cdot 10^{-5}$	$1.359 \cdot 10^{-5}$	0	$1.06 \cdot 10^{-5}$	$1.06 \cdot 10^{-5}$	0
sm	0	0	0	$1.928 \cdot 10^{-5}$	$1.928 \cdot 10^{-5}$	0

#### 1.4 $HH \rightarrow Hzz$

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
c3pl1	$-1.483 \cdot 10^{-6}$	$-1.483 \cdot 10^{-6}$	0	$6.742 \cdot 10^{-8}$	$6.742 \cdot 10^{-8}$	0
c3pl2	$-8.367 \cdot 10^{-7}$	$-8.367 \cdot 10^{-7}$	0	$3.805 \cdot 10^{-8}$	$3.805 \cdot 10^{-8}$	0
cdp	$-1.679 \cdot 10^{-6}$	$-1.679 \cdot 10^{-6}$	0	$2.503 \cdot 10^{-6}$	$2.503 \cdot 10^{-6}$	0
cll1221	$1.483 \cdot 10^{-6}$	$1.483 \cdot 10^{-6}$	0	$6.742 \cdot 10^{-8}$	$6.742 \cdot 10^{-8}$	0
cp	$-1.755 \cdot 10^{-5}$	$-1.755 \cdot 10^{-5}$	0	$3.184 \cdot 10^{-5}$	$3.184 \cdot 10^{-5}$	0
cpBB	$-3.266 \cdot 10^{-6}$	$-3.266 \cdot 10^{-6}$	0	$8.843 \cdot 10^{-7}$	$8.843 \cdot 10^{-7}$	0
cpDC	$2.692 \cdot 10^{-6}$	$2.692 \cdot 10^{-6}$	0	$2.202 \cdot 10^{-6}$	$2.202 \cdot 10^{-6}$	0
cpW	$1.094 \cdot 10^{-6}$	$1.094 \cdot 10^{-6}$	0	$6.607 \cdot 10^{-6}$	$6.607 \cdot 10^{-6}$	0
cpWB	$6.04 \cdot 10^{-7}$	$6.04 \cdot 10^{-7}$	0	$2.015 \cdot 10^{-6}$	$2.015 \cdot 10^{-6}$	0
sm	0	0	0	$1.097 \cdot 10^{-5}$	$1.097 \cdot 10^{-5}$	0

#### 1.5 $HH \rightarrow W^+W^-$

interference			square		
mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1

c3p11	-0.01098	-0.01098	0	0.0003328	0.0003328	0
c3p12	-0.01248	-0.01248	0	0.0003782	0.0003782	0
cdp	0.1749	0.1749	0	4.043	4.043	0
c111221	0.01098	0.01098	0	0.0003328	0.0003328	0
cp	6.695	6.695	0	0.1331	0.1331	0
cpDC	4.09	4.09	0	0.04999	0.04999	0
cpW	-0.03036	-0.03036	0	7.804	7.804	0
sm	0	0	0	84.33	84.33	0

## 1.6 $HH \rightarrow W^+W^-\gamma$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
c3p11	$-6.444 \cdot 10^{-8}$	$-6.444 \cdot 10^{-8}$	0	$2.93 \cdot 10^{-9}$	$2.93 \cdot 10^{-9}$	0
c3p12	$-1.48 \cdot 10^{-8}$	$-1.48 \cdot 10^{-8}$	0	$6.73 \cdot 10^{-10}$	$6.73 \cdot 10^{-10}$	0
cWW	$3.004 \cdot 10^{-7}$	$3.004 \cdot 10^{-7}$	0	$1.139 \cdot 10^{-6}$	$1.139 \cdot 10^{-6}$	0
cdp	$1.978 \cdot 10^{-6}$	$1.978 \cdot 10^{-6}$	0	$4.951 \cdot 10^{-6}$	$4.951 \cdot 10^{-6}$	0
c111221	$6.444 \cdot 10^{-8}$	$6.444 \cdot 10^{-8}$	0	$2.93 \cdot 10^{-9}$	$2.93 \cdot 10^{-9}$	0
cp	$-1.158 \cdot 10^{-7}$	$-1.158 \cdot 10^{-7}$	0	$2.358 \cdot 10^{-8}$	$2.358 \cdot 10^{-8}$	0
cpBB	$-7.915 \cdot 10^{-7}$	$-7.915 \cdot 10^{-7}$	0	$1.909 \cdot 10^{-6}$	$1.909 \cdot 10^{-6}$	0
cpDC	$-2.041 \cdot 10^{-7}$	$-2.041 \cdot 10^{-7}$	0	$5.909 \cdot 10^{-8}$	$5.909 \cdot 10^{-8}$	0
cpW	$1.264 \cdot 10^{-7}$	$1.264 \cdot 10^{-7}$	0	$6.278 \cdot 10^{-5}$	$6.278 \cdot 10^{-5}$	0
cpWB	$-4.036 \cdot 10^{-7}$	$-4.036 \cdot 10^{-7}$	0	$1.026 \cdot 10^{-5}$	$1.026 \cdot 10^{-5}$	0
sm	0	0	0	$2.804 \cdot 10^{-7}$	$2.804 \cdot 10^{-7}$	0

## 1.7 $HH \rightarrow W^+\bar{t}b$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$

c3p11	-0.0001159	-0.0001159	0	$5.269 \cdot 10^{-6}$	$5.269 \cdot 10^{-6}$	0
c3p12	$-8.664 \cdot 10^{-7}$	$-8.664 \cdot 10^{-7}$	0	$3.94 \cdot 10^{-8}$	$3.94 \cdot 10^{-8}$	0
cdp	-0.0002117	-0.0002117	0	$7.207 \cdot 10^{-5}$	$7.207 \cdot 10^{-5}$	0
c111221	0.0001159	0.0001159	0	$5.269 \cdot 10^{-6}$	$5.269 \cdot 10^{-6}$	0
cp	$2.686 \cdot 10^{-5}$	$2.686 \cdot 10^{-5}$	0	$2.698 \cdot 10^{-6}$	$2.698 \cdot 10^{-6}$	0
cpDC	$3.33 \cdot 10^{-5}$	$3.33 \cdot 10^{-5}$	0	$4.33 \cdot 10^{-6}$	$4.33 \cdot 10^{-6}$	0
cpQ3	$4.433 \cdot 10^{-5}$	$4.433 \cdot 10^{-5}$	0	$2.566 \cdot 10^{-5}$	$2.566 \cdot 10^{-5}$	0
cpW	$-2.643 \cdot 10^{-7}$	$-2.643 \cdot 10^{-7}$	0	$4.011 \cdot 10^{-6}$	$4.011 \cdot 10^{-6}$	0
ctW	0.0001123	0.0001123	0	$2.36 \cdot 10^{-5}$	$2.36 \cdot 10^{-5}$	0
ctp	$3.545 \cdot 10^{-6}$	$3.545 \cdot 10^{-6}$	0	$2.051 \cdot 10^{-6}$	$2.051 \cdot 10^{-6}$	0
sm	0	0	0	$7.826 \cdot 10^{-5}$	$7.826 \cdot 10^{-5}$	0

### 1.8 $HH \rightarrow W^+ e^- \bar{\nu}_e$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
c3p11	$1.038 \cdot 10^{-6}$	$1.038 \cdot 10^{-6}$	0	$1.984 \cdot 10^{-6}$	$1.984 \cdot 10^{-6}$	0
c3p12	$-2.681 \cdot 10^{-9}$	$-2.681 \cdot 10^{-9}$	0	$1.219 \cdot 10^{-10}$	$1.219 \cdot 10^{-10}$	0
cdp	$2.576 \cdot 10^{-8}$	$2.576 \cdot 10^{-8}$	0	$5.606 \cdot 10^{-9}$	$5.606 \cdot 10^{-9}$	0
c111221	$2.471 \cdot 10^{-8}$	$2.471 \cdot 10^{-8}$	0	$1.124 \cdot 10^{-9}$	$1.124 \cdot 10^{-9}$	0
cp	$2.544 \cdot 10^{-10}$	$2.544 \cdot 10^{-10}$	0	$7.382 \cdot 10^{-9}$	$7.382 \cdot 10^{-9}$	0
cpDC	$-8.299 \cdot 10^{-9}$	$-8.299 \cdot 10^{-9}$	0	$1.407 \cdot 10^{-8}$	$1.407 \cdot 10^{-8}$	0
cpW	$-1.156 \cdot 10^{-7}$	$-1.156 \cdot 10^{-7}$	0	$4.092 \cdot 10^{-7}$	$4.092 \cdot 10^{-7}$	0
sm	0	0	0	$1.427 \cdot 10^{-7}$	$1.427 \cdot 10^{-7}$	0

### 1.9 $HH \rightarrow W^- u \bar{d}$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$

c3pl1	$-3.434 \cdot 10^{-8}$	$-3.434 \cdot 10^{-8}$	0	$1.562 \cdot 10^{-9}$	$1.562 \cdot 10^{-9}$	0
c3pl2	$-1.378 \cdot 10^{-7}$	$-1.378 \cdot 10^{-7}$	0	$6.267 \cdot 10^{-9}$	$6.267 \cdot 10^{-9}$	0
cdp	$8.425 \cdot 10^{-8}$	$8.425 \cdot 10^{-8}$	0	$1.099 \cdot 10^{-7}$	$1.099 \cdot 10^{-7}$	0
c111221	$3.434 \cdot 10^{-8}$	$3.434 \cdot 10^{-8}$	0	$1.562 \cdot 10^{-9}$	$1.562 \cdot 10^{-9}$	0
cp	$2.707 \cdot 10^{-10}$	$2.707 \cdot 10^{-10}$	0	$1.98 \cdot 10^{-9}$	$1.98 \cdot 10^{-9}$	0
cpDC	$-6.974 \cdot 10^{-9}$	$-6.974 \cdot 10^{-9}$	0	$3.841 \cdot 10^{-9}$	$3.841 \cdot 10^{-9}$	0
cpW	$-3.922 \cdot 10^{-6}$	$-3.922 \cdot 10^{-6}$	0	$4.498 \cdot 10^{-5}$	$4.498 \cdot 10^{-5}$	0
cpq3i	$7.328 \cdot 10^{-7}$	$7.328 \cdot 10^{-7}$	0	$1.108 \cdot 10^{-6}$	$1.108 \cdot 10^{-6}$	0
sm	0	0	0	$1.212 \cdot 10^{-7}$	$1.212 \cdot 10^{-7}$	0

### 1.10 $HH \rightarrow z\bar{b}b$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
c3pl1	$-1.538 \cdot 10^{-5}$	$-1.538 \cdot 10^{-5}$	0	$6.991 \cdot 10^{-7}$	$6.991 \cdot 10^{-7}$	0
c3pl2	$-1.928 \cdot 10^{-7}$	$-1.928 \cdot 10^{-7}$	0	$8.765 \cdot 10^{-9}$	$8.765 \cdot 10^{-9}$	0
cdp	-0.0001366	-0.0001366	0	$5.95 \cdot 10^{-5}$	$5.95 \cdot 10^{-5}$	0
c111221	$1.538 \cdot 10^{-5}$	$1.538 \cdot 10^{-5}$	0	$6.991 \cdot 10^{-7}$	$6.991 \cdot 10^{-7}$	0
cp	$1.198 \cdot 10^{-7}$	$1.198 \cdot 10^{-7}$	0	$2.979 \cdot 10^{-8}$	$2.979 \cdot 10^{-8}$	0
cpBB	$4.72 \cdot 10^{-7}$	$4.72 \cdot 10^{-7}$	0	$6.059 \cdot 10^{-7}$	$6.059 \cdot 10^{-7}$	0
cpDC	$-2.752 \cdot 10^{-7}$	$-2.752 \cdot 10^{-7}$	0	$1.961 \cdot 10^{-7}$	$1.961 \cdot 10^{-7}$	0
cpQ3	$2.088 \cdot 10^{-6}$	$2.088 \cdot 10^{-6}$	0	$1.722 \cdot 10^{-6}$	$1.722 \cdot 10^{-6}$	0
cpQM	$1.044 \cdot 10^{-6}$	$1.044 \cdot 10^{-6}$	0	$4.304 \cdot 10^{-7}$	$4.304 \cdot 10^{-7}$	0
cpW	$5.018 \cdot 10^{-7}$	$5.018 \cdot 10^{-7}$	0	$1.413 \cdot 10^{-6}$	$1.413 \cdot 10^{-6}$	0
cpWB	$2.143 \cdot 10^{-7}$	$2.143 \cdot 10^{-7}$	0	$2.364 \cdot 10^{-7}$	$2.364 \cdot 10^{-7}$	0
cpd	$-1.919 \cdot 10^{-7}$	$-1.919 \cdot 10^{-7}$	0	$4.286 \cdot 10^{-7}$	$4.286 \cdot 10^{-7}$	0
sm	0	0	0	$6.546 \cdot 10^{-7}$	$6.546 \cdot 10^{-7}$	0

### 1.11 $HH \rightarrow z\nu_e\bar{\nu}_e$

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
c3pl1	$8.246 \cdot 10^{-7}$	$8.246 \cdot 10^{-7}$	0	$1.104 \cdot 10^{-6}$	$1.104 \cdot 10^{-6}$	0
c3pl2	$-1.912 \cdot 10^{-8}$	$-1.912 \cdot 10^{-8}$	0	$8.694 \cdot 10^{-10}$	$8.694 \cdot 10^{-10}$	0
cdp	$1.67 \cdot 10^{-8}$	$1.67 \cdot 10^{-8}$	0	$1.297 \cdot 10^{-8}$	$1.297 \cdot 10^{-8}$	0
cll1221	$2.801 \cdot 10^{-8}$	$2.801 \cdot 10^{-8}$	0	$1.273 \cdot 10^{-9}$	$1.273 \cdot 10^{-9}$	0
cp	$5.177 \cdot 10^{-8}$	$5.177 \cdot 10^{-8}$	0	$5.956 \cdot 10^{-8}$	$5.956 \cdot 10^{-8}$	0
cpBB	$-4.632 \cdot 10^{-7}$	$-4.632 \cdot 10^{-7}$	0	$1.286 \cdot 10^{-6}$	$1.286 \cdot 10^{-6}$	0
cpDC	$-1.172 \cdot 10^{-7}$	$-1.172 \cdot 10^{-7}$	0	$4.07 \cdot 10^{-7}$	$4.07 \cdot 10^{-7}$	0
cpW	$5.923 \cdot 10^{-8}$	$5.923 \cdot 10^{-8}$	0	$6.042 \cdot 10^{-7}$	$6.042 \cdot 10^{-7}$	0
cpWB	$3.271 \cdot 10^{-8}$	$3.271 \cdot 10^{-8}$	0	$1.843 \cdot 10^{-7}$	$1.843 \cdot 10^{-7}$	0
cp11	$-5.607 \cdot 10^{-7}$	$-5.607 \cdot 10^{-7}$	0	$7.476 \cdot 10^{-7}$	$7.476 \cdot 10^{-7}$	0
sm	0	0	0	$6.102 \cdot 10^{-7}$	$6.102 \cdot 10^{-7}$	0

### 1.12 $HH \rightarrow zc\bar{c}$

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
c3pl1	$-2.919 \cdot 10^{-8}$	$-2.919 \cdot 10^{-8}$	0	$1.327 \cdot 10^{-9}$	$1.327 \cdot 10^{-9}$	0
c3pl2	$-3.992 \cdot 10^{-8}$	$-3.992 \cdot 10^{-8}$	0	$1.815 \cdot 10^{-9}$	$1.815 \cdot 10^{-9}$	0
cdp	$2.022 \cdot 10^{-8}$	$2.022 \cdot 10^{-8}$	0	$6.52 \cdot 10^{-8}$	$6.52 \cdot 10^{-8}$	0
cll1221	$2.919 \cdot 10^{-8}$	$2.919 \cdot 10^{-8}$	0	$1.327 \cdot 10^{-9}$	$1.327 \cdot 10^{-9}$	0
cp	$5.144 \cdot 10^{-9}$	$5.144 \cdot 10^{-9}$	0	$3.153 \cdot 10^{-9}$	$3.153 \cdot 10^{-9}$	0
cpBB	$7.005 \cdot 10^{-8}$	$7.005 \cdot 10^{-8}$	0	$5.514 \cdot 10^{-7}$	$5.514 \cdot 10^{-7}$	0
cpDC	$4.1 \cdot 10^{-10}$	$4.1 \cdot 10^{-10}$	0	$2.199 \cdot 10^{-8}$	$2.199 \cdot 10^{-8}$	0
cpW	$1.241 \cdot 10^{-6}$	$1.241 \cdot 10^{-6}$	0	$4.793 \cdot 10^{-6}$	$4.793 \cdot 10^{-6}$	0
cpWB	$4.479 \cdot 10^{-7}$	$4.479 \cdot 10^{-7}$	0	$8.047 \cdot 10^{-7}$	$8.047 \cdot 10^{-7}$	0

cpqMi	$-7.705 \cdot 10^{-7}$	$-7.705 \cdot 10^{-7}$	0	$9.167 \cdot 10^{-7}$	$9.167 \cdot 10^{-7}$	0
cpu	$3.488 \cdot 10^{-7}$	$3.488 \cdot 10^{-7}$	0	$9.168 \cdot 10^{-7}$	$9.168 \cdot 10^{-7}$	0
sm	0	0	0	$1.951 \cdot 10^{-7}$	$1.951 \cdot 10^{-7}$	0

### 1.13 $HH \rightarrow zd\bar{d}$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
c3pl1	$-1.306 \cdot 10^{-7}$	$-1.306 \cdot 10^{-7}$	0	$5.937 \cdot 10^{-9}$	$5.937 \cdot 10^{-9}$	0
c3pl2	$-2.249 \cdot 10^{-7}$	$-2.249 \cdot 10^{-7}$	0	$1.023 \cdot 10^{-8}$	$1.023 \cdot 10^{-8}$	0
cdp	$1.439 \cdot 10^{-7}$	$1.439 \cdot 10^{-7}$	0	$8.176 \cdot 10^{-9}$	$8.176 \cdot 10^{-9}$	0
cll1221	$1.306 \cdot 10^{-7}$	$1.306 \cdot 10^{-7}$	0	$5.937 \cdot 10^{-9}$	$5.937 \cdot 10^{-9}$	0
cp	$8.973 \cdot 10^{-7}$	$8.973 \cdot 10^{-7}$	0	$2.656 \cdot 10^{-7}$	$2.656 \cdot 10^{-7}$	0
cpBB	$-5.101 \cdot 10^{-7}$	$-5.101 \cdot 10^{-7}$	0	$4.322 \cdot 10^{-6}$	$4.322 \cdot 10^{-6}$	0
cpDC	$-2.128 \cdot 10^{-6}$	$-2.128 \cdot 10^{-6}$	0	$1.759 \cdot 10^{-6}$	$1.759 \cdot 10^{-6}$	0
cpW	$-3.143 \cdot 10^{-6}$	$-3.143 \cdot 10^{-6}$	0	$2.225 \cdot 10^{-5}$	$2.225 \cdot 10^{-5}$	0
cpWB	$-1.321 \cdot 10^{-6}$	$-1.321 \cdot 10^{-6}$	0	$3.933 \cdot 10^{-6}$	$3.933 \cdot 10^{-6}$	0
cpd	$-3.371 \cdot 10^{-7}$	$-3.371 \cdot 10^{-7}$	0	$2.289 \cdot 10^{-7}$	$2.289 \cdot 10^{-7}$	0
cpq3i	$3.645 \cdot 10^{-6}$	$3.645 \cdot 10^{-6}$	0	$9.136 \cdot 10^{-7}$	$9.136 \cdot 10^{-7}$	0
cpqMi	$1.822 \cdot 10^{-6}$	$1.822 \cdot 10^{-6}$	0	$2.284 \cdot 10^{-7}$	$2.284 \cdot 10^{-7}$	0
sm	0	0	0	$3.76 \cdot 10^{-6}$	$3.76 \cdot 10^{-6}$	0

### 1.14 $HH \rightarrow ze^+e^-$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
c3pl1	$1.209 \cdot 10^{-6}$	$1.209 \cdot 10^{-6}$	0	$4.751 \cdot 10^{-6}$	$4.751 \cdot 10^{-6}$	0
c3pl2	$-6.951 \cdot 10^{-9}$	$-6.951 \cdot 10^{-9}$	0	$3.161 \cdot 10^{-10}$	$3.161 \cdot 10^{-10}$	0
cdp	$2.496 \cdot 10^{-8}$	$2.496 \cdot 10^{-8}$	0	$2.355 \cdot 10^{-9}$	$2.355 \cdot 10^{-9}$	0

c111221	$2.522 \cdot 10^{-8}$	$2.522 \cdot 10^{-8}$	0	$1.147 \cdot 10^{-9}$	$1.147 \cdot 10^{-9}$	0
cp	$8.86 \cdot 10^{-10}$	$8.86 \cdot 10^{-10}$	0	$4.311 \cdot 10^{-11}$	$4.311 \cdot 10^{-11}$	0
cpBB	$2.885 \cdot 10^{-8}$	$2.885 \cdot 10^{-8}$	0	$1.347 \cdot 10^{-7}$	$1.347 \cdot 10^{-7}$	0
cpDC	$1.625 \cdot 10^{-9}$	$1.625 \cdot 10^{-9}$	0	$1.086 \cdot 10^{-9}$	$1.086 \cdot 10^{-9}$	0
cpW	$-1.149 \cdot 10^{-8}$	$-1.149 \cdot 10^{-8}$	0	$5.327 \cdot 10^{-7}$	$5.327 \cdot 10^{-7}$	0
cpWB	$-5.34 \cdot 10^{-9}$	$-5.34 \cdot 10^{-9}$	0	$1.635 \cdot 10^{-7}$	$1.635 \cdot 10^{-7}$	0
cpe	$-6.714 \cdot 10^{-7}$	$-6.714 \cdot 10^{-7}$	0	$2.781 \cdot 10^{-6}$	$2.781 \cdot 10^{-6}$	0
cp11	$2.217 \cdot 10^{-7}$	$2.217 \cdot 10^{-7}$	0	$5.688 \cdot 10^{-7}$	$5.688 \cdot 10^{-7}$	0
sm	0	0	0	$9.314 \cdot 10^{-8}$	$9.314 \cdot 10^{-8}$	0

### 1.15 $HH \rightarrow zt\bar{t}$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
c3p11	$-5.072 \cdot 10^{-6}$	$-5.072 \cdot 10^{-6}$	0	$2.306 \cdot 10^{-7}$	$2.306 \cdot 10^{-7}$	0
c3p12	$-2.061 \cdot 10^{-6}$	$-2.061 \cdot 10^{-6}$	0	$9.37 \cdot 10^{-8}$	$9.37 \cdot 10^{-8}$	0
cdp	$6.392 \cdot 10^{-5}$	$6.392 \cdot 10^{-5}$	0	$5.722 \cdot 10^{-5}$	$5.722 \cdot 10^{-5}$	0
c111221	$5.072 \cdot 10^{-6}$	$5.072 \cdot 10^{-6}$	0	$2.306 \cdot 10^{-7}$	$2.306 \cdot 10^{-7}$	0
cp	$-3.328 \cdot 10^{-6}$	$-3.328 \cdot 10^{-6}$	0	$5.967 \cdot 10^{-7}$	$5.967 \cdot 10^{-7}$	0
cpBB	$-1.311 \cdot 10^{-6}$	$-1.311 \cdot 10^{-6}$	0	$7.236 \cdot 10^{-7}$	$7.236 \cdot 10^{-7}$	0
cpDC	$1.542 \cdot 10^{-5}$	$1.542 \cdot 10^{-5}$	0	$1.268 \cdot 10^{-5}$	$1.268 \cdot 10^{-5}$	0
cpQM	$2.203 \cdot 10^{-5}$	$2.203 \cdot 10^{-5}$	0	$2.636 \cdot 10^{-5}$	$2.636 \cdot 10^{-5}$	0
cpW	$-3.117 \cdot 10^{-6}$	$-3.117 \cdot 10^{-6}$	0	$5.899 \cdot 10^{-6}$	$5.899 \cdot 10^{-6}$	0
cpWB	$-1.493 \cdot 10^{-6}$	$-1.493 \cdot 10^{-6}$	0	$1.013 \cdot 10^{-6}$	$1.013 \cdot 10^{-6}$	0
cpt	$-1.435 \cdot 10^{-5}$	$-1.435 \cdot 10^{-5}$	0	$1.471 \cdot 10^{-5}$	$1.471 \cdot 10^{-5}$	0
ctW	$2.477 \cdot 10^{-12}$	0	1	$6.842 \cdot 10^{-17}$	0	1
ctZ	$1.935 \cdot 10^{-6}$	$1.935 \cdot 10^{-6}$	$-1.085 \cdot 10^{-6}$	$4.223 \cdot 10^{-5}$	$4.223 \cdot 10^{-5}$	$-2.179 \cdot 10^{-6}$
ctp	$-3.856 \cdot 10^{-6}$	$-3.856 \cdot 10^{-6}$	0	$1.865 \cdot 10^{-6}$	$1.865 \cdot 10^{-6}$	0
sm	0	0	0	$1.293 \cdot 10^{-5}$	$1.293 \cdot 10^{-5}$	0



### 1.16 $HH \rightarrow zz$

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
c3p11	-0.2909	-0.2909	0	0.008817	0.008817	0
c3p12	-0.01491	-0.01491	0	0.000452	0.000452	0
cdp	-3.718	-3.718	0	1.511	1.511	0
c111221	0.2909	0.2909	0	0.008817	0.008817	0
cp	0.02066	0.02066	0	0.06606	0.06606	0
cpBB	0.006265	0.006265	0	0.2052	0.2052	0
cpDC	-0.04948	-0.04948	0	0.452	0.452	0
cpW	0.03222	0.03222	0	2.276	2.276	0
cpWB	0.01779	0.01779	0	0.6941	0.6941	0
sm	0	0	0	0.07703	0.07703	0

### 1.17 $HW^+ \rightarrow \gamma t\bar{b}$

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
c3p11	$-7.28 \cdot 10^{-7}$	$-7.28 \cdot 10^{-7}$	0	$3.31 \cdot 10^{-8}$	$3.31 \cdot 10^{-8}$	0
c3p12	$-2.754 \cdot 10^{-7}$	$-2.754 \cdot 10^{-7}$	0	$1.252 \cdot 10^{-8}$	$1.252 \cdot 10^{-8}$	0
cWW	$-9.154 \cdot 10^{-8}$	$-9.154 \cdot 10^{-8}$	0	$5.844 \cdot 10^{-8}$	$5.844 \cdot 10^{-8}$	0
cdp	$4.854 \cdot 10^{-7}$	$4.854 \cdot 10^{-7}$	0	$1.471 \cdot 10^{-8}$	$1.471 \cdot 10^{-8}$	0
c111221	$7.28 \cdot 10^{-7}$	$7.28 \cdot 10^{-7}$	0	$3.31 \cdot 10^{-8}$	$3.31 \cdot 10^{-8}$	0
cpBB	$4.237 \cdot 10^{-7}$	$4.237 \cdot 10^{-7}$	0	$5.742 \cdot 10^{-8}$	$5.742 \cdot 10^{-8}$	0
cpDC	$-3.249 \cdot 10^{-7}$	$-3.249 \cdot 10^{-7}$	0	$1.054 \cdot 10^{-8}$	$1.054 \cdot 10^{-8}$	0
cpQ3	$-3.811 \cdot 10^{-6}$	$-3.811 \cdot 10^{-6}$	0	$4.813 \cdot 10^{-6}$	$4.813 \cdot 10^{-6}$	0
cpW	$-4.232 \cdot 10^{-7}$	$-4.232 \cdot 10^{-7}$	0	$2.496 \cdot 10^{-7}$	$2.496 \cdot 10^{-7}$	0
cpWB	$-1.656 \cdot 10^{-7}$	$-1.656 \cdot 10^{-7}$	0	$6.487 \cdot 10^{-7}$	$6.487 \cdot 10^{-7}$	0

ctW	$8.25 \cdot 10^{-7}$	$8.25 \cdot 10^{-7}$	$-3.018 \cdot 10^{-6}$	$9.802 \cdot 10^{-6}$	$9.802 \cdot 10^{-6}$	$-1.489 \cdot 10^{-6}$
ctZ	$6.273 \cdot 10^{-7}$	$6.273 \cdot 10^{-7}$	$-1.084 \cdot 10^{-6}$	$5.144 \cdot 10^{-6}$	$5.144 \cdot 10^{-6}$	$-2.197 \cdot 10^{-6}$
ctp	$6.17 \cdot 10^{-8}$	$6.17 \cdot 10^{-8}$	0	$1.255 \cdot 10^{-7}$	$1.255 \cdot 10^{-7}$	0
sm	0	0	0	$2.505 \cdot 10^{-6}$	$2.505 \cdot 10^{-6}$	0

### 1.18 $HW^+ \rightarrow \gamma u \bar{d}$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
c3pl1	$-1.887 \cdot 10^{-8}$	$-1.887 \cdot 10^{-8}$	0	$8.578 \cdot 10^{-10}$	$8.578 \cdot 10^{-10}$	0
c3pl2	$-8.778 \cdot 10^{-9}$	$-8.778 \cdot 10^{-9}$	0	$3.991 \cdot 10^{-10}$	$3.991 \cdot 10^{-10}$	0
cWW	$-2.275 \cdot 10^{-7}$	$-2.275 \cdot 10^{-7}$	0	$5.974 \cdot 10^{-7}$	$5.974 \cdot 10^{-7}$	0
cdp	$1.258 \cdot 10^{-8}$	$1.258 \cdot 10^{-8}$	0	$3.813 \cdot 10^{-10}$	$3.813 \cdot 10^{-10}$	0
c111221	$1.887 \cdot 10^{-8}$	$1.887 \cdot 10^{-8}$	0	$8.578 \cdot 10^{-10}$	$8.578 \cdot 10^{-10}$	0
cpBB	$1.307 \cdot 10^{-7}$	$1.307 \cdot 10^{-7}$	0	$5.314 \cdot 10^{-8}$	$5.314 \cdot 10^{-8}$	0
cpDC	$-1.625 \cdot 10^{-8}$	$-1.625 \cdot 10^{-8}$	0	$5.269 \cdot 10^{-10}$	$5.269 \cdot 10^{-10}$	0
cpW	$-1.01 \cdot 10^{-7}$	$-1.01 \cdot 10^{-7}$	0	$2.121 \cdot 10^{-6}$	$2.121 \cdot 10^{-6}$	0
cpWB	$-3.397 \cdot 10^{-8}$	$-3.397 \cdot 10^{-8}$	0	$3.366 \cdot 10^{-6}$	$3.366 \cdot 10^{-6}$	0
cpq3i	$1.388 \cdot 10^{-7}$	$1.388 \cdot 10^{-7}$	0	$3.986 \cdot 10^{-8}$	$3.986 \cdot 10^{-8}$	0
sm	0	0	0	$1.253 \cdot 10^{-7}$	$1.253 \cdot 10^{-7}$	0

### 1.19 $HW^+ \rightarrow u \bar{d}$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
c3pl1	-0.001511	-0.001511	0	$4.581 \cdot 10^{-5}$	$4.581 \cdot 10^{-5}$	0
c3pl2	-0.002553	-0.002553	0	$7.74 \cdot 10^{-5}$	$7.74 \cdot 10^{-5}$	0
cdp	0.001511	0.001511	0	$4.581 \cdot 10^{-5}$	$4.581 \cdot 10^{-5}$	0
c111221	0.001511	0.001511	0	$4.581 \cdot 10^{-5}$	$4.581 \cdot 10^{-5}$	0

cpDC	-0.0006467	-0.0006467	0	$4.9 \cdot 10^{-6}$	$4.9 \cdot 10^{-6}$	0
cpW	0.01179	0.01179	0	0.05611	0.05611	0
cpq3i	0.4059	0.4059	0	1.931	1.931	0
sm	0	0	0	0.02133	0.02133	0

## 1.20 $HW^- \rightarrow t\bar{b}$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
c3p11	-0.1642	-0.1642	0	0.004978	0.004978	0
c3p12	-0.3364	-0.3364	0	0.0102	0.0102	0
cdp	0.1642	0.1642	0	0.004978	0.004978	0
c111221	0.1642	0.1642	0	0.004978	0.004978	0
cpDC	-0.04557	-0.04557	0	0.0003453	0.0003453	0
cpQ3	-2.241	-2.241	0	1.488	1.488	0
cpW	-0.1427	-0.1427	0	0.07302	0.07302	0
ctW	-0.1953	-0.1953	0	1.697	1.697	0
ctp	0.0502	0.0502	0	0.05048	0.05048	0
sm	0	0	0	1.503	1.503	0

## 1.21 $HW^- \rightarrow \gamma e^- \bar{\nu}_e$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
c3p11	$7.615 \cdot 10^{-8}$	$7.615 \cdot 10^{-8}$	0	$1.78 \cdot 10^{-7}$	$1.78 \cdot 10^{-7}$	0
c3p12	$-6.432 \cdot 10^{-8}$	$-6.432 \cdot 10^{-8}$	0	$2.925 \cdot 10^{-9}$	$2.925 \cdot 10^{-9}$	0
cWWW	$5.764 \cdot 10^{-9}$	$5.764 \cdot 10^{-9}$	0	$9.064 \cdot 10^{-9}$	$9.064 \cdot 10^{-9}$	0
cdp	$2.397 \cdot 10^{-9}$	$2.397 \cdot 10^{-9}$	0	$7.266 \cdot 10^{-11}$	$7.266 \cdot 10^{-11}$	0
c111221	$3.596 \cdot 10^{-9}$	$3.596 \cdot 10^{-9}$	0	$1.635 \cdot 10^{-10}$	$1.635 \cdot 10^{-10}$	0

cpBB	$4.503 \cdot 10^{-9}$	$4.503 \cdot 10^{-9}$	0	$4.332 \cdot 10^{-8}$	$4.332 \cdot 10^{-8}$	0
cpDC	$-4.267 \cdot 10^{-10}$	$-4.267 \cdot 10^{-10}$	0	$1.384 \cdot 10^{-11}$	$1.384 \cdot 10^{-11}$	0
cpW	$1.871 \cdot 10^{-7}$	$1.871 \cdot 10^{-7}$	0	$8.83 \cdot 10^{-7}$	$8.83 \cdot 10^{-7}$	0
cpWB	$-9.562 \cdot 10^{-8}$	$-9.562 \cdot 10^{-8}$	0	$1.13 \cdot 10^{-8}$	$1.13 \cdot 10^{-8}$	0
sm	0	0	0	$3.289 \cdot 10^{-9}$	$3.289 \cdot 10^{-9}$	0

### 1.22 $HW^- \rightarrow \mu^- \bar{\nu}_\mu$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
c3p11	-0.000772	-0.000772	0	$2.34 \cdot 10^{-5}$	$2.34 \cdot 10^{-5}$	0
c3p12	0.1366	0.1366	0	0.6458	0.6458	0
cdp	0.000772	0.000772	0	$2.34 \cdot 10^{-5}$	$2.34 \cdot 10^{-5}$	0
c111221	0.000772	0.000772	0	$2.34 \cdot 10^{-5}$	$2.34 \cdot 10^{-5}$	0
cpDC	-0.00015	-0.00015	0	$1.137 \cdot 10^{-6}$	$1.137 \cdot 10^{-6}$	0
cpW	0.003829	0.003829	0	0.01821	0.01821	0
sm	0	0	0	0.004948	0.004948	0

### 1.23 $H\gamma \rightarrow b\bar{b}$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
cpBB	0	0	0	0.005709	0.005709	0
cpDC	0	0	0	0	$1.219 \cdot 10^{-38}$	$\infty$
cpW	0	0	0	0.01375	0.01375	0
cpWB	0	0	0	0.009526	0.009526	0

### 1.24 $H\gamma \rightarrow c\bar{c}$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
cpBB	0	0	0	0.01702	0.01702	0
cpDC	0	0	0	0	$8.363 \cdot 10^{-39}$	$\infty$
cpW	0	0	0	0.01166	0.01166	0
cpWB	0	0	0	0.0131	0.0131	0

### 1.25 $H\gamma \rightarrow d\bar{d}$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
cpBB	0	0	0	0.005495	0.005495	0
cpDC	0	0	0	0	$1.173 \cdot 10^{-38}$	$\infty$
cpW	0	0	0	0.01398	0.01398	0
cpWB	0	0	0	0.009679	0.009679	0

### 1.26 $H\gamma \rightarrow e^+e^-$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
cpBB	0	0	0	0.02115	0.02115	0
cpDC	0	0	0	0	$3.453 \cdot 10^{-39}$	$\infty$
cpW	0	0	0	0.004833	0.004833	0
cpWB	0	0	0	0.008167	0.008167	0

### 1.27 $H\gamma \rightarrow t\bar{t}$

interference

square

	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
c3p11	-0.04926	-0.04926	0	0.001493	0.001493	0
c3p12	-0.07081	-0.07081	0	0.002146	0.002146	0
cdp	0.04926	0.04926	0	0.001493	0.001493	0
cl11221	0.04926	0.04926	0	0.001493	0.001493	0
cpBB	-0.01963	-0.01963	0	0.01964	0.01964	0
cpDC	-0.05908	-0.05908	0	0.001916	0.001916	0
cpW	-0.02755	-0.02755	0	0.01171	0.01171	0
cpWB	-0.09067	-0.09067	0	0.01685	0.01685	0
ctW	-0.6101	-0.6101	$-1.065 \cdot 10^{-6}$	15.46	15.46	$-2.135 \cdot 10^{-6}$
ctZ	0.756	0.756	$-1.085 \cdot 10^{-6}$	8.851	8.851	$-2.192 \cdot 10^{-6}$
ctp	-0.0559	-0.0559	0	0.001715	0.001715	0
sm	0	0	0	0.4555	0.4555	0

## 1.28 $H_z \rightarrow \mu^+ \mu^-$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
c3p11	-0.0003923	-0.0003923	0	$1.189 \cdot 10^{-5}$	$1.189 \cdot 10^{-5}$	0
c3p12	0.04907	0.04907	0	0.3355	0.3355	0
cdp	0.0003923	0.0003923	0	$1.189 \cdot 10^{-5}$	$1.189 \cdot 10^{-5}$	0
cl11221	0.0003923	0.0003923	0	$1.189 \cdot 10^{-5}$	$1.189 \cdot 10^{-5}$	0
cpBB	0.0003061	0.0003061	0	0.003186	0.003186	0
cpDC	$3.801 \cdot 10^{-5}$	$3.801 \cdot 10^{-5}$	0	$2.708 \cdot 10^{-5}$	$2.708 \cdot 10^{-5}$	0
cpW	0.001307	0.001307	0	0.006804	0.006804	0
cpWB	0.0006766	0.0006766	0	0.002037	0.002037	0
cp12	0.05004	0.05004	0	0.3425	0.3425	0
cpmu	-0.04392	-0.04392	0	0.3425	0.3425	0
sm	0	0	0	0.00315	0.00315	0

### 1.29 $H z \rightarrow \nu_\tau \bar{\nu}_\tau$

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
c3p11	-0.0005201	-0.0005201	0	$1.576 \cdot 10^{-5}$	$1.576 \cdot 10^{-5}$	0
c3p12	-0.0002155	-0.0002155	0	$6.534 \cdot 10^{-6}$	$6.534 \cdot 10^{-6}$	0
c3p13	0.06254	0.06254	0	0.228	0.228	0
cdp	0.0005201	0.0005201	0	$1.576 \cdot 10^{-5}$	$1.576 \cdot 10^{-5}$	0
cl11221	0.0005201	0.0005201	0	$1.576 \cdot 10^{-5}$	$1.576 \cdot 10^{-5}$	0
cpBB	0.001242	0.001242	0	0.001058	0.001058	0
cpDC	$-1.103 \cdot 10^{-18}$	$4.004 \cdot 10^{-19}$	1.363	$1.757 \cdot 10^{-34}$	$2.838 \cdot 10^{-35}$	0.8384
cpW	0.004219	0.004219	0	0.01179	0.01179	0
cpWB	0.00233	0.00233	0	0.003595	0.003595	0
cp13	-0.06254	-0.06254	0	0.228	0.228	0
sm	0	0	0	0.002159	0.002159	0

### 1.30 $H z \rightarrow b\bar{b}$

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
c3p11	-0.0008172	-0.0008172	0	$2.477 \cdot 10^{-5}$	$2.477 \cdot 10^{-5}$	0
c3p12	-0.0005754	-0.0005754	0	$1.744 \cdot 10^{-5}$	$1.744 \cdot 10^{-5}$	0
cdp	0.0008172	0.0008172	0	$2.477 \cdot 10^{-5}$	$2.477 \cdot 10^{-5}$	0
cl11221	0.0008172	0.0008172	0	$2.477 \cdot 10^{-5}$	$2.477 \cdot 10^{-5}$	0
cpBB	0.001086	0.001086	0	0.001317	0.001317	0
cpDC	0.0003035	0.0003035	0	$6.827 \cdot 10^{-6}$	$6.827 \cdot 10^{-6}$	0
cpQ3	0.3524	0.3524	0	3.06	3.06	0
cpQM	0.1762	0.1762	0	0.7651	0.7651	0
cpW	0.01026	0.01026	0	0.0339	0.0339	0

cpWB	0.004289	0.004289	0	0.005812	0.005812	0
cpd	-0.03252	-0.03252	0	0.7651	0.7651	0
sm	0	0	0	0.01049	0.01049	0

### 1.31 $H_z \rightarrow s\bar{s}$

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
c3p11	-0.0004593	-0.0004593	0	$1.392 \cdot 10^{-5}$	$1.392 \cdot 10^{-5}$	0
c3p12	-0.001718	-0.001718	0	$5.209 \cdot 10^{-5}$	$5.209 \cdot 10^{-5}$	0
cdp	0.0004593	0.0004593	0	$1.392 \cdot 10^{-5}$	$1.392 \cdot 10^{-5}$	0
c111221	0.0004593	0.0004593	0	$1.392 \cdot 10^{-5}$	$1.392 \cdot 10^{-5}$	0
cpBB	0.001019	0.001019	0	0.001236	0.001236	0
cpDC	0.0003383	0.0003383	0	$7.611 \cdot 10^{-6}$	$7.611 \cdot 10^{-6}$	0
cpW	0.006168	0.006168	0	0.02038	0.02038	0
cpWB	0.00294	0.00294	0	0.003503	0.003503	0
cpd	-0.03605	-0.03605	0	0.8436	0.8436	0
cpq3i	0.3907	0.3907	0	3.374	3.374	0
cpqMi	0.1953	0.1953	0	0.8436	0.8436	0
sm	0	0	0	0.01169	0.01169	0

### 1.32 $H_z \rightarrow t\bar{t}$

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
c3p11	-0.2116	-0.2116	0	0.006415	0.006415	0
c3p12	-0.2132	-0.2132	0	0.006462	0.006462	0
cdp	0.2116	0.2116	0	0.006415	0.006415	0
c111221	0.2116	0.2116	0	0.006415	0.006415	0



cpBB	-0.01362	-0.01362	0	0.005496	0.005496	0
cpDC	0.01045	0.01045	0	0.01722	0.01722	0
cpQM	2.065	2.065	0	1.143	1.143	0
cpW	-0.04291	-0.04291	0	0.02495	0.02495	0
cpWB	-0.01136	-0.01136	0	0.00502	0.00502	0
cpt	-2.22	-2.22	0	1.488	1.488	0
ctW	$-4.395 \cdot 10^{-8}$	0	1	$5.561 \cdot 10^{-12}$	0	1
ctZ	-0.03677	-0.03677	$-1.088 \cdot 10^{-6}$	3.792	3.792	$-2.189 \cdot 10^{-6}$
ctp	-0.006668	-0.006668	0	0.06763	0.06763	0
sm	0	0	0	2.41	2.41	0

### 1.33 $H_z \rightarrow u\bar{u}$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
c3pl1	-0.0009471	-0.0009471	0	$2.871 \cdot 10^{-5}$	$2.871 \cdot 10^{-5}$	0
c3pl2	-0.0006724	-0.0006724	0	$2.038 \cdot 10^{-5}$	$2.038 \cdot 10^{-5}$	0
cdp	0.0009471	0.0009471	0	$2.871 \cdot 10^{-5}$	$2.871 \cdot 10^{-5}$	0
cll1221	0.0009471	0.0009471	0	$2.871 \cdot 10^{-5}$	$2.871 \cdot 10^{-5}$	0
cpBB	0.0006424	0.0006424	0	0.005382	0.005382	0
cpDC	0.000217	0.000217	0	$1.784 \cdot 10^{-5}$	$1.784 \cdot 10^{-5}$	0
cpW	0.007544	0.007544	0	0.0305	0.0305	0
cpWB	0.002907	0.002907	0	0.005131	0.005131	0
cpqMi	-0.09335	-0.09335	0	0.4943	0.4943	0
cpu	0.04225	0.04225	0	0.4943	0.4943	0
sm	0	0	0	0.00531	0.00531	0

### 1.34 $W^+W^- \rightarrow Hb\bar{b}$

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
c3pl1	$-1.882 \cdot 10^{-8}$	$-1.882 \cdot 10^{-8}$	0	$8.556 \cdot 10^{-10}$	$8.556 \cdot 10^{-10}$	0
c3pl2	$-3.885 \cdot 10^{-7}$	$-3.885 \cdot 10^{-7}$	0	$1.767 \cdot 10^{-8}$	$1.767 \cdot 10^{-8}$	0
cWWW	$2.576 \cdot 10^{-7}$	$2.576 \cdot 10^{-7}$	0	$9.119 \cdot 10^{-7}$	$9.119 \cdot 10^{-7}$	0
cdp	$1.255 \cdot 10^{-8}$	$1.255 \cdot 10^{-8}$	0	$3.803 \cdot 10^{-10}$	$3.803 \cdot 10^{-10}$	0
c111221	$1.882 \cdot 10^{-8}$	$1.882 \cdot 10^{-8}$	0	$8.556 \cdot 10^{-10}$	$8.556 \cdot 10^{-10}$	0
cpBB	$-1.984 \cdot 10^{-8}$	$-1.984 \cdot 10^{-8}$	0	$2.331 \cdot 10^{-10}$	$2.331 \cdot 10^{-10}$	0
cpDC	$-1.534 \cdot 10^{-7}$	$-1.534 \cdot 10^{-7}$	0	$2.771 \cdot 10^{-9}$	$2.771 \cdot 10^{-9}$	0
cpQ3	$-1.211 \cdot 10^{-6}$	$-1.211 \cdot 10^{-6}$	0	$3.18 \cdot 10^{-7}$	$3.18 \cdot 10^{-7}$	0
cpQM	$1.107 \cdot 10^{-6}$	$1.107 \cdot 10^{-6}$	0	$1.953 \cdot 10^{-7}$	$1.953 \cdot 10^{-7}$	0
cpW	$-1.59 \cdot 10^{-7}$	$-1.59 \cdot 10^{-7}$	0	$1.318 \cdot 10^{-7}$	$1.318 \cdot 10^{-7}$	0
cpWB	$-8.69 \cdot 10^{-8}$	$-8.69 \cdot 10^{-8}$	0	$4.395 \cdot 10^{-8}$	$4.395 \cdot 10^{-8}$	0
cpd	$-2.695 \cdot 10^{-8}$	$-2.695 \cdot 10^{-8}$	0	$1.95 \cdot 10^{-7}$	$1.95 \cdot 10^{-7}$	0
ctW	$-2.452 \cdot 10^{-7}$	$-2.452 \cdot 10^{-7}$	0	$2.976 \cdot 10^{-6}$	$2.976 \cdot 10^{-6}$	0
ctp	$4.712 \cdot 10^{-7}$	$4.712 \cdot 10^{-7}$	0	$3.501 \cdot 10^{-8}$	$3.501 \cdot 10^{-8}$	0
sm	0	0	0	$2.429 \cdot 10^{-6}$	$2.429 \cdot 10^{-6}$	0

### 1.35 $W^+W^- \rightarrow Hc\bar{c}$

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
c3pl1	$-8.387 \cdot 10^{-8}$	$-8.387 \cdot 10^{-8}$	0	$3.813 \cdot 10^{-9}$	$3.813 \cdot 10^{-9}$	0
c3pl2	$-1.803 \cdot 10^{-7}$	$-1.803 \cdot 10^{-7}$	0	$8.196 \cdot 10^{-9}$	$8.196 \cdot 10^{-9}$	0
cWWW	$1.869 \cdot 10^{-7}$	$1.869 \cdot 10^{-7}$	0	$4.056 \cdot 10^{-7}$	$4.056 \cdot 10^{-7}$	0
cdp	$5.591 \cdot 10^{-8}$	$5.591 \cdot 10^{-8}$	0	$1.695 \cdot 10^{-9}$	$1.695 \cdot 10^{-9}$	0
c111221	$8.387 \cdot 10^{-8}$	$8.387 \cdot 10^{-8}$	0	$3.813 \cdot 10^{-9}$	$3.813 \cdot 10^{-9}$	0
cpBB	$4.333 \cdot 10^{-9}$	$4.333 \cdot 10^{-9}$	0	$3.515 \cdot 10^{-10}$	$3.515 \cdot 10^{-10}$	0
cpDC	$-2.305 \cdot 10^{-8}$	$-2.305 \cdot 10^{-8}$	0	$5.558 \cdot 10^{-10}$	$5.558 \cdot 10^{-10}$	0

cpW	$-1.612 \cdot 10^{-7}$	$-1.612 \cdot 10^{-7}$	0	$7.903 \cdot 10^{-8}$	$7.903 \cdot 10^{-8}$	0
cpWB	$1.207 \cdot 10^{-8}$	$1.207 \cdot 10^{-8}$	0	$6.431 \cdot 10^{-8}$	$6.431 \cdot 10^{-8}$	0
cpq3i	$2.239 \cdot 10^{-7}$	$2.239 \cdot 10^{-7}$	0	$1.814 \cdot 10^{-6}$	$1.814 \cdot 10^{-6}$	0
cpqMi	$-4.318 \cdot 10^{-9}$	$-4.318 \cdot 10^{-9}$	0	$1.733 \cdot 10^{-7}$	$1.733 \cdot 10^{-7}$	0
cpu	$3.292 \cdot 10^{-8}$	$3.292 \cdot 10^{-8}$	0	$1.733 \cdot 10^{-7}$	$1.733 \cdot 10^{-7}$	0
sm	0	0	0	$2.712 \cdot 10^{-7}$	$2.712 \cdot 10^{-7}$	0

### 1.36 $W^+W^- \rightarrow Hdd\bar{}$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
c3pl1	$-9.127 \cdot 10^{-7}$	$-9.127 \cdot 10^{-7}$	0	$4.15 \cdot 10^{-8}$	$4.15 \cdot 10^{-8}$	0
c3pl2	$-7.878 \cdot 10^{-7}$	$-7.878 \cdot 10^{-7}$	0	$3.582 \cdot 10^{-8}$	$3.582 \cdot 10^{-8}$	0
cWWW	$6.746 \cdot 10^{-7}$	$6.746 \cdot 10^{-7}$	0	$1.108 \cdot 10^{-6}$	$1.108 \cdot 10^{-6}$	0
cdp	$6.085 \cdot 10^{-7}$	$6.085 \cdot 10^{-7}$	0	$1.844 \cdot 10^{-8}$	$1.844 \cdot 10^{-8}$	0
c111221	$9.127 \cdot 10^{-7}$	$9.127 \cdot 10^{-7}$	0	$4.15 \cdot 10^{-8}$	$4.15 \cdot 10^{-8}$	0
cpBB	$-1.538 \cdot 10^{-8}$	$-1.538 \cdot 10^{-8}$	0	$2.251 \cdot 10^{-10}$	$2.251 \cdot 10^{-10}$	0
cpDC	$-1.157 \cdot 10^{-7}$	$-1.157 \cdot 10^{-7}$	0	$2.493 \cdot 10^{-9}$	$2.493 \cdot 10^{-9}$	0
cpW	$-1.193 \cdot 10^{-6}$	$-1.193 \cdot 10^{-6}$	0	$1.569 \cdot 10^{-7}$	$1.569 \cdot 10^{-7}$	0
cpWB	$-9.669 \cdot 10^{-8}$	$-9.669 \cdot 10^{-8}$	0	$3.78 \cdot 10^{-8}$	$3.78 \cdot 10^{-8}$	0
cpd	$-4.074 \cdot 10^{-8}$	$-4.074 \cdot 10^{-8}$	0	$2.813 \cdot 10^{-7}$	$2.813 \cdot 10^{-7}$	0
cpq3i	$-3.579 \cdot 10^{-7}$	$-3.579 \cdot 10^{-7}$	0	$1.085 \cdot 10^{-6}$	$1.085 \cdot 10^{-6}$	0
cpqMi	$7.218 \cdot 10^{-7}$	$7.218 \cdot 10^{-7}$	0	$2.824 \cdot 10^{-7}$	$2.824 \cdot 10^{-7}$	0
sm	0	0	0	$1.585 \cdot 10^{-6}$	$1.585 \cdot 10^{-6}$	0

### 1.37 $W^+W^- \rightarrow Ht\bar{t}$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$

c3p11	$-4.16 \cdot 10^{-6}$	$-4.16 \cdot 10^{-6}$	0	$1.892 \cdot 10^{-7}$	$1.892 \cdot 10^{-7}$	0
c3p12	$-3.531 \cdot 10^{-5}$	$-3.531 \cdot 10^{-5}$	0	$1.605 \cdot 10^{-6}$	$1.605 \cdot 10^{-6}$	0
cWWW	$4.504 \cdot 10^{-7}$	$4.504 \cdot 10^{-7}$	0	$7.428 \cdot 10^{-6}$	$7.428 \cdot 10^{-6}$	0
cdp	$-4.352 \cdot 10^{-7}$	$-4.352 \cdot 10^{-7}$	0	$7.212 \cdot 10^{-6}$	$7.212 \cdot 10^{-6}$	0
c111221	$4.16 \cdot 10^{-6}$	$4.16 \cdot 10^{-6}$	0	$1.892 \cdot 10^{-7}$	$1.892 \cdot 10^{-7}$	0
cp	$4.605 \cdot 10^{-7}$	$4.605 \cdot 10^{-7}$	0	$6.752 \cdot 10^{-8}$	$6.752 \cdot 10^{-8}$	0
cpBB	$-5.907 \cdot 10^{-8}$	$-5.907 \cdot 10^{-8}$	0	$7.311 \cdot 10^{-10}$	$7.311 \cdot 10^{-10}$	0
cpDC	$-1.492 \cdot 10^{-6}$	$-1.492 \cdot 10^{-6}$	0	$5.388 \cdot 10^{-7}$	$5.388 \cdot 10^{-7}$	0
cpQ3	$1.097 \cdot 10^{-5}$	$1.097 \cdot 10^{-5}$	0	$1.826 \cdot 10^{-5}$	$1.826 \cdot 10^{-5}$	0
cpQM	$-4.575 \cdot 10^{-7}$	$-4.575 \cdot 10^{-7}$	0	$3.294 \cdot 10^{-6}$	$3.294 \cdot 10^{-6}$	0
cpW	$5.619 \cdot 10^{-6}$	$5.619 \cdot 10^{-6}$	0	$2.172 \cdot 10^{-5}$	$2.172 \cdot 10^{-5}$	0
cpWB	$1.223 \cdot 10^{-5}$	$1.223 \cdot 10^{-5}$	0	$5.789 \cdot 10^{-7}$	$5.789 \cdot 10^{-7}$	0
cpt	$1.955 \cdot 10^{-5}$	$1.955 \cdot 10^{-5}$	0	$1.462 \cdot 10^{-6}$	$1.462 \cdot 10^{-6}$	0
ctW	$2.406 \cdot 10^{-7}$	$2.406 \cdot 10^{-7}$	$-2.494 \cdot 10^{-7}$	$2.309 \cdot 10^{-5}$	$2.309 \cdot 10^{-5}$	$8.662 \cdot 10^{-8}$
ctZ	$-6.635 \cdot 10^{-7}$	$-6.635 \cdot 10^{-7}$	$-1.1 \cdot 10^{-6}$	$1.04 \cdot 10^{-7}$	$1.04 \cdot 10^{-7}$	$-2.211 \cdot 10^{-6}$
ctp	$-9.427 \cdot 10^{-7}$	$-9.427 \cdot 10^{-7}$	0	$7.024 \cdot 10^{-7}$	$7.024 \cdot 10^{-7}$	0
sm	0	0	0	$3.093 \cdot 10^{-5}$	$3.093 \cdot 10^{-5}$	0

### 1.38 $W^+W^- \rightarrow W^+W^-$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
c3p11	-0.8922	-0.8922	0	0.02704	0.02704	0
c3p12	-5.964	-5.964	0	0.1808	0.1808	0
cWWW	-0.102	-0.102	0	9.664	9.664	0
cdp	-0.1306	-0.1306	0	0.006302	0.006302	0
c111221	0.8922	0.8922	0	0.02704	0.02704	0
cpDC	2.034	2.034	0	0.03117	0.03117	0
cpW	0.1914	0.1914	0	1.993	1.993	0

cpWB	-0.1023	-0.1023	0	0.02642	0.02642	0
sm	0	0	0	34.74	34.74	0

### 1.39 $W^+W^- \rightarrow \gamma\gamma$

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
c3pl1	-0.01439	-0.01439	0	0.0004361	0.0004361	0
c3pl2	-0.07538	-0.07538	0	0.002285	0.002285	0
cWWW	-0.0008358	-0.0008358	0	0.7162	0.7162	0
cll1221	0.01439	0.01439	0	0.0004361	0.0004361	0
cpBB	-0.04593	-0.04593	0	0.2694	0.2694	0
cpDC	-0.02789	-0.02789	0	0.001386	0.001386	0
cpW	-0.01269	-0.01269	0	0.02506	0.02506	0
cpWB	-0.1811	-0.1811	0	0.1121	0.1121	0
sm	0	0	0	0.1403	0.1403	0

### 1.40 $W^+W^- \rightarrow \gamma\gamma\gamma$

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
c3pl1	$-1.342 \cdot 10^{-7}$	$-1.342 \cdot 10^{-7}$	0	$6.104 \cdot 10^{-9}$	$6.104 \cdot 10^{-9}$	0
c3pl2	$-1.043 \cdot 10^{-7}$	$-1.043 \cdot 10^{-7}$	0	$4.744 \cdot 10^{-9}$	$4.744 \cdot 10^{-9}$	0
cWWW	$1.042 \cdot 10^{-6}$	$1.042 \cdot 10^{-6}$	0	$5.21 \cdot 10^{-6}$	$5.21 \cdot 10^{-6}$	0
cll1221	$1.342 \cdot 10^{-7}$	$1.342 \cdot 10^{-7}$	0	$6.104 \cdot 10^{-9}$	$6.104 \cdot 10^{-9}$	0
cpBB	$-1.797 \cdot 10^{-7}$	$-1.797 \cdot 10^{-7}$	0	$1.775 \cdot 10^{-6}$	$1.775 \cdot 10^{-6}$	0
cpDC	$-4.507 \cdot 10^{-6}$	$-4.507 \cdot 10^{-6}$	0	$3.36 \cdot 10^{-7}$	$3.36 \cdot 10^{-7}$	0
cpW	$-3.474 \cdot 10^{-9}$	$-3.474 \cdot 10^{-9}$	0	$1.199 \cdot 10^{-8}$	$1.199 \cdot 10^{-8}$	0
cpWB	$-2.948 \cdot 10^{-7}$	$-2.948 \cdot 10^{-7}$	0	$9.748 \cdot 10^{-8}$	$9.748 \cdot 10^{-8}$	0

sm	0	0	0	$1.511 \cdot 10^{-5}$	$1.511 \cdot 10^{-5}$	0
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#### 1.41 $\bar{b}t \rightarrow \bar{d}u$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
c3p11	-0.001603	-0.001603	0	$4.859 \cdot 10^{-5}$	$4.859 \cdot 10^{-5}$	0
c3p12	-0.0001219	-0.0001219	0	$3.694 \cdot 10^{-6}$	$3.694 \cdot 10^{-6}$	0
cQq13	0.25	0.25	0	1.182	1.182	0
cQq83	$5.203 \cdot 10^{-40}$	$5.203 \cdot 10^{-40}$	0	0.2626	0.2626	0
c111221	0.001603	0.001603	0	$4.859 \cdot 10^{-5}$	$4.859 \cdot 10^{-5}$	0
cpQ3	0.001958	0.001958	0	$5.935 \cdot 10^{-5}$	$5.935 \cdot 10^{-5}$	0
cpq3i	0.001958	0.001958	0	$5.935 \cdot 10^{-5}$	$5.935 \cdot 10^{-5}$	0
ctW	0.008875	0.008875	0	0.01328	0.01328	0
sm	0	0	0	0.01615	0.01615	0

#### 1.42 $\gamma W^+ \rightarrow zW^+$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
c3p11	-6.135	-6.135	0	0.186	0.186	0
c3p12	-0.02801	-0.02801	0	0.0008489	0.0008489	0
cWWW	-0.007777	-0.007777	0	1.091	1.091	0
c111221	6.135	6.135	0	0.186	0.186	0
cpBB	-0.03644	-0.03644	0	0.03653	0.03653	0
cpDC	-0.02044	-0.02044	0	0.000353	0.000353	0
cpW	0.02377	0.02377	0	0.01592	0.01592	0
cpWB	0.08442	0.08442	0	0.698	0.698	0
sm	0	0	0	0.2959	0.2959	0

### 1.43 $\mu^+\mu^- \rightarrow \tau^+\tau^-$

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
c3p11	-0.0008057	-0.0008057	0	$2.442 \cdot 10^{-5}$	$2.442 \cdot 10^{-5}$	0
c3p12	-0.001103	-0.001103	0	$3.79 \cdot 10^{-5}$	$3.79 \cdot 10^{-5}$	0
c3p13	-0.0002584	-0.0002584	0	$1.047 \cdot 10^{-5}$	$1.047 \cdot 10^{-5}$	0
c111221	0.0008057	0.0008057	0	$2.442 \cdot 10^{-5}$	$2.442 \cdot 10^{-5}$	0
c112233	0.02419	0	1	0.176	0	1
c112332	0.02419	0	1	0.176	0	1
cpDC	-0.003819	-0.003819	0	0.0002088	0.0002088	0
cpWB	-0.003996	-0.003996	0	0.0004694	0.0004694	0
cp12	-0.0002584	-0.0002584	0	$1.047 \cdot 10^{-5}$	$1.047 \cdot 10^{-5}$	0
cp13	-0.0002584	-0.0002584	0	$1.047 \cdot 10^{-5}$	$1.047 \cdot 10^{-5}$	0
cpmu	0.0003117	0.0003117	0	$1.313 \cdot 10^{-5}$	$1.313 \cdot 10^{-5}$	0
cpta	$-7.216 \cdot 10^{-5}$	$-7.216 \cdot 10^{-5}$	0	$8.954 \cdot 10^{-6}$	$8.954 \cdot 10^{-6}$	0
sm	0	0	0	0.0248	0.0248	0

### 1.44 $\nu_\tau \bar{\nu}_\tau \rightarrow \nu_\tau \bar{\nu}_\tau$

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
c3p11	-0.04632	-0.04632	0	0.001404	0.001404	0
c3p12	$-5.879 \cdot 10^{-5}$	$-5.879 \cdot 10^{-5}$	0	$1.782 \cdot 10^{-6}$	$1.782 \cdot 10^{-6}$	0
c3p13	0.09263	0.09263	0	0.005616	0.005616	0
c111221	0.04632	0.04632	0	0.001404	0.001404	0
c113333	-0.0004255	0	1	0.0949	0	1
cpDC	$-2.892 \cdot 10^{-8}$	$-2.892 \cdot 10^{-8}$	0	$4.383 \cdot 10^{-10}$	$4.383 \cdot 10^{-10}$	0
cpWB	$-1.97 \cdot 10^{-24}$	0	1	$1.148 \cdot 10^{-41}$	0	1

cp13	-0.09263	-0.09263	0	0.005616	0.005616	0
sm	0	0	0	$4.77 \cdot 10^{-7}$	$4.77 \cdot 10^{-7}$	0

### 1.45 $\nu_e \bar{\nu}_e \rightarrow \nu_\mu \bar{\nu}_\mu$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
c3pl1	0	$-1.105 \cdot 10^{-21}$	$\infty$	0	$3.122 \cdot 10^{-39}$	$\infty$
c3pl2	$-2.119 \cdot 10^{-19}$	$-4.23 \cdot 10^{-20}$	0.8003	$9.551 \cdot 10^{-37}$	$1.881 \cdot 10^{-37}$	0.8031
c111122	0.4269	0	1	3.087	0	1
c111221	0.002913	$1.216 \cdot 10^{-5}$	0.9958	0.02115	$3.687 \cdot 10^{-7}$	1
cpDC	-0.0002716	-0.0002716	0	$4.116 \cdot 10^{-6}$	$4.116 \cdot 10^{-6}$	0
cpWB	$3.319 \cdot 10^{-19}$	0	1	$1.881 \cdot 10^{-36}$	0	1
cp11	-0.00179	-0.00179	0	$5.425 \cdot 10^{-5}$	$5.425 \cdot 10^{-5}$	0
cp12	$-1.216 \cdot 10^{-5}$	$-1.216 \cdot 10^{-5}$	0	$3.687 \cdot 10^{-7}$	$3.687 \cdot 10^{-7}$	0
sm	0	0	0	0.00448	0.00448	0

### 1.46 $b\bar{b} \rightarrow \gamma\gamma$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
c3pl1	$-1.337 \cdot 10^{-5}$	$-1.337 \cdot 10^{-5}$	0	$4.052 \cdot 10^{-7}$	$4.052 \cdot 10^{-7}$	0
c3pl2	$-1.079 \cdot 10^{-5}$	$-1.079 \cdot 10^{-5}$	0	$3.271 \cdot 10^{-7}$	$3.271 \cdot 10^{-7}$	0
c111221	$1.337 \cdot 10^{-5}$	$1.337 \cdot 10^{-5}$	0	$4.052 \cdot 10^{-7}$	$4.052 \cdot 10^{-7}$	0
cpDC	$-1.673 \cdot 10^{-5}$	$-1.673 \cdot 10^{-5}$	0	$8.316 \cdot 10^{-7}$	$8.316 \cdot 10^{-7}$	0
cpWB	$-3.908 \cdot 10^{-5}$	$-3.908 \cdot 10^{-5}$	0	$4.29 \cdot 10^{-6}$	$4.29 \cdot 10^{-6}$	0
sm	0	0	0	$8.417 \cdot 10^{-5}$	$8.417 \cdot 10^{-5}$	0



### 1.47 $b\bar{b} \rightarrow \mu^+ \mu^-$

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
c3p11	$-5.691 \cdot 10^{-5}$	$-5.691 \cdot 10^{-5}$	0	$1.725 \cdot 10^{-6}$	$1.725 \cdot 10^{-6}$	0
c3p12	$6.475 \cdot 10^{-6}$	$6.475 \cdot 10^{-6}$	0	$2.209 \cdot 10^{-6}$	$2.209 \cdot 10^{-6}$	0
cQe2	-0.0002292	-0.0002292	0	0.005252	0.005252	0
cQ132	0.01105	0.01105	0	0.1164	0.1164	0
cQ1M2	0.0484	0.0484	0	0.2549	0.2549	0
c111221	$5.691 \cdot 10^{-5}$	$5.691 \cdot 10^{-5}$	0	$1.725 \cdot 10^{-6}$	$1.725 \cdot 10^{-6}$	0
cpDC	$-7.163 \cdot 10^{-5}$	$-7.163 \cdot 10^{-5}$	0	$4.666 \cdot 10^{-6}$	$4.666 \cdot 10^{-6}$	0
cpQ3	0.0001032	0.0001032	0	$1.829 \cdot 10^{-5}$	$1.829 \cdot 10^{-5}$	0
cpQM	$5.161 \cdot 10^{-5}$	$5.161 \cdot 10^{-5}$	0	$4.573 \cdot 10^{-6}$	$4.573 \cdot 10^{-6}$	0
cpWB	-0.0002034	-0.0002034	0	$2.282 \cdot 10^{-5}$	$2.282 \cdot 10^{-5}$	0
cpd	$5.594 \cdot 10^{-5}$	$5.594 \cdot 10^{-5}$	0	$5.927 \cdot 10^{-6}$	$5.927 \cdot 10^{-6}$	0
cp12	$2.992 \cdot 10^{-5}$	$2.992 \cdot 10^{-5}$	0	$1.741 \cdot 10^{-6}$	$1.741 \cdot 10^{-6}$	0
cpmu	$-5.437 \cdot 10^{-5}$	$-5.437 \cdot 10^{-5}$	0	$8.34 \cdot 10^{-6}$	$8.34 \cdot 10^{-6}$	0
sm	0	0	0	0.000287	0.000287	0

### 1.48 $b\bar{b} \rightarrow \nu_e \bar{\nu}_e$

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
c3p11	$6.61 \cdot 10^{-21}$	$2.588 \cdot 10^{-20}$	-2.915	$1.647 \cdot 10^{-38}$	$7.886 \cdot 10^{-38}$	-3.788
c3p12	$-1.82 \cdot 10^{-5}$	$-1.82 \cdot 10^{-5}$	0	$5.516 \cdot 10^{-7}$	$5.516 \cdot 10^{-7}$	0
cQ1M1	-0.03969	-0.03969	0	0.17	0.17	0
c111221	0.0002663	0.0002663	0	$8.072 \cdot 10^{-6}$	$8.072 \cdot 10^{-6}$	0
cpDC	$-5.875 \cdot 10^{-5}$	$-5.875 \cdot 10^{-5}$	0	$5.448 \cdot 10^{-7}$	$5.448 \cdot 10^{-7}$	0
cpQ3	0.0006656	0.0006656	0	$4.78 \cdot 10^{-5}$	$4.78 \cdot 10^{-5}$	0

cpQM	0.0003328	0.0003328	0	$1.195 \cdot 10^{-5}$	$1.195 \cdot 10^{-5}$	0
cpWB	$-3.086 \cdot 10^{-5}$	$-3.086 \cdot 10^{-5}$	0	$1.715 \cdot 10^{-6}$	$1.715 \cdot 10^{-6}$	0
cpd	$-9.847 \cdot 10^{-6}$	$-9.847 \cdot 10^{-6}$	0	$1.916 \cdot 10^{-6}$	$1.916 \cdot 10^{-6}$	0
cp11	$-1.82 \cdot 10^{-5}$	$-1.82 \cdot 10^{-5}$	0	$5.516 \cdot 10^{-7}$	$5.516 \cdot 10^{-7}$	0
sm	0	0	0	0.00233	0.00233	0

#### 1.49 $b\bar{b} \rightarrow b\bar{b}$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
c3pl1	0.058	0.058	0	0.00277	0.00277	0
c3pl2	0.02202	0.02202	0	0.0001668	0.0001668	0
cQQ1	-11.12	-11.12	0	2.146	2.146	0
cQQ8	$-1.514 \cdot 10^{-6}$	$-1.514 \cdot 10^{-6}$	0	$6.682 \cdot 10^{-5}$	$6.682 \cdot 10^{-5}$	0
cQd1	0.2242	0.2242	0	2.021	2.021	0
cQd8	-0.05933	-0.05933	0	0.8746	0.8746	0
c111221	-0.058	-0.058	0	0.00277	0.00277	0
cpDC	$-5.122 \cdot 10^{-5}$	$-5.122 \cdot 10^{-5}$	0	$3.411 \cdot 10^{-6}$	$3.411 \cdot 10^{-6}$	0
cpQ3	0.0001324	0.0001324	0	$2.706 \cdot 10^{-5}$	$2.706 \cdot 10^{-5}$	0
cpQM	$6.618 \cdot 10^{-5}$	$6.618 \cdot 10^{-5}$	0	$6.766 \cdot 10^{-6}$	$6.766 \cdot 10^{-6}$	0
cpWB	0.006994	0.006994	0	$5.884 \cdot 10^{-5}$	$5.884 \cdot 10^{-5}$	0
cpd	-0.0003979	-0.0003979	0	0.0001969	0.0001969	0
sm	0	0	0	1.951	1.951	0

#### 1.50 $b\bar{b} \rightarrow d\bar{d}$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
c3pl1	-0.0007726	-0.0007726	0	$2.342 \cdot 10^{-5}$	$2.342 \cdot 10^{-5}$	0

c3p12	$-4.374 \cdot 10^{-5}$	$-4.374 \cdot 10^{-5}$	0	$1.326 \cdot 10^{-6}$	$1.326 \cdot 10^{-6}$	0
cQd1	-0.00112	-0.00112	0	0.077	0.077	0
cQd8	0.1879	0.1879	0	0.06342	0.06342	0
cQq11	0.04751	0.04751	0	0.217	0.217	0
cQq13	0.1143	0.1143	0	0.522	0.522	0
cQq81	0.3437	0.3437	0	0.116	0.116	0
cQq83	0.3437	0.3437	0	0.116	0.116	0
cl11221	0.0007726	0.0007726	0	$2.342 \cdot 10^{-5}$	$2.342 \cdot 10^{-5}$	0
cpDC	$-4.099 \cdot 10^{-5}$	$-4.099 \cdot 10^{-5}$	0	$1.296 \cdot 10^{-6}$	$1.296 \cdot 10^{-6}$	0
cpQ3	0.0006834	0.0006834	0	$4.543 \cdot 10^{-5}$	$4.543 \cdot 10^{-5}$	0
cpQM	0.0003417	0.0003417	0	$1.136 \cdot 10^{-5}$	$1.136 \cdot 10^{-5}$	0
cpWB	$2.213 \cdot 10^{-5}$	$2.213 \cdot 10^{-5}$	0	$1.137 \cdot 10^{-6}$	$1.137 \cdot 10^{-6}$	0
cpd	$-7.496 \cdot 10^{-5}$	$-7.496 \cdot 10^{-5}$	0	$3.008 \cdot 10^{-5}$	$3.008 \cdot 10^{-5}$	0
cpq3i	0.0006834	0.0006834	0	$4.543 \cdot 10^{-5}$	$4.543 \cdot 10^{-5}$	0
cpqMi	0.0003417	0.0003417	0	$1.136 \cdot 10^{-5}$	$1.136 \cdot 10^{-5}$	0
sm	0	0	0	0.4928	0.4928	0

### 1.51 $b\bar{b} \rightarrow t\bar{t}$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
c3p11	-0.02906	-0.02906	0	0.002261	0.002261	0
c3p12	-0.2735	-0.2735	0	0.01215	0.01215	0
cQQ1	-0.3486	-0.3486	0	0.4651	0.4651	0
cQQ8	-0.5748	-0.5748	0	0.1567	0.1567	0
cQd1	-0.003103	-0.003103	0	0.101	0.101	0
cQd8	0.03634	0.03634	0	0.00569	0.00569	0
cQt1	-0.09669	-0.09669	0	0.02561	0.02561	0
cQt8	-0.08171	-0.08171	0	0.02244	0.02244	0

c111221	0.02906	0.02906	0	0.002261	0.002261	0
cpDC	0.0004828	0.0004828	0	$1.023 \cdot 10^{-5}$	$1.023 \cdot 10^{-5}$	0
cpQ3	0.3712	0.3712	0	0.03529	0.03529	0
cpQM	-0.001474	-0.001474	0	$1.624 \cdot 10^{-6}$	$1.624 \cdot 10^{-6}$	0
cpWB	0.0005079	0.0005079	0	$3.127 \cdot 10^{-5}$	$3.127 \cdot 10^{-5}$	0
cpd	$-9.445 \cdot 10^{-5}$	$-9.445 \cdot 10^{-5}$	0	$4.774 \cdot 10^{-6}$	$4.774 \cdot 10^{-6}$	0
cpt	-0.0006223	-0.0006223	0	$2.242 \cdot 10^{-6}$	$2.242 \cdot 10^{-6}$	0
ctG	-0.06081	-0.06081	$2.631 \cdot 10^{-7}$	0.03879	0.03879	$4.898 \cdot 10^{-7}$
ctW	-0.1135	-0.1135	$-8.808 \cdot 10^{-8}$	0.199	0.199	$-5.025 \cdot 10^{-8}$
ctZ	0.02263	0.02263	$-1.105 \cdot 10^{-6}$	0.002802	0.002802	$-2.177 \cdot 10^{-6}$
ctd1	-0.02697	-0.02697	0	0.4651	0.4651	0
ctd8	0.3257	0.3257	0	0.1034	0.1034	0
sm	0	0	0	1.432	1.432	0

## 1.52 $b\bar{b} \rightarrow u\bar{u}$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
c3p11	-0.0005912	-0.0005912	0	$1.792 \cdot 10^{-5}$	$1.792 \cdot 10^{-5}$	0
c3p12	-0.001121	-0.001121	0	$3.397 \cdot 10^{-5}$	$3.397 \cdot 10^{-5}$	0
cQq11	-0.07168	-0.07168	0	0.3506	0.3506	0
cQq13	0.08794	0.08794	0	0.4302	0.4302	0
cQq81	0.2833	0.2833	0	0.0956	0.0956	0
cQq83	-0.2833	-0.2833	0	0.0956	0.0956	0
cQu1	0.003445	0.003445	0	0.1184	0.1184	0
cQu8	0.07797	0.07797	0	0.02631	0.02631	0
c111221	0.0005912	0.0005912	0	$1.792 \cdot 10^{-5}$	$1.792 \cdot 10^{-5}$	0
cpDC	$-5.078 \cdot 10^{-5}$	$-5.078 \cdot 10^{-5}$	0	$5.632 \cdot 10^{-6}$	$5.632 \cdot 10^{-6}$	0
cpQ3	0.0008527	0.0008527	0	$5.127 \cdot 10^{-5}$	$5.127 \cdot 10^{-5}$	0

cpQM	0.0004264	0.0004264	0	$1.282 \cdot 10^{-5}$	$1.282 \cdot 10^{-5}$	0
cpWB	-0.0001547	-0.0001547	0	$3.296 \cdot 10^{-5}$	$3.296 \cdot 10^{-5}$	0
cpd	$-3.886 \cdot 10^{-5}$	$-3.886 \cdot 10^{-5}$	0	$7.936 \cdot 10^{-6}$	$7.936 \cdot 10^{-6}$	0
cpqMi	-0.0005043	-0.0005043	0	$1.785 \cdot 10^{-5}$	$1.785 \cdot 10^{-5}$	0
cpu	$6.042 \cdot 10^{-5}$	$6.042 \cdot 10^{-5}$	0	$8.934 \cdot 10^{-6}$	$8.934 \cdot 10^{-6}$	0
sm	0	0	0	0.5083	0.5083	0

### 1.53 $b\bar{t} \rightarrow e^- \bar{\nu}_e$

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
c3p11	$1.773 \cdot 10^{-19}$	$1.195 \cdot 10^{-19}$	0.3262	$1.043 \cdot 10^{-35}$	$9.291 \cdot 10^{-36}$	0.1089
c3p12	-0.0005506	-0.0005506	0	$1.669 \cdot 10^{-5}$	$1.669 \cdot 10^{-5}$	0
cQ131	0.01864	0.01864	0	0.08809	0.08809	0
c111221	0.0003993	0.0003993	0	$1.21 \cdot 10^{-5}$	$1.21 \cdot 10^{-5}$	0
cpQ3	0.0001195	0.0001195	0	$3.622 \cdot 10^{-6}$	$3.622 \cdot 10^{-6}$	0
ctW	0.002546	0.002546	0	0.004386	0.004386	0
sm	0	0	0	0.0009856	0.0009856	0

### 1.54 $c\bar{c} \rightarrow \mu^+ \mu^-$

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
c3p11	-0.0008066	-0.0008066	0	$2.445 \cdot 10^{-5}$	$2.445 \cdot 10^{-5}$	0
c3p12	-0.0001239	-0.0001239	0	$6.724 \cdot 10^{-6}$	$6.724 \cdot 10^{-6}$	0
c111221	0.0008066	0.0008066	0	$2.445 \cdot 10^{-5}$	$2.445 \cdot 10^{-5}$	0
cpDC	-0.0001692	-0.0001692	0	$1.097 \cdot 10^{-5}$	$1.097 \cdot 10^{-5}$	0
cpWB	-0.0004312	-0.0004312	0	$7.957 \cdot 10^{-5}$	$7.957 \cdot 10^{-5}$	0
cp12	0.0004282	0.0004282	0	$1.064 \cdot 10^{-5}$	$1.064 \cdot 10^{-5}$	0

cpmu	-0.0001428	-0.0001428	0	$2.184 \cdot 10^{-6}$	$2.184 \cdot 10^{-6}$	0
cpqMi	$4.363 \cdot 10^{-5}$	$4.363 \cdot 10^{-5}$	0	$4.344 \cdot 10^{-6}$	$4.344 \cdot 10^{-6}$	0
cpu	-0.0001048	-0.0001048	0	$5.616 \cdot 10^{-6}$	$5.616 \cdot 10^{-6}$	0
sm	0	0	0	0.0006787	0.0006787	0

### 1.55 $c\bar{s} \rightarrow \tau^+ \nu_\tau$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
c3pl1	-0.0008027	-0.0008027	0	$2.433 \cdot 10^{-5}$	$2.433 \cdot 10^{-5}$	0
c3pl2	-0.0004951	-0.0004951	0	$1.501 \cdot 10^{-5}$	$1.501 \cdot 10^{-5}$	0
c3pl3	0.0008027	0.0008027	0	$2.433 \cdot 10^{-5}$	$2.433 \cdot 10^{-5}$	0
cll1221	0.0008027	0.0008027	0	$2.433 \cdot 10^{-5}$	$2.433 \cdot 10^{-5}$	0
cpq3i	0.00108	0.00108	0	$3.275 \cdot 10^{-5}$	$3.275 \cdot 10^{-5}$	0
sm	0	0	0	0.008911	0.008911	0

### 1.56 $d\bar{d} \rightarrow c\bar{c}$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
c3pl1	-0.000695	-0.000695	0	$2.107 \cdot 10^{-5}$	$2.107 \cdot 10^{-5}$	0
c3pl2	-0.0001303	-0.0001303	0	$3.95 \cdot 10^{-6}$	$3.95 \cdot 10^{-6}$	0
cll1221	0.000695	0.000695	0	$2.107 \cdot 10^{-5}$	$2.107 \cdot 10^{-5}$	0
cpDC	$-4.226 \cdot 10^{-5}$	$-4.226 \cdot 10^{-5}$	0	$3.728 \cdot 10^{-6}$	$3.728 \cdot 10^{-6}$	0
cpWB	$-2.079 \cdot 10^{-5}$	$-2.079 \cdot 10^{-5}$	0	$1.223 \cdot 10^{-5}$	$1.223 \cdot 10^{-5}$	0
cpd	$8.458 \cdot 10^{-6}$	$8.458 \cdot 10^{-6}$	0	$1.361 \cdot 10^{-5}$	$1.361 \cdot 10^{-5}$	0
cpq3i	0.0004073	0.0004073	0	$3.008 \cdot 10^{-5}$	$3.008 \cdot 10^{-5}$	0
cpqMi	$-3.903 \cdot 10^{-6}$	$-3.903 \cdot 10^{-6}$	0	$3.481 \cdot 10^{-6}$	$3.481 \cdot 10^{-6}$	0
cpu	$8.896 \cdot 10^{-5}$	$8.896 \cdot 10^{-5}$	0	$1.921 \cdot 10^{-5}$	$1.921 \cdot 10^{-5}$	0

sm	0	0	0	0.5154	0.5154	0
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### 1.57 $d\bar{d} \rightarrow e^+e^-$

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
c3pl1	$-3.05 \cdot 10^{-5}$	$-3.05 \cdot 10^{-5}$	0	$1.755 \cdot 10^{-6}$	$1.755 \cdot 10^{-6}$	0
c3pl2	-0.0002604	-0.0002604	0	$7.894 \cdot 10^{-6}$	$7.894 \cdot 10^{-6}$	0
cll1221	$4.933 \cdot 10^{-5}$	$4.933 \cdot 10^{-5}$	0	$1.495 \cdot 10^{-6}$	$1.495 \cdot 10^{-6}$	0
cpDC	$-3.701 \cdot 10^{-5}$	$-3.701 \cdot 10^{-5}$	0	$4.31 \cdot 10^{-6}$	$4.31 \cdot 10^{-6}$	0
cpWB	-0.0001595	-0.0001595	0	$1.835 \cdot 10^{-5}$	$1.835 \cdot 10^{-5}$	0
cpd	$-1.931 \cdot 10^{-5}$	$-1.931 \cdot 10^{-5}$	0	$2.899 \cdot 10^{-6}$	$2.899 \cdot 10^{-6}$	0
cpe	$-3.264 \cdot 10^{-5}$	$-3.264 \cdot 10^{-5}$	0	$3.693 \cdot 10^{-6}$	$3.693 \cdot 10^{-6}$	0
cp11	0.0002631	0.0002631	0	$9.875 \cdot 10^{-6}$	$9.875 \cdot 10^{-6}$	0
cpq3i	0.0001892	0.0001892	0	$1.209 \cdot 10^{-5}$	$1.209 \cdot 10^{-5}$	0
cpqMi	$9.461 \cdot 10^{-5}$	$9.461 \cdot 10^{-5}$	0	$3.023 \cdot 10^{-6}$	$3.023 \cdot 10^{-6}$	0
sm	0	0	0	0.001122	0.001122	0

### 1.58 $d\bar{d} \rightarrow s\bar{s}$

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
c3pl1	-0.0003642	-0.0003642	0	$1.104 \cdot 10^{-5}$	$1.104 \cdot 10^{-5}$	0
c3pl2	-0.000296	-0.000296	0	$8.973 \cdot 10^{-6}$	$8.973 \cdot 10^{-6}$	0
cll1221	0.0003642	0.0003642	0	$1.104 \cdot 10^{-5}$	$1.104 \cdot 10^{-5}$	0
cpDC	$-2.328 \cdot 10^{-5}$	$-2.328 \cdot 10^{-5}$	0	$1.323 \cdot 10^{-6}$	$1.323 \cdot 10^{-6}$	0
cpWB	$5.833 \cdot 10^{-5}$	$5.833 \cdot 10^{-5}$	0	$2.809 \cdot 10^{-6}$	$2.809 \cdot 10^{-6}$	0
cpd	-0.0001438	-0.0001438	0	$6.91 \cdot 10^{-5}$	$6.91 \cdot 10^{-5}$	0
cpq3i	0.0002331	0.0002331	0	$3.277 \cdot 10^{-5}$	$3.277 \cdot 10^{-5}$	0

cpqMi	0.0001166	0.0001166	0	$8.193 \cdot 10^{-6}$	$8.193 \cdot 10^{-6}$	0
sm	0	0	0	0.6997	0.6997	0

### 1.59 $e^+\nu_\mu \rightarrow e^+\nu_\mu$

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
c3pl1	-0.002199	-0.002199	0	0.003647	0.003647	0
c3pl2	$4.052 \cdot 10^{-19}$	$1.143 \cdot 10^{-18}$	-1.822	$6.019 \cdot 10^{-36}$	$7.147 \cdot 10^{-36}$	-0.1875
cll1122	0.6154	0	1	2.219	0	1
cll1221	0.1368	0.1368	0	0.004147	0.004147	0
cpDC	-0.01735	-0.01735	0	0.002101	0.002101	0
cpWB	-0.004781	-0.004781	0	0.00111	0.00111	0
cpe	-0.02781	-0.02781	0	0.001803	0.001803	0
cpl1	0.009711	0.009711	0	0.0005527	0.0005527	0
cpl2	-0.1368	-0.1368	0	0.004147	0.004147	0
sm	0	0	0	0.1991	0.1991	0

### 1.60 $e^+\nu_e \rightarrow \mu^+\nu_\mu$

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
c3pl1	$6.249 \cdot 10^{-22}$	$-1.6 \cdot 10^{-21}$	3.561	$2.939 \cdot 10^{-39}$	$3.673 \cdot 10^{-39}$	-0.25
c3pl2	$4.36 \cdot 10^{-19}$	$3.142 \cdot 10^{-19}$	0.2793	$3.115 \cdot 10^{-36}$	$1.693 \cdot 10^{-36}$	0.4566
cll1221	0.003317	$2.113 \cdot 10^{-5}$	0.9936	0.01578	$6.406 \cdot 10^{-7}$	1
sm	0	0	0	0.03709	0.03709	0

### 1.61 $e^+\nu_e \rightarrow e^+\nu_e$



	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
c3pl1	0.0005073	0.0005073	0	$1.939 \cdot 10^{-5}$	$1.939 \cdot 10^{-5}$	0
c3pl2	-0.0009694	-0.0009694	0	$2.939 \cdot 10^{-5}$	$2.939 \cdot 10^{-5}$	0
cll1111	<b>0.198</b>	<b>0</b>	<b>1</b>	<b>0.6012</b>	<b>0</b>	<b>1</b>
cll1221	0.001149	0.001149	0	$3.483 \cdot 10^{-5}$	$3.483 \cdot 10^{-5}$	0
cpDC	-0.002105	-0.002105	0	0.0001863	0.0001863	0
cpWB	-0.001128	-0.001128	0	$7.066 \cdot 10^{-5}$	$7.066 \cdot 10^{-5}$	0
cpe	-0.002768	-0.002768	0	0.0001795	0.0001795	0
cp11	-0.0006229	-0.0006229	0	$2.155 \cdot 10^{-5}$	$2.155 \cdot 10^{-5}$	0
sm	0	0	0	0.02697	0.02697	0

## 1.62 $e^+\tau^- \rightarrow e^+\tau^-$

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
c3pl1	-0.001938	-0.001938	0	$9.612 \cdot 10^{-5}$	$9.612 \cdot 10^{-5}$	0
c3pl2	-0.002794	-0.002794	0	$8.47 \cdot 10^{-5}$	$8.47 \cdot 10^{-5}$	0
c3pl3	-0.000607	-0.000607	0	$1.896 \cdot 10^{-5}$	$1.896 \cdot 10^{-5}$	0
cll11133	<b>-0.007297</b>	<b>0</b>	<b>1</b>	<b>0.04752</b>	<b>0</b>	<b>1</b>
cll1221	0.001331	0.001331	0	$4.036 \cdot 10^{-5}$	$4.036 \cdot 10^{-5}$	0
cll1331	<b>-0.1649</b>	<b>0</b>	<b>1</b>	<b>0.7017</b>	<b>0</b>	<b>1</b>
cpDC	-0.009172	-0.009172	0	0.0005627	0.0005627	0
cpWB	-0.01298	-0.01298	0	0.001978	0.001978	0
cpe	0.001161	0.001161	0	$6.407 \cdot 10^{-5}$	$6.407 \cdot 10^{-5}$	0
cp11	-0.0007888	-0.0007888	0	$3.322 \cdot 10^{-5}$	$3.322 \cdot 10^{-5}$	0
cp13	-0.000607	-0.000607	0	$1.896 \cdot 10^{-5}$	$1.896 \cdot 10^{-5}$	0
cp1a	0.0009666	0.0009666	0	$4.134 \cdot 10^{-5}$	$4.134 \cdot 10^{-5}$	0
sm	0	0	0	0.04288	0.04288	0

### 1.63 $e^+e^- \rightarrow \mu^+\mu^-$

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
c3pl1	-0.002245	-0.002245	0	$5.628 \cdot 10^{-5}$	$5.628 \cdot 10^{-5}$	0
c3pl2	-0.001109	-0.001109	0	$3.787 \cdot 10^{-5}$	$3.787 \cdot 10^{-5}$	0
cll1122	0.1268	0	1	0.9224	0	1
cll1221	0.3999	0.00312	0.9922	2.91	$9.457 \cdot 10^{-5}$	1
cpDC	-0.004994	-0.004994	0	0.0002723	0.0002723	0
cpWB	-0.004016	-0.004016	0	0.0004695	0.0004695	0
cpe	-0.0009266	-0.0009266	0	$1.418 \cdot 10^{-5}$	$1.418 \cdot 10^{-5}$	0
cp11	0.000148	0.000148	0	$8.749 \cdot 10^{-6}$	$8.749 \cdot 10^{-6}$	0
cp12	0.0008746	0.0008746	0	$1.474 \cdot 10^{-5}$	$1.474 \cdot 10^{-5}$	0
cpmu	-0.0007136	-0.0007136	0	$1.153 \cdot 10^{-5}$	$1.153 \cdot 10^{-5}$	0
sm	0	0	0	0.03263	0.03263	0

### 1.64 $e^+e^- \rightarrow e^+e^-$

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
c3pl1	-0.1192	-0.1192	0	0.005909	0.005909	0
c3pl2	-0.009012	-0.009012	0	0.0002732	0.0002732	0
cll1111	-1.993	0	1	9.261	0	1
cll1221	0.1253	0.1253	0	0.003799	0.003799	0
cpDC	-0.06949	-0.06949	0	0.004124	0.004124	0
cpWB	-0.04051	-0.04051	0	0.006049	0.006049	0
cpe	0.008586	0.008586	0	0.0009639	0.0009639	0
cp11	-0.004347	-0.004347	0	0.000225	0.000225	0
sm	0	0	0	0.3507	0.3507	0

### 1.65 $gg \rightarrow gg$

interference				square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
cG	$2.276 \cdot 10^{-9}$	0	1	147.9	0	1
sm	0	0	0	100.7	100.7	0

### 1.66 $gg \rightarrow ggg$

interference				square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
cG	0.0001379	0	1	0.3664	0	1
sm	0	0	0	0.136	0.136	0

### 1.67 $gg \rightarrow t\bar{t}$

interference				square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
cG	0.06921	0	1	3.004	0	1
cpG	-0.04838	-0.04838	0	0.04035	0.04035	0
ctG	0.2349	0.2349	$2.129 \cdot 10^{-7}$	0.1388	0.1388	$5.043 \cdot 10^{-7}$
sm	0	0	0	0.6814	0.6814	0

### 1.68 $gg \rightarrow u\bar{u}$

interference				square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
cG	$3.116 \cdot 10^{-11}$	0	1	2.033	0	1

sm	0	0	0	1.337	1.337	0
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### 1.69 $s\bar{s} \rightarrow \nu_\tau \bar{\nu}_\tau$

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
c3p11	-0.0003597	-0.0003597	0	$1.09 \cdot 10^{-5}$	$1.09 \cdot 10^{-5}$	0
c3p12	-0.0003083	-0.0003083	0	$9.345 \cdot 10^{-6}$	$9.345 \cdot 10^{-6}$	0
c3p13	0.0003597	0.0003597	0	$1.09 \cdot 10^{-5}$	$1.09 \cdot 10^{-5}$	0
c111221	0.0003597	0.0003597	0	$1.09 \cdot 10^{-5}$	$1.09 \cdot 10^{-5}$	0
cpDC	$-2.948 \cdot 10^{-5}$	$-2.948 \cdot 10^{-5}$	0	$1.328 \cdot 10^{-6}$	$1.328 \cdot 10^{-6}$	0
cpWB	0.0001004	0.0001004	0	$1.159 \cdot 10^{-6}$	$1.159 \cdot 10^{-6}$	0
cpd	$-5.87 \cdot 10^{-5}$	$-5.87 \cdot 10^{-5}$	0	$1.142 \cdot 10^{-5}$	$1.142 \cdot 10^{-5}$	0
cp13	-0.0003597	-0.0003597	0	$1.09 \cdot 10^{-5}$	$1.09 \cdot 10^{-5}$	0
cpq3i	0.000119	0.000119	0	$8.544 \cdot 10^{-6}$	$8.544 \cdot 10^{-6}$	0
cpqMi	$5.949 \cdot 10^{-5}$	$5.949 \cdot 10^{-5}$	0	$2.136 \cdot 10^{-6}$	$2.136 \cdot 10^{-6}$	0
sm	0	0	0	0.0004896	0.0004896	0

### 1.70 $s\bar{s} \rightarrow s\bar{s}$

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
c3p11	0.005538	0.005538	0	$2.444 \cdot 10^{-5}$	$2.444 \cdot 10^{-5}$	0
c3p12	0.01007	0.01007	0	$5.166 \cdot 10^{-5}$	$5.166 \cdot 10^{-5}$	0
c111221	-0.005538	-0.005538	0	$2.444 \cdot 10^{-5}$	$2.444 \cdot 10^{-5}$	0
cpDC	0.01167	0.01167	0	$4.977 \cdot 10^{-5}$	$4.977 \cdot 10^{-5}$	0
cpWB	0.00288	0.00288	0	$2.018 \cdot 10^{-5}$	$2.018 \cdot 10^{-5}$	0
cpd	0.01134	0.01134	0	0.001469	0.001469	0
cpq3i	-0.1139	-0.1139	0	0.005796	0.005796	0

cpqMi	-0.05697	-0.05697	0	0.001449	0.001449	0
sm	0	0	0	24.61	24.61	0

### 1.71 $t\bar{t} \rightarrow \nu_\mu \bar{\nu}_\mu$

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
c3p11	-0.0003263	-0.0003263	0	$9.892 \cdot 10^{-6}$	$9.892 \cdot 10^{-6}$	0
c3p12	$-1.314 \cdot 10^{-20}$	$-3.236 \cdot 10^{-21}$	0.7538	$2.767 \cdot 10^{-36}$	$1.025 \cdot 10^{-36}$	0.6297
cQ132	0.1146	0.1146	0	1.222	1.222	0
cQ1M2	0.001194	0.001194	0	0.01073	0.01073	0
c111221	0.0003263	0.0003263	0	$9.892 \cdot 10^{-6}$	$9.892 \cdot 10^{-6}$	0
cpDC	-0.0001323	-0.0001323	0	$9.386 \cdot 10^{-6}$	$9.386 \cdot 10^{-6}$	0
cpQM	$2.968 \cdot 10^{-6}$	$2.968 \cdot 10^{-6}$	0	$1.831 \cdot 10^{-7}$	$1.831 \cdot 10^{-7}$	0
cpWB	$-8.371 \cdot 10^{-5}$	$-8.371 \cdot 10^{-5}$	0	$6.074 \cdot 10^{-6}$	$6.074 \cdot 10^{-6}$	0
cp12	-0.0003263	-0.0003263	0	$9.892 \cdot 10^{-6}$	$9.892 \cdot 10^{-6}$	0
cpt	0.0001584	0.0001584	0	$1.694 \cdot 10^{-5}$	$1.694 \cdot 10^{-5}$	0
ctW	$3.171 \cdot 10^{-9}$	0	1	$1.625 \cdot 10^{-15}$	0	1
ctZ	-0.0005832	-0.0005832	$-1.097 \cdot 10^{-6}$	0.002053	0.002053	$-2.192 \cdot 10^{-6}$
ctl2	-0.01889	-0.01889	0	0.2409	0.2409	0
sm	0	0	0	0.0004911	0.0004911	0

### 1.72 $t\bar{t} \rightarrow \tau^+ \tau^-$

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
c3p11	-0.0003402	-0.0003402	0	$1.031 \cdot 10^{-5}$	$1.031 \cdot 10^{-5}$	0
c3p12	-0.0002549	-0.0002549	0	$7.726 \cdot 10^{-6}$	$7.726 \cdot 10^{-6}$	0
c3p13	0.0001488	0.0001488	0	$4.17 \cdot 10^{-6}$	$4.17 \cdot 10^{-6}$	0

cQe3	-0.003054	-0.003054	0	0.03251	0.03251	0
cQlM3	-0.02049	-0.02049	0	0.08453	0.08453	0
cll1221	0.0003402	0.0003402	0	$1.031 \cdot 10^{-5}$	$1.031 \cdot 10^{-5}$	0
cpDC	-0.0004224	-0.0004224	0	$2.352 \cdot 10^{-5}$	$2.352 \cdot 10^{-5}$	0
cpQM	-0.0001698	-0.0001698	0	$3.92 \cdot 10^{-6}$	$3.92 \cdot 10^{-6}$	0
cpWB	-0.0006308	-0.0006308	0	$7.119 \cdot 10^{-5}$	$7.119 \cdot 10^{-5}$	0
cpl3	0.0001488	0.0001488	0	$4.17 \cdot 10^{-6}$	$4.17 \cdot 10^{-6}$	0
cpt	$1.309 \cdot 10^{-5}$	$1.309 \cdot 10^{-5}$	0	$3.138 \cdot 10^{-6}$	$3.138 \cdot 10^{-6}$	0
cpta	$-6.805 \cdot 10^{-6}$	$-6.805 \cdot 10^{-6}$	0	$3.352 \cdot 10^{-6}$	$3.352 \cdot 10^{-6}$	0
ctW	0.007716	0.007716	$-9.721 \cdot 10^{-7}$	0.01948	0.01948	$-2.054 \cdot 10^{-6}$
ctZ	-0.005593	-0.005593	$-1.109 \cdot 10^{-6}$	0.01635	0.01635	$-2.141 \cdot 10^{-6}$
cte3	-0.01489	-0.01489	0	0.08453	0.08453	0
ctl3	-0.007421	-0.007421	0	0.06027	0.06027	0
ctlS3	0	0	0	0.1668	0	1
ctlT3	0	0	0	0.5951	0.5951	0
sm	0	0	0	0.00378	0.00378	0

### 1.73 $t\bar{t} \rightarrow c\bar{c}$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
c3pl1	-0.0001454	-0.0001454	0	$4.409 \cdot 10^{-6}$	$4.409 \cdot 10^{-6}$	0
c3pl2	-0.0002266	-0.0002266	0	$6.869 \cdot 10^{-6}$	$6.869 \cdot 10^{-6}$	0
cQq11	0.09157	0.09157	0	0.4154	0.4154	0
cQq13	0.01251	0.01251	0	0.05347	0.05347	0
cQq81	0.05469	0.05469	0	0.01188	0.01188	0
cQq83	0.05469	0.05469	0	0.01188	0.01188	0
cQu1	0.02122	0.02122	0	0.6374	0.6374	0
cQu8	0.4392	0.4392	0	0.1416	0.1416	0

c111221	0.0001454	0.0001454	0	$4.409 \cdot 10^{-6}$	$4.409 \cdot 10^{-6}$	0
cpDC	-0.0004305	-0.0004305	0	$2.477 \cdot 10^{-5}$	$2.477 \cdot 10^{-5}$	0
cpQM	-0.0005089	-0.0005089	0	$1.485 \cdot 10^{-5}$	$1.485 \cdot 10^{-5}$	0
cpWB	-0.0005234	-0.0005234	0	$8.577 \cdot 10^{-5}$	$8.577 \cdot 10^{-5}$	0
cpqMi	-0.0005008	-0.0005008	0	$1.396 \cdot 10^{-5}$	$1.396 \cdot 10^{-5}$	0
cpt	$-8.694 \cdot 10^{-5}$	$-8.694 \cdot 10^{-5}$	0	$1.758 \cdot 10^{-5}$	$1.758 \cdot 10^{-5}$	0
cpu	$8.265 \cdot 10^{-5}$	$8.265 \cdot 10^{-5}$	0	$6.883 \cdot 10^{-6}$	$6.883 \cdot 10^{-6}$	0
ctG	0.2406	0.2406	$2.493 \cdot 10^{-7}$	0.06571	0.06571	$5.022 \cdot 10^{-7}$
ctW	0.006297	0.006297	$-7.623 \cdot 10^{-7}$	0.01941	0.01941	$-1.752 \cdot 10^{-6}$
ctZ	-0.004629	-0.004629	$-1.102 \cdot 10^{-6}$	0.01609	0.01609	$-2.175 \cdot 10^{-6}$
ctq1	0.02431	0.02431	0	0.6374	0.6374	0
ctq8	0.3532	0.3532	0	0.1126	0.1126	0
ctu1	0.04827	0.04827	0	0.4154	0.4154	0
ctu8	0.05469	0.05469	0	0.01188	0.01188	0
sm	0	0	0	0.6142	0.6142	0

#### 1.74 $t\bar{t} \rightarrow d\bar{d}$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
c3pl1	$-5.27 \cdot 10^{-5}$	$-5.27 \cdot 10^{-5}$	0	$1.597 \cdot 10^{-6}$	$1.597 \cdot 10^{-6}$	0
c3pl2	-0.0008564	-0.0008564	0	$2.596 \cdot 10^{-5}$	$2.596 \cdot 10^{-5}$	0
cQd1	-0.01209	-0.01209	0	0.7426	0.7426	0
cQd8	0.03884	0.03884	0	0.006535	0.006535	0
cQq11	-0.1497	-0.1497	0	0.7363	0.7363	0
cQq13	0.004897	0.004897	0	0.02816	0.02816	0
cQq81	0.03803	0.03803	0	0.006259	0.006259	0
cQq83	-0.03803	-0.03803	0	0.006259	0.006259	0
c111221	$5.27 \cdot 10^{-5}$	$5.27 \cdot 10^{-5}$	0	$1.597 \cdot 10^{-6}$	$1.597 \cdot 10^{-6}$	0

cpDC	$-7.715 \cdot 10^{-5}$	$-7.715 \cdot 10^{-5}$	0	$1.068 \cdot 10^{-5}$	$1.068 \cdot 10^{-5}$	0
cpQM	-0.001057	-0.001057	0	$3.694 \cdot 10^{-5}$	$3.694 \cdot 10^{-5}$	0
cpWB	-0.000139	-0.000139	0	$2.763 \cdot 10^{-5}$	$2.763 \cdot 10^{-5}$	0
cpd	$-9.88 \cdot 10^{-5}$	$-9.88 \cdot 10^{-5}$	0	$5.114 \cdot 10^{-6}$	$5.114 \cdot 10^{-6}$	0
cpq3i	0.001701	0.001701	0	$9.537 \cdot 10^{-5}$	$9.537 \cdot 10^{-5}$	0
cpqMi	0.0008503	0.0008503	0	$2.384 \cdot 10^{-5}$	$2.384 \cdot 10^{-5}$	0
cpt	$1.622 \cdot 10^{-5}$	$1.622 \cdot 10^{-5}$	0	$3.827 \cdot 10^{-6}$	$3.827 \cdot 10^{-6}$	0
ctG	0.2406	0.2406	$2.493 \cdot 10^{-7}$	0.04181	0.04181	$5.023 \cdot 10^{-7}$
ctW	0.0007994	0.0007994	$-7.631 \cdot 10^{-7}$	0.003947	0.003947	$-6.841 \cdot 10^{-7}$
ctZ	0.0009097	0.0009097	$-1.099 \cdot 10^{-6}$	0.004035	0.004035	$-2.181 \cdot 10^{-6}$
ctd1	-0.002022	-0.002022	0	0.02816	0.02816	0
ctd8	0.03803	0.03803	0	0.006259	0.006259	0
ctq1	0.01556	0.01556	0	0.7426	0.7426	0
ctq8	0.05559	0.05559	0	0.01219	0.01219	0
sm	0	0	0	0.813	0.813	0

### 1.75 $t\bar{t} \rightarrow s\bar{s}$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
c3p11	-0.0002375	-0.0002375	0	$7.2 \cdot 10^{-6}$	$7.2 \cdot 10^{-6}$	0
c3p12	-0.0004126	-0.0004126	0	$1.251 \cdot 10^{-5}$	$1.251 \cdot 10^{-5}$	0
cQd1	-0.006983	-0.006983	0	0.3781	0.3781	0
cQd8	0.5503	0.5503	0	0.1791	0.1791	0
cQq11	-0.002688	-0.002688	0	0.01736	0.01736	0
cQq13	0.03429	0.03429	0	0.1719	0.1719	0
cQq81	0.1327	0.1327	0	0.03821	0.03821	0
cQq83	-0.1327	-0.1327	0	0.03821	0.03821	0
c111221	0.0002375	0.0002375	0	$7.2 \cdot 10^{-6}$	$7.2 \cdot 10^{-6}$	0



cpDC	$-4.851 \cdot 10^{-5}$	$-4.851 \cdot 10^{-5}$	0	$4.023 \cdot 10^{-6}$	$4.023 \cdot 10^{-6}$	0
cpQM	$-2.076 \cdot 10^{-6}$	$-2.076 \cdot 10^{-6}$	0	$2.245 \cdot 10^{-6}$	$2.245 \cdot 10^{-6}$	0
cpWB	$-7.868 \cdot 10^{-5}$	$-7.868 \cdot 10^{-5}$	0	$1.754 \cdot 10^{-5}$	$1.754 \cdot 10^{-5}$	0
cpd	$7.122 \cdot 10^{-5}$	$7.122 \cdot 10^{-5}$	0	$2.608 \cdot 10^{-5}$	$2.608 \cdot 10^{-5}$	0
cpq3i	0.000122	0.000122	0	$2.075 \cdot 10^{-5}$	$2.075 \cdot 10^{-5}$	0
cpqMi	$6.1 \cdot 10^{-5}$	$6.1 \cdot 10^{-5}$	0	$5.189 \cdot 10^{-6}$	$5.189 \cdot 10^{-6}$	0
cpt	$2.755 \cdot 10^{-5}$	$2.755 \cdot 10^{-5}$	0	$1.199 \cdot 10^{-5}$	$1.199 \cdot 10^{-5}$	0
ctG	0.2406	0.2406	$2.493 \cdot 10^{-7}$	0.03498	0.03498	$4.859 \cdot 10^{-7}$
ctW	0.002567	0.002567	0	0.006447	0.006447	$-6.825 \cdot 10^{-7}$
ctZ	0.0003599	0.0003599	$-1.084 \cdot 10^{-6}$	0.005483	0.005483	$-2.189 \cdot 10^{-6}$
ctd1	-0.01023	-0.01023	0	0.1719	0.1719	0
ctd8	0.1327	0.1327	0	0.03821	0.03821	0
ctq1	0.004955	0.004955	0	0.3781	0.3781	0
ctq8	0.1703	0.1703	0	0.0509	0.0509	0
sm	0	0	0	0.8614	0.8614	0

## 1.76 $t\bar{t} \rightarrow t\bar{t}$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
c3p11	0.04278	0.04278	0	0.003444	0.003444	0
c3p12	0.04257	0.04257	0	0.003441	0.003441	0
cQQ1	0.005443	0.005443	0	0.03321	0.03321	0
cQQ8	-0.8404	-0.8404	0	0.4481	0.4481	0
cQt1	-0.3902	-0.3902	0	8.132	8.132	0
cQt8	-0.1091	-0.1091	0	3.039	3.039	0
cdp	-0.04156	-0.04156	0	0.008194	0.008194	0
c111221	-0.04278	-0.04278	0	0.003444	0.003444	0
cpDC	0.09131	0.09131	0	0.001097	0.001097	0

cpQM	0.1617	0.1617	0	0.009126	0.009126	0
cpWB	0.00937	0.00937	0	0.0002451	0.0002451	0
cpt	-0.03476	-0.03476	0	0.008753	0.008753	0
ctG	0.3419	0.3419	$2.632 \cdot 10^{-7}$	1.573	1.573	$5.085 \cdot 10^{-7}$
ctW	-0.053	-0.053	$-8.49 \cdot 10^{-7}$	0.1076	0.1076	$-1.766 \cdot 10^{-6}$
ctZ	0.03661	0.03661	$-1.12 \cdot 10^{-6}$	0.04344	0.04344	$-2.21 \cdot 10^{-6}$
ctp	0.1303	0.1303	0	0.008999	0.008999	0
ctt1	0.01101	0.01101	0	0.1328	0.1328	0
sm	0	0	0	9.011	9.011	0

### 1.77 $u\bar{d} \rightarrow \mu^+ \nu_\mu$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
c3pl1	-0.0008037	-0.0008037	0	$2.436 \cdot 10^{-5}$	$2.436 \cdot 10^{-5}$	0
c3pl2	$9.063 \cdot 10^{-24}$	$-6.152 \cdot 10^{-21}$	679.8	$1.531 \cdot 10^{-41}$	$1.567 \cdot 10^{-38}$	-1023
c1l1221	0.0008037	0.0008037	0	$2.436 \cdot 10^{-5}$	$2.436 \cdot 10^{-5}$	0
cpq3i	0.0003078	0.0003078	0	$9.331 \cdot 10^{-6}$	$9.331 \cdot 10^{-6}$	0
sm	0	0	0	0.002539	0.002539	0

### 1.78 $u\bar{d} \rightarrow c\bar{s}$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
c3pl1	-0.0005098	-0.0005098	0	$1.545 \cdot 10^{-5}$	$1.545 \cdot 10^{-5}$	0
c3pl2	-0.001323	-0.001323	0	$4.01 \cdot 10^{-5}$	$4.01 \cdot 10^{-5}$	0
c1l1221	0.0005098	0.0005098	0	$1.545 \cdot 10^{-5}$	$1.545 \cdot 10^{-5}$	0
cpq3i	0.0003889	0.0003889	0	$2.358 \cdot 10^{-5}$	$2.358 \cdot 10^{-5}$	0
sm	0	0	0	0.001604	0.001604	0

### 1.79 $u\bar{d} \rightarrow u\bar{d}$

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
c3pl1	-6.933	-6.933	0	0.2752	0.2752	0
c3pl2	0.01236	0.01236	0	0.0003066	0.0003066	0
cll1221	6.933	6.933	0	0.2752	0.2752	0
cpDC	-0.0001104	-0.0001104	0	$7.88 \cdot 10^{-6}$	$7.88 \cdot 10^{-6}$	0
cpWB	-0.0009041	-0.0009041	0	0.0003189	0.0003189	0
cpd	0.0001238	0.0001238	0	$5.319 \cdot 10^{-5}$	$5.319 \cdot 10^{-5}$	0
cpq3i	-0.0009443	-0.0009443	0	$9.7 \cdot 10^{-5}$	$9.7 \cdot 10^{-5}$	0
cpqMi	0.0001158	0.0001158	0	$1.362 \cdot 10^{-5}$	$1.362 \cdot 10^{-5}$	0
cpu	0.000322	0.000322	0	$7.933 \cdot 10^{-5}$	$7.933 \cdot 10^{-5}$	0
sm	0	0	0	1.666	1.666	0

### 1.80 $u\bar{u} \rightarrow \nu_e \bar{\nu}_e$

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
c3pl1	$2.953 \cdot 10^{-22}$	$5.935 \cdot 10^{-21}$	-19.1	$6.338 \cdot 10^{-39}$	$1.573 \cdot 10^{-38}$	-1.483
c3pl2	$-6.775 \cdot 10^{-5}$	$-6.775 \cdot 10^{-5}$	0	$2.054 \cdot 10^{-6}$	$2.054 \cdot 10^{-6}$	0
cll1221	$7.021 \cdot 10^{-5}$	$7.021 \cdot 10^{-5}$	0	$2.128 \cdot 10^{-6}$	$2.128 \cdot 10^{-6}$	0
cpDC	-0.0001434	-0.0001434	0	$9.317 \cdot 10^{-6}$	$9.317 \cdot 10^{-6}$	0
cpWB	$-4.649 \cdot 10^{-5}$	$-4.649 \cdot 10^{-5}$	0	$4.445 \cdot 10^{-6}$	$4.445 \cdot 10^{-6}$	0
cp11	$-6.775 \cdot 10^{-5}$	$-6.775 \cdot 10^{-5}$	0	$2.054 \cdot 10^{-6}$	$2.054 \cdot 10^{-6}$	0
cpqMi	$-1.57 \cdot 10^{-6}$	$-1.57 \cdot 10^{-6}$	0	$6.914 \cdot 10^{-8}$	$6.914 \cdot 10^{-8}$	0
cpu	0.0002154	0.0002154	0	$2.096 \cdot 10^{-5}$	$2.096 \cdot 10^{-5}$	0
sm	0	0	0	0.0005626	0.0005626	0

### 1.81 $u\bar{u} \rightarrow c\bar{c}$

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
c3pl1	-0.0003128	-0.0003128	0	$9.483 \cdot 10^{-6}$	$9.483 \cdot 10^{-6}$	0
c3pl2	-0.000798	-0.000798	0	$2.419 \cdot 10^{-5}$	$2.419 \cdot 10^{-5}$	0
c111221	0.0003128	0.0003128	0	$9.483 \cdot 10^{-6}$	$9.483 \cdot 10^{-6}$	0
cpDC	-0.0005692	-0.0005692	0	$3.343 \cdot 10^{-5}$	$3.343 \cdot 10^{-5}$	0
cpWB	-0.0009566	-0.0009566	0	$8.611 \cdot 10^{-5}$	$8.611 \cdot 10^{-5}$	0
cpqMi	-0.001504	-0.001504	0	$8.06 \cdot 10^{-5}$	$8.06 \cdot 10^{-5}$	0
cpu	0.0003413	0.0003413	0	$1.976 \cdot 10^{-5}$	$1.976 \cdot 10^{-5}$	0
sm	0	0	0	0.6437	0.6437	0

### 1.82 $u\bar{u} \rightarrow u\bar{u}$

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
c3pl1	0.03783	0.03783	0	0.0003419	0.0003419	0
c3pl2	0.03949	0.03949	0	0.0003704	0.0003704	0
c111221	-0.03783	-0.03783	0	0.0003419	0.0003419	0
cpDC	0.001613	0.001613	0	$2.422 \cdot 10^{-5}$	$2.422 \cdot 10^{-5}$	0
cpWB	0.0609	0.0609	0	0.002772	0.002772	0
cpqMi	0.002928	0.002928	0	$4.967 \cdot 10^{-5}$	$4.967 \cdot 10^{-5}$	0
cpu	-0.002025	-0.002025	0	0.0001586	0.0001586	0
sm	0	0	0	2.56	2.56	0

### 1.83 $zz \rightarrow W^+W^-$

interference

square

	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
c3p11	-9.119	-9.119	0	0.2764	0.2764	0
c3p12	-3.905	-3.905	0	0.1184	0.1184	0
cWWW	0.1243	0.1243	0	14.82	14.82	0
cdp	7.133	7.133	0	0.4473	0.4473	0
cl11221	9.119	9.119	0	0.2764	0.2764	0
cpBB	-0.02347	-0.02347	0	0.04883	0.04883	0
cpDC	1.397	1.397	0	0.0221	0.0221	0
cpW	-0.3635	-0.3635	0	1.42	1.42	0
cpWB	0.2166	0.2166	0	0.1816	0.1816	0
sm	0	0	0	52.47	52.47	0

#### 1.84 $zz \rightarrow zz$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
c3p11	-0.008561	-0.008561	0	0.0002595	0.0002595	0
c3p12	-0.009874	-0.009874	0	0.0002993	0.0002993	0
cdp	0.01712	0.01712	0	0.001038	0.001038	0
cl11221	0.008561	0.008561	0	0.0002595	0.0002595	0
cpBB	0.001833	0.001833	0	0.07348	0.07348	0
cpDC	0.004939	0.004939	0	$7.486 \cdot 10^{-5}$	$7.486 \cdot 10^{-5}$	0
cpW	0.006009	0.006009	0	0.7956	0.7956	0
cpWB	0.003318	0.003318	0	0.2426	0.2426	0
sm	0	0	0	0.08147	0.08147	0

## 2 By parameter point

### 2.1 c3pl1

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$HH \rightarrow HH$	-0.02352	-0.02352	0	0.0007129	0.0007129	0
$HH \rightarrow HHH$	$-2.481 \cdot 10^{-7}$	$-2.481 \cdot 10^{-7}$	0	$1.128 \cdot 10^{-8}$	$1.128 \cdot 10^{-8}$	0
$HH \rightarrow Ht\bar{t}$	$-2.661 \cdot 10^{-6}$	$-2.661 \cdot 10^{-6}$	0	$1.21 \cdot 10^{-7}$	$1.21 \cdot 10^{-7}$	0
$HH \rightarrow Hzz$	$-1.483 \cdot 10^{-6}$	$-1.483 \cdot 10^{-6}$	0	$6.742 \cdot 10^{-8}$	$6.742 \cdot 10^{-8}$	0
$HH \rightarrow W^+W^-$	-0.01098	-0.01098	0	0.0003328	0.0003328	0
$HH \rightarrow W^+W^-\gamma$	$-6.444 \cdot 10^{-8}$	$-6.444 \cdot 10^{-8}$	0	$2.93 \cdot 10^{-9}$	$2.93 \cdot 10^{-9}$	0
$HH \rightarrow W^+\bar{t}b$	-0.0001159	-0.0001159	0	$5.269 \cdot 10^{-6}$	$5.269 \cdot 10^{-6}$	0
$HH \rightarrow W^+e^-\bar{\nu}_e$	$1.038 \cdot 10^{-6}$	$1.038 \cdot 10^{-6}$	0	$1.984 \cdot 10^{-6}$	$1.984 \cdot 10^{-6}$	0
$HH \rightarrow W^-u\bar{d}$	$-3.434 \cdot 10^{-8}$	$-3.434 \cdot 10^{-8}$	0	$1.562 \cdot 10^{-9}$	$1.562 \cdot 10^{-9}$	0
$HH \rightarrow z\bar{b}b$	$-1.538 \cdot 10^{-5}$	$-1.538 \cdot 10^{-5}$	0	$6.991 \cdot 10^{-7}$	$6.991 \cdot 10^{-7}$	0
$HH \rightarrow z\nu_e\bar{\nu}_e$	$8.246 \cdot 10^{-7}$	$8.246 \cdot 10^{-7}$	0	$1.104 \cdot 10^{-6}$	$1.104 \cdot 10^{-6}$	0
$HH \rightarrow z\bar{c}c$	$-2.919 \cdot 10^{-8}$	$-2.919 \cdot 10^{-8}$	0	$1.327 \cdot 10^{-9}$	$1.327 \cdot 10^{-9}$	0
$HH \rightarrow z\bar{d}d$	$-1.306 \cdot 10^{-7}$	$-1.306 \cdot 10^{-7}$	0	$5.937 \cdot 10^{-9}$	$5.937 \cdot 10^{-9}$	0
$HH \rightarrow ze^+e^-$	$1.209 \cdot 10^{-6}$	$1.209 \cdot 10^{-6}$	0	$4.751 \cdot 10^{-6}$	$4.751 \cdot 10^{-6}$	0
$HH \rightarrow zt\bar{t}$	$-5.072 \cdot 10^{-6}$	$-5.072 \cdot 10^{-6}$	0	$2.306 \cdot 10^{-7}$	$2.306 \cdot 10^{-7}$	0
$HH \rightarrow zz$	-0.2909	-0.2909	0	0.008817	0.008817	0
$HW^+ \rightarrow \gamma t\bar{b}$	$-7.28 \cdot 10^{-7}$	$-7.28 \cdot 10^{-7}$	0	$3.31 \cdot 10^{-8}$	$3.31 \cdot 10^{-8}$	0
$HW^+ \rightarrow \gamma u\bar{d}$	$-1.887 \cdot 10^{-8}$	$-1.887 \cdot 10^{-8}$	0	$8.578 \cdot 10^{-10}$	$8.578 \cdot 10^{-10}$	0
$HW^+ \rightarrow u\bar{d}$	-0.001511	-0.001511	0	$4.581 \cdot 10^{-5}$	$4.581 \cdot 10^{-5}$	0
$HW^- \rightarrow \bar{t}b$	-0.1642	-0.1642	0	0.004978	0.004978	0
$HW^- \rightarrow \gamma e^-\bar{\nu}_e$	$7.615 \cdot 10^{-8}$	$7.615 \cdot 10^{-8}$	0	$1.78 \cdot 10^{-7}$	$1.78 \cdot 10^{-7}$	0
$HW^- \rightarrow \mu^-\bar{\nu}_\mu$	-0.000772	-0.000772	0	$2.34 \cdot 10^{-5}$	$2.34 \cdot 10^{-5}$	0
$H\gamma \rightarrow t\bar{t}$	-0.04926	-0.04926	0	0.001493	0.001493	0

$H z \rightarrow \mu^+ \mu^-$	-0.0003923	-0.0003923	0	$1.189 \cdot 10^{-5}$	$1.189 \cdot 10^{-5}$	0
$H z \rightarrow \nu_\tau \bar{\nu}_\tau$	-0.0005201	-0.0005201	0	$1.576 \cdot 10^{-5}$	$1.576 \cdot 10^{-5}$	0
$H z \rightarrow b \bar{b}$	-0.0008172	-0.0008172	0	$2.477 \cdot 10^{-5}$	$2.477 \cdot 10^{-5}$	0
$H z \rightarrow s \bar{s}$	-0.0004593	-0.0004593	0	$1.392 \cdot 10^{-5}$	$1.392 \cdot 10^{-5}$	0
$H z \rightarrow t \bar{t}$	-0.2116	-0.2116	0	0.006415	0.006415	0
$H z \rightarrow u \bar{u}$	-0.0009471	-0.0009471	0	$2.871 \cdot 10^{-5}$	$2.871 \cdot 10^{-5}$	0
$W^+ W^- \rightarrow H b \bar{b}$	$-1.882 \cdot 10^{-8}$	$-1.882 \cdot 10^{-8}$	0	$8.556 \cdot 10^{-10}$	$8.556 \cdot 10^{-10}$	0
$W^+ W^- \rightarrow H c \bar{c}$	$-8.387 \cdot 10^{-8}$	$-8.387 \cdot 10^{-8}$	0	$3.813 \cdot 10^{-9}$	$3.813 \cdot 10^{-9}$	0
$W^+ W^- \rightarrow H d \bar{d}$	$-9.127 \cdot 10^{-7}$	$-9.127 \cdot 10^{-7}$	0	$4.15 \cdot 10^{-8}$	$4.15 \cdot 10^{-8}$	0
$W^+ W^- \rightarrow H t \bar{t}$	$-4.16 \cdot 10^{-6}$	$-4.16 \cdot 10^{-6}$	0	$1.892 \cdot 10^{-7}$	$1.892 \cdot 10^{-7}$	0
$W^+ W^- \rightarrow W^+ W^-$	-0.8922	-0.8922	0	0.02704	0.02704	0
$W^+ W^- \rightarrow \gamma \gamma$	-0.01439	-0.01439	0	0.0004361	0.0004361	0
$W^+ W^- \rightarrow \gamma \gamma \gamma$	$-1.342 \cdot 10^{-7}$	$-1.342 \cdot 10^{-7}$	0	$6.104 \cdot 10^{-9}$	$6.104 \cdot 10^{-9}$	0
$\bar{b} t \rightarrow \bar{d} u$	-0.001603	-0.001603	0	$4.859 \cdot 10^{-5}$	$4.859 \cdot 10^{-5}$	0
$\gamma W^+ \rightarrow z W^+$	-6.135	-6.135	0	0.186	0.186	0
$\mu^+ \mu^- \rightarrow \tau^+ \tau^-$	-0.0008057	-0.0008057	0	$2.442 \cdot 10^{-5}$	$2.442 \cdot 10^{-5}$	0
$\nu_\tau \bar{\nu}_\tau \rightarrow \nu_\tau \bar{\nu}_\tau$	-0.04632	-0.04632	0	0.001404	0.001404	0
$\nu_e \bar{\nu}_e \rightarrow \nu_\mu \bar{\nu}_\mu$	0	$-1.105 \cdot 10^{-21}$	$\infty$	0	$3.122 \cdot 10^{-39}$	$\infty$
$b \bar{b} \rightarrow \gamma \gamma$	$-1.337 \cdot 10^{-5}$	$-1.337 \cdot 10^{-5}$	0	$4.052 \cdot 10^{-7}$	$4.052 \cdot 10^{-7}$	0
$b \bar{b} \rightarrow \mu^+ \mu^-$	$-5.691 \cdot 10^{-5}$	$-5.691 \cdot 10^{-5}$	0	$1.725 \cdot 10^{-6}$	$1.725 \cdot 10^{-6}$	0
$b \bar{b} \rightarrow \nu_e \bar{\nu}_e$	$6.61 \cdot 10^{-21}$	$2.588 \cdot 10^{-20}$	-2.915	$1.647 \cdot 10^{-38}$	$7.886 \cdot 10^{-38}$	-3.788
$b \bar{b} \rightarrow b \bar{b}$	0.058	0.058	0	0.00277	0.00277	0
$b \bar{b} \rightarrow d \bar{d}$	-0.0007726	-0.0007726	0	$2.342 \cdot 10^{-5}$	$2.342 \cdot 10^{-5}$	0
$b \bar{b} \rightarrow t \bar{t}$	-0.02906	-0.02906	0	0.002261	0.002261	0
$b \bar{b} \rightarrow u \bar{u}$	-0.0005912	-0.0005912	0	$1.792 \cdot 10^{-5}$	$1.792 \cdot 10^{-5}$	0
$b \bar{t} \rightarrow e^- \bar{\nu}_e$	$1.773 \cdot 10^{-19}$	$1.195 \cdot 10^{-19}$	0.3262	$1.043 \cdot 10^{-35}$	$9.291 \cdot 10^{-36}$	0.1089
$c \bar{c} \rightarrow \mu^+ \mu^-$	-0.0008066	-0.0008066	0	$2.445 \cdot 10^{-5}$	$2.445 \cdot 10^{-5}$	0
$c \bar{s} \rightarrow \tau^+ \nu_\tau$	-0.0008027	-0.0008027	0	$2.433 \cdot 10^{-5}$	$2.433 \cdot 10^{-5}$	0
$d \bar{d} \rightarrow c \bar{c}$	-0.000695	-0.000695	0	$2.107 \cdot 10^{-5}$	$2.107 \cdot 10^{-5}$	0

$d\bar{d} \rightarrow e^+e^-$	$-3.05 \cdot 10^{-5}$	$-3.05 \cdot 10^{-5}$	0	$1.755 \cdot 10^{-6}$	$1.755 \cdot 10^{-6}$	0
$d\bar{d} \rightarrow s\bar{s}$	-0.0003642	-0.0003642	0	$1.104 \cdot 10^{-5}$	$1.104 \cdot 10^{-5}$	0
$e^+\nu_\mu \rightarrow e^+\nu_\mu$	-0.002199	-0.002199	0	0.003647	0.003647	0
$e^+\nu_e \rightarrow \mu^+\nu_\mu$	$6.249 \cdot 10^{-22}$	$-1.6 \cdot 10^{-21}$	3.561	$2.939 \cdot 10^{-39}$	$3.673 \cdot 10^{-39}$	-0.25
$e^+\nu_e \rightarrow e^+\nu_e$	0.0005073	0.0005073	0	$1.939 \cdot 10^{-5}$	$1.939 \cdot 10^{-5}$	0
$e^+\tau^- \rightarrow e^+\tau^-$	-0.001938	-0.001938	0	$9.612 \cdot 10^{-5}$	$9.612 \cdot 10^{-5}$	0
$e^+e^- \rightarrow \mu^+\mu^-$	-0.002245	-0.002245	0	$5.628 \cdot 10^{-5}$	$5.628 \cdot 10^{-5}$	0
$e^+e^- \rightarrow e^+e^-$	-0.1192	-0.1192	0	0.005909	0.005909	0
$s\bar{s} \rightarrow \nu_\tau\bar{\nu}_\tau$	-0.0003597	-0.0003597	0	$1.09 \cdot 10^{-5}$	$1.09 \cdot 10^{-5}$	0
$s\bar{s} \rightarrow s\bar{s}$	0.005538	0.005538	0	$2.444 \cdot 10^{-5}$	$2.444 \cdot 10^{-5}$	0
$t\bar{t} \rightarrow \nu_\mu\bar{\nu}_\mu$	-0.0003263	-0.0003263	0	$9.892 \cdot 10^{-6}$	$9.892 \cdot 10^{-6}$	0
$t\bar{t} \rightarrow \tau^+\tau^-$	-0.0003402	-0.0003402	0	$1.031 \cdot 10^{-5}$	$1.031 \cdot 10^{-5}$	0
$t\bar{t} \rightarrow c\bar{c}$	-0.0001454	-0.0001454	0	$4.409 \cdot 10^{-6}$	$4.409 \cdot 10^{-6}$	0
$t\bar{t} \rightarrow d\bar{d}$	$-5.27 \cdot 10^{-5}$	$-5.27 \cdot 10^{-5}$	0	$1.597 \cdot 10^{-6}$	$1.597 \cdot 10^{-6}$	0
$t\bar{t} \rightarrow s\bar{s}$	-0.0002375	-0.0002375	0	$7.2 \cdot 10^{-6}$	$7.2 \cdot 10^{-6}$	0
$t\bar{t} \rightarrow t\bar{t}$	0.04278	0.04278	0	0.003444	0.003444	0
$u\bar{d} \rightarrow \mu^+\nu_\mu$	-0.0008037	-0.0008037	0	$2.436 \cdot 10^{-5}$	$2.436 \cdot 10^{-5}$	0
$u\bar{d} \rightarrow c\bar{s}$	-0.0005098	-0.0005098	0	$1.545 \cdot 10^{-5}$	$1.545 \cdot 10^{-5}$	0
$u\bar{d} \rightarrow u\bar{d}$	-6.933	-6.933	0	0.2752	0.2752	0
$u\bar{u} \rightarrow \nu_e\bar{\nu}_e$	$2.953 \cdot 10^{-22}$	$5.935 \cdot 10^{-21}$	-19.1	$6.338 \cdot 10^{-39}$	$1.573 \cdot 10^{-38}$	-1.483
$u\bar{u} \rightarrow c\bar{c}$	-0.0003128	-0.0003128	0	$9.483 \cdot 10^{-6}$	$9.483 \cdot 10^{-6}$	0
$u\bar{u} \rightarrow u\bar{u}$	0.03783	0.03783	0	0.0003419	0.0003419	0
$zz \rightarrow W^+W^-$	-9.119	-9.119	0	0.2764	0.2764	0
$zz \rightarrow zz$	-0.008561	-0.008561	0	0.0002595	0.0002595	0

## 2.2 c3pl2

mod1	interference		mod1	square	
	mod2	$1 - \text{mod2}/\text{mod1}$		mod2	$1 - \text{mod2}/\text{mod1}$



$HH \rightarrow HH$	-0.02611	-0.02611	0	0.0007916	0.0007916	0
$HH \rightarrow HHH$	$-3.065 \cdot 10^{-7}$	$-3.065 \cdot 10^{-7}$	0	$1.393 \cdot 10^{-8}$	$1.393 \cdot 10^{-8}$	0
$HH \rightarrow Ht\bar{t}$	$-3.605 \cdot 10^{-6}$	$-3.605 \cdot 10^{-6}$	0	$1.639 \cdot 10^{-7}$	$1.639 \cdot 10^{-7}$	0
$HH \rightarrow Hzz$	$-8.367 \cdot 10^{-7}$	$-8.367 \cdot 10^{-7}$	0	$3.805 \cdot 10^{-8}$	$3.805 \cdot 10^{-8}$	0
$HH \rightarrow W^+W^-$	-0.01248	-0.01248	0	0.0003782	0.0003782	0
$HH \rightarrow W^+W^-\gamma$	$-1.48 \cdot 10^{-8}$	$-1.48 \cdot 10^{-8}$	0	$6.73 \cdot 10^{-10}$	$6.73 \cdot 10^{-10}$	0
$HH \rightarrow W^+\bar{t}b$	$-8.664 \cdot 10^{-7}$	$-8.664 \cdot 10^{-7}$	0	$3.94 \cdot 10^{-8}$	$3.94 \cdot 10^{-8}$	0
$HH \rightarrow W^+e^-\bar{\nu}_e$	$-2.681 \cdot 10^{-9}$	$-2.681 \cdot 10^{-9}$	0	$1.219 \cdot 10^{-10}$	$1.219 \cdot 10^{-10}$	0
$HH \rightarrow W^-u\bar{d}$	$-1.378 \cdot 10^{-7}$	$-1.378 \cdot 10^{-7}$	0	$6.267 \cdot 10^{-9}$	$6.267 \cdot 10^{-9}$	0
$HH \rightarrow z\bar{b}b$	$-1.928 \cdot 10^{-7}$	$-1.928 \cdot 10^{-7}$	0	$8.765 \cdot 10^{-9}$	$8.765 \cdot 10^{-9}$	0
$HH \rightarrow z\nu_e\bar{\nu}_e$	$-1.912 \cdot 10^{-8}$	$-1.912 \cdot 10^{-8}$	0	$8.694 \cdot 10^{-10}$	$8.694 \cdot 10^{-10}$	0
$HH \rightarrow zcc$	$-3.992 \cdot 10^{-8}$	$-3.992 \cdot 10^{-8}$	0	$1.815 \cdot 10^{-9}$	$1.815 \cdot 10^{-9}$	0
$HH \rightarrow zdd$	$-2.249 \cdot 10^{-7}$	$-2.249 \cdot 10^{-7}$	0	$1.023 \cdot 10^{-8}$	$1.023 \cdot 10^{-8}$	0
$HH \rightarrow ze^+e^-$	$-6.951 \cdot 10^{-9}$	$-6.951 \cdot 10^{-9}$	0	$3.161 \cdot 10^{-10}$	$3.161 \cdot 10^{-10}$	0
$HH \rightarrow zt\bar{t}$	$-2.061 \cdot 10^{-6}$	$-2.061 \cdot 10^{-6}$	0	$9.37 \cdot 10^{-8}$	$9.37 \cdot 10^{-8}$	0
$HH \rightarrow zz$	-0.01491	-0.01491	0	0.000452	0.000452	0
$HW^+ \rightarrow \gamma t\bar{b}$	$-2.754 \cdot 10^{-7}$	$-2.754 \cdot 10^{-7}$	0	$1.252 \cdot 10^{-8}$	$1.252 \cdot 10^{-8}$	0
$HW^+ \rightarrow \gamma u\bar{d}$	$-8.778 \cdot 10^{-9}$	$-8.778 \cdot 10^{-9}$	0	$3.991 \cdot 10^{-10}$	$3.991 \cdot 10^{-10}$	0
$HW^+ \rightarrow u\bar{d}$	-0.002553	-0.002553	0	$7.74 \cdot 10^{-5}$	$7.74 \cdot 10^{-5}$	0
$HW^- \rightarrow \bar{t}b$	-0.3364	-0.3364	0	0.0102	0.0102	0
$HW^- \rightarrow \gamma e^-\bar{\nu}_e$	$-6.432 \cdot 10^{-8}$	$-6.432 \cdot 10^{-8}$	0	$2.925 \cdot 10^{-9}$	$2.925 \cdot 10^{-9}$	0
$HW^- \rightarrow \mu^-\bar{\nu}_\mu$	0.1366	0.1366	0	0.6458	0.6458	0
$H\gamma \rightarrow t\bar{t}$	-0.07081	-0.07081	0	0.002146	0.002146	0
$H\gamma \rightarrow \mu^+\mu^-$	0.04907	0.04907	0	0.3355	0.3355	0
$H\gamma \rightarrow \nu_\tau\bar{\nu}_\tau$	-0.0002155	-0.0002155	0	$6.534 \cdot 10^{-6}$	$6.534 \cdot 10^{-6}$	0
$H\gamma \rightarrow b\bar{b}$	-0.0005754	-0.0005754	0	$1.744 \cdot 10^{-5}$	$1.744 \cdot 10^{-5}$	0
$H\gamma \rightarrow s\bar{s}$	-0.001718	-0.001718	0	$5.209 \cdot 10^{-5}$	$5.209 \cdot 10^{-5}$	0
$H\gamma \rightarrow t\bar{t}$	-0.2132	-0.2132	0	0.006462	0.006462	0
$H\gamma \rightarrow u\bar{u}$	-0.0006724	-0.0006724	0	$2.038 \cdot 10^{-5}$	$2.038 \cdot 10^{-5}$	0

$W^+W^- \rightarrow Hb\bar{b}$	$-3.885 \cdot 10^{-7}$	$-3.885 \cdot 10^{-7}$	0	$1.767 \cdot 10^{-8}$	$1.767 \cdot 10^{-8}$	0
$W^+W^- \rightarrow Hc\bar{c}$	$-1.803 \cdot 10^{-7}$	$-1.803 \cdot 10^{-7}$	0	$8.196 \cdot 10^{-9}$	$8.196 \cdot 10^{-9}$	0
$W^+W^- \rightarrow Hd\bar{d}$	$-7.878 \cdot 10^{-7}$	$-7.878 \cdot 10^{-7}$	0	$3.582 \cdot 10^{-8}$	$3.582 \cdot 10^{-8}$	0
$W^+W^- \rightarrow Ht\bar{t}$	$-3.531 \cdot 10^{-5}$	$-3.531 \cdot 10^{-5}$	0	$1.605 \cdot 10^{-6}$	$1.605 \cdot 10^{-6}$	0
$W^+W^- \rightarrow W^+W^-$	-5.964	-5.964	0	0.1808	0.1808	0
$W^+W^- \rightarrow \gamma\gamma$	-0.07538	-0.07538	0	0.002285	0.002285	0
$W^+W^- \rightarrow \gamma\gamma\gamma$	$-1.043 \cdot 10^{-7}$	$-1.043 \cdot 10^{-7}$	0	$4.744 \cdot 10^{-9}$	$4.744 \cdot 10^{-9}$	0
$\bar{b}t \rightarrow \bar{d}u$	-0.0001219	-0.0001219	0	$3.694 \cdot 10^{-6}$	$3.694 \cdot 10^{-6}$	0
$\gamma W^+ \rightarrow zW^+$	-0.02801	-0.02801	0	0.0008489	0.0008489	0
$\mu^+\mu^- \rightarrow \tau^+\tau^-$	-0.001103	-0.001103	0	$3.79 \cdot 10^{-5}$	$3.79 \cdot 10^{-5}$	0
$\nu_\tau\bar{\nu}_\tau \rightarrow \nu_\tau\bar{\nu}_\tau$	$-5.879 \cdot 10^{-5}$	$-5.879 \cdot 10^{-5}$	0	$1.782 \cdot 10^{-6}$	$1.782 \cdot 10^{-6}$	0
$\nu_e\bar{\nu}_e \rightarrow \nu_\mu\bar{\nu}_\mu$	$-2.119 \cdot 10^{-19}$	$-4.23 \cdot 10^{-20}$	0.8003	$9.551 \cdot 10^{-37}$	$1.881 \cdot 10^{-37}$	0.8031
$b\bar{b} \rightarrow \gamma\gamma$	$-1.079 \cdot 10^{-5}$	$-1.079 \cdot 10^{-5}$	0	$3.271 \cdot 10^{-7}$	$3.271 \cdot 10^{-7}$	0
$b\bar{b} \rightarrow \mu^+\mu^-$	$6.475 \cdot 10^{-6}$	$6.475 \cdot 10^{-6}$	0	$2.209 \cdot 10^{-6}$	$2.209 \cdot 10^{-6}$	0
$b\bar{b} \rightarrow \nu_e\bar{\nu}_e$	$-1.82 \cdot 10^{-5}$	$-1.82 \cdot 10^{-5}$	0	$5.516 \cdot 10^{-7}$	$5.516 \cdot 10^{-7}$	0
$b\bar{b} \rightarrow b\bar{b}$	0.02202	0.02202	0	0.0001668	0.0001668	0
$b\bar{b} \rightarrow d\bar{d}$	$-4.374 \cdot 10^{-5}$	$-4.374 \cdot 10^{-5}$	0	$1.326 \cdot 10^{-6}$	$1.326 \cdot 10^{-6}$	0
$b\bar{b} \rightarrow t\bar{t}$	-0.2735	-0.2735	0	0.01215	0.01215	0
$b\bar{b} \rightarrow u\bar{u}$	-0.001121	-0.001121	0	$3.397 \cdot 10^{-5}$	$3.397 \cdot 10^{-5}$	0
$b\bar{t} \rightarrow e^-\bar{\nu}_e$	-0.0005506	-0.0005506	0	$1.669 \cdot 10^{-5}$	$1.669 \cdot 10^{-5}$	0
$c\bar{c} \rightarrow \mu^+\mu^-$	-0.0001239	-0.0001239	0	$6.724 \cdot 10^{-6}$	$6.724 \cdot 10^{-6}$	0
$c\bar{s} \rightarrow \tau^+\nu_\tau$	-0.0004951	-0.0004951	0	$1.501 \cdot 10^{-5}$	$1.501 \cdot 10^{-5}$	0
$d\bar{d} \rightarrow c\bar{c}$	-0.0001303	-0.0001303	0	$3.95 \cdot 10^{-6}$	$3.95 \cdot 10^{-6}$	0
$d\bar{d} \rightarrow e^+e^-$	-0.0002604	-0.0002604	0	$7.894 \cdot 10^{-6}$	$7.894 \cdot 10^{-6}$	0
$d\bar{d} \rightarrow s\bar{s}$	-0.000296	-0.000296	0	$8.973 \cdot 10^{-6}$	$8.973 \cdot 10^{-6}$	0
$e^+\nu_\mu \rightarrow e^+\nu_\mu$	$4.052 \cdot 10^{-19}$	$1.143 \cdot 10^{-18}$	-1.822	$6.019 \cdot 10^{-36}$	$7.147 \cdot 10^{-36}$	-0.1875
$e^+\nu_e \rightarrow \mu^+\nu_\mu$	$4.36 \cdot 10^{-19}$	$3.142 \cdot 10^{-19}$	0.2793	$3.115 \cdot 10^{-36}$	$1.693 \cdot 10^{-36}$	0.4566
$e^+\nu_e \rightarrow e^+\nu_e$	-0.0009694	-0.0009694	0	$2.939 \cdot 10^{-5}$	$2.939 \cdot 10^{-5}$	0
$e^+\tau^- \rightarrow e^+\tau^-$	-0.002794	-0.002794	0	$8.47 \cdot 10^{-5}$	$8.47 \cdot 10^{-5}$	0

$e^+e^- \rightarrow \mu^+\mu^-$	-0.001109	-0.001109	0	$3.787 \cdot 10^{-5}$	$3.787 \cdot 10^{-5}$	0
$e^+e^- \rightarrow e^+e^-$	-0.009012	-0.009012	0	0.0002732	0.0002732	0
$s\bar{s} \rightarrow \nu_\tau\bar{\nu}_\tau$	-0.0003083	-0.0003083	0	$9.345 \cdot 10^{-6}$	$9.345 \cdot 10^{-6}$	0
$s\bar{s} \rightarrow s\bar{s}$	0.01007	0.01007	0	$5.166 \cdot 10^{-5}$	$5.166 \cdot 10^{-5}$	0
$t\bar{t} \rightarrow \nu_\mu\bar{\nu}_\mu$	$-1.314 \cdot 10^{-20}$	$-3.236 \cdot 10^{-21}$	0.7538	$2.767 \cdot 10^{-36}$	$1.025 \cdot 10^{-36}$	0.6297
$t\bar{t} \rightarrow \tau^+\tau^-$	-0.0002549	-0.0002549	0	$7.726 \cdot 10^{-6}$	$7.726 \cdot 10^{-6}$	0
$t\bar{t} \rightarrow c\bar{c}$	-0.0002266	-0.0002266	0	$6.869 \cdot 10^{-6}$	$6.869 \cdot 10^{-6}$	0
$t\bar{t} \rightarrow d\bar{d}$	-0.0008564	-0.0008564	0	$2.596 \cdot 10^{-5}$	$2.596 \cdot 10^{-5}$	0
$t\bar{t} \rightarrow s\bar{s}$	-0.0004126	-0.0004126	0	$1.251 \cdot 10^{-5}$	$1.251 \cdot 10^{-5}$	0
$t\bar{t} \rightarrow t\bar{t}$	0.04257	0.04257	0	0.003441	0.003441	0
$u\bar{d} \rightarrow \mu^+\nu_\mu$	$9.063 \cdot 10^{-24}$	$-6.152 \cdot 10^{-21}$	679.8	$1.531 \cdot 10^{-41}$	$1.567 \cdot 10^{-38}$	-1023
$u\bar{d} \rightarrow c\bar{s}$	-0.001323	-0.001323	0	$4.01 \cdot 10^{-5}$	$4.01 \cdot 10^{-5}$	0
$u\bar{d} \rightarrow u\bar{d}$	0.01236	0.01236	0	0.0003066	0.0003066	0
$u\bar{u} \rightarrow \nu_e\bar{\nu}_e$	$-6.775 \cdot 10^{-5}$	$-6.775 \cdot 10^{-5}$	0	$2.054 \cdot 10^{-6}$	$2.054 \cdot 10^{-6}$	0
$u\bar{u} \rightarrow c\bar{c}$	-0.000798	-0.000798	0	$2.419 \cdot 10^{-5}$	$2.419 \cdot 10^{-5}$	0
$u\bar{u} \rightarrow u\bar{u}$	0.03949	0.03949	0	0.0003704	0.0003704	0
$zz \rightarrow W^+W^-$	-3.905	-3.905	0	0.1184	0.1184	0
$zz \rightarrow zz$	-0.009874	-0.009874	0	0.0002993	0.0002993	0

## 2.3 c3pl3

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$H z \rightarrow \nu_\tau\bar{\nu}_\tau$	0.06254	0.06254	0	0.228	0.228	0
$\mu^+\mu^- \rightarrow \tau^+\tau^-$	-0.0002584	-0.0002584	0	$1.047 \cdot 10^{-5}$	$1.047 \cdot 10^{-5}$	0
$\nu_\tau\bar{\nu}_\tau \rightarrow \nu_\tau\bar{\nu}_\tau$	0.09263	0.09263	0	0.005616	0.005616	0
$c\bar{s} \rightarrow \tau^+\nu_\tau$	0.0008027	0.0008027	0	$2.433 \cdot 10^{-5}$	$2.433 \cdot 10^{-5}$	0
$e^+\tau^- \rightarrow e^+\tau^-$	-0.000607	-0.000607	0	$1.896 \cdot 10^{-5}$	$1.896 \cdot 10^{-5}$	0
$s\bar{s} \rightarrow \nu_\tau\bar{\nu}_\tau$	0.0003597	0.0003597	0	$1.09 \cdot 10^{-5}$	$1.09 \cdot 10^{-5}$	0

$t\bar{t} \rightarrow \tau^+\tau^-$	0.0001488	0.0001488	0	$4.17 \cdot 10^{-6}$	$4.17 \cdot 10^{-6}$	0
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## 2.4 cG

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$gg \rightarrow gg$	$2.276 \cdot 10^{-9}$	0	1	147.9	0	1
$gg \rightarrow ggg$	0.0001379	0	1	0.3664	0	1
$gg \rightarrow t\bar{t}$	0.06921	0	1	3.004	0	1
$gg \rightarrow u\bar{u}$	$3.116 \cdot 10^{-11}$	0	1	2.033	0	1

## 2.5 cQQ1

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$b\bar{b} \rightarrow b\bar{b}$	-11.12	-11.12	0	2.146	2.146	0
$b\bar{b} \rightarrow t\bar{t}$	-0.3486	-0.3486	0	0.4651	0.4651	0
$t\bar{t} \rightarrow t\bar{t}$	0.005443	0.005443	0	0.03321	0.03321	0

## 2.6 cQQ8

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$b\bar{b} \rightarrow b\bar{b}$	$-1.514 \cdot 10^{-6}$	$-1.514 \cdot 10^{-6}$	0	$6.682 \cdot 10^{-5}$	$6.682 \cdot 10^{-5}$	0
$b\bar{b} \rightarrow t\bar{t}$	-0.5748	-0.5748	0	0.1567	0.1567	0
$t\bar{t} \rightarrow t\bar{t}$	-0.8404	-0.8404	0	0.4481	0.4481	0

## 2.7 cQd1

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$b\bar{b} \rightarrow b\bar{b}$	0.2242	0.2242	0	2.021	2.021	0
$b\bar{b} \rightarrow d\bar{d}$	-0.00112	-0.00112	0	0.077	0.077	0
$b\bar{b} \rightarrow t\bar{t}$	-0.003103	-0.003103	0	0.101	0.101	0
$t\bar{t} \rightarrow d\bar{d}$	-0.01209	-0.01209	0	0.7426	0.7426	0
$t\bar{t} \rightarrow s\bar{s}$	-0.006983	-0.006983	0	0.3781	0.3781	0

## 2.8 cQd8

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$b\bar{b} \rightarrow b\bar{b}$	-0.05933	-0.05933	0	0.8746	0.8746	0
$b\bar{b} \rightarrow d\bar{d}$	0.1879	0.1879	0	0.06342	0.06342	0
$b\bar{b} \rightarrow t\bar{t}$	0.03634	0.03634	0	0.00569	0.00569	0
$t\bar{t} \rightarrow d\bar{d}$	0.03884	0.03884	0	0.006535	0.006535	0
$t\bar{t} \rightarrow s\bar{s}$	0.5503	0.5503	0	0.1791	0.1791	0

## 2.9 cQe2

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$b\bar{b} \rightarrow \mu^+\mu^-$	-0.0002292	-0.0002292	0	0.005252	0.005252	0

## 2.10 cQe3

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$t\bar{t} \rightarrow \tau^+ \tau^-$	-0.003054	-0.003054	0	0.03251	0.03251	0

## 2.11 cQl31

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$b\bar{t} \rightarrow e^- \bar{\nu}_e$	0.01864	0.01864	0	0.08809	0.08809	0

## 2.12 cQl32

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$b\bar{b} \rightarrow \mu^+ \mu^-$	0.01105	0.01105	0	0.1164	0.1164	0
$t\bar{t} \rightarrow \nu_\mu \bar{\nu}_\mu$	0.1146	0.1146	0	1.222	1.222	0

## 2.13 cQlM1

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$b\bar{b} \rightarrow \nu_e \bar{\nu}_e$	-0.03969	-0.03969	0	0.17	0.17	0

## 2.14 cQlM2

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$b\bar{b} \rightarrow \mu^+ \mu^-$	0.0484	0.0484	0	0.2549	0.2549	0

$t\bar{t} \rightarrow \nu_\mu \bar{\nu}_\mu$	0.001194	0.001194	0	0.01073	0.01073	0
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## 2.15 cQlM3

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$t\bar{t} \rightarrow \tau^+ \tau^-$	-0.02049	-0.02049	0	0.08453	0.08453	0

## 2.16 cQq11

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$b\bar{b} \rightarrow d\bar{d}$	0.04751	0.04751	0	0.217	0.217	0
$b\bar{b} \rightarrow u\bar{u}$	-0.07168	-0.07168	0	0.3506	0.3506	0
$t\bar{t} \rightarrow c\bar{c}$	0.09157	0.09157	0	0.4154	0.4154	0
$t\bar{t} \rightarrow d\bar{d}$	-0.1497	-0.1497	0	0.7363	0.7363	0
$t\bar{t} \rightarrow s\bar{s}$	-0.002688	-0.002688	0	0.01736	0.01736	0

## 2.17 cQq13

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$b\bar{t} \rightarrow \bar{d}u$	0.25	0.25	0	1.182	1.182	0
$b\bar{b} \rightarrow d\bar{d}$	0.1143	0.1143	0	0.522	0.522	0
$b\bar{b} \rightarrow u\bar{u}$	0.08794	0.08794	0	0.4302	0.4302	0
$t\bar{t} \rightarrow c\bar{c}$	0.01251	0.01251	0	0.05347	0.05347	0
$t\bar{t} \rightarrow d\bar{d}$	0.004897	0.004897	0	0.02816	0.02816	0
$t\bar{t} \rightarrow s\bar{s}$	0.03429	0.03429	0	0.1719	0.1719	0

## 2.18 cQq81

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$b\bar{b} \rightarrow d\bar{d}$	0.3437	0.3437	0	0.116	0.116	0
$b\bar{b} \rightarrow u\bar{u}$	0.2833	0.2833	0	0.0956	0.0956	0
$t\bar{t} \rightarrow c\bar{c}$	0.05469	0.05469	0	0.01188	0.01188	0
$t\bar{t} \rightarrow d\bar{d}$	0.03803	0.03803	0	0.006259	0.006259	0
$t\bar{t} \rightarrow s\bar{s}$	0.1327	0.1327	0	0.03821	0.03821	0

## 2.19 cQq83

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$\bar{b}t \rightarrow \bar{d}u$	$5.203 \cdot 10^{-40}$	$5.203 \cdot 10^{-40}$	0	0.2626	0.2626	0
$b\bar{b} \rightarrow d\bar{d}$	0.3437	0.3437	0	0.116	0.116	0
$b\bar{b} \rightarrow u\bar{u}$	-0.2833	-0.2833	0	0.0956	0.0956	0
$t\bar{t} \rightarrow c\bar{c}$	0.05469	0.05469	0	0.01188	0.01188	0
$t\bar{t} \rightarrow d\bar{d}$	-0.03803	-0.03803	0	0.006259	0.006259	0
$t\bar{t} \rightarrow s\bar{s}$	-0.1327	-0.1327	0	0.03821	0.03821	0

## 2.20 cQt1

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$b\bar{b} \rightarrow t\bar{t}$	-0.09669	-0.09669	0	0.02561	0.02561	0
$t\bar{t} \rightarrow t\bar{t}$	-0.3902	-0.3902	0	8.132	8.132	0



## 2.21 cQt8

	interference			square		
	mod1	mod2	1 − mod2/mod1	mod1	mod2	1 − mod2/mod1
$b\bar{b} \rightarrow t\bar{t}$	−0.08171	−0.08171	0	0.02244	0.02244	0
$t\bar{t} \rightarrow t\bar{t}$	−0.1091	−0.1091	0	3.039	3.039	0

## 2.22 cQu1

	interference			square		
	mod1	mod2	1 − mod2/mod1	mod1	mod2	1 − mod2/mod1
$b\bar{b} \rightarrow u\bar{u}$	0.003445	0.003445	0	0.1184	0.1184	0
$t\bar{t} \rightarrow c\bar{c}$	0.02122	0.02122	0	0.6374	0.6374	0

## 2.23 cQu8

	interference			square		
	mod1	mod2	1 − mod2/mod1	mod1	mod2	1 − mod2/mod1
$b\bar{b} \rightarrow u\bar{u}$	0.07797	0.07797	0	0.02631	0.02631	0
$t\bar{t} \rightarrow c\bar{c}$	0.4392	0.4392	0	0.1416	0.1416	0

## 2.24 cWWW

	interference			square		
	mod1	mod2	1 − mod2/mod1	mod1	mod2	1 − mod2/mod1
$HH \rightarrow W^+W^-\gamma$	$3.004 \cdot 10^{-7}$	$3.004 \cdot 10^{-7}$	0	$1.139 \cdot 10^{-6}$	$1.139 \cdot 10^{-6}$	0
$HW^+ \rightarrow \gamma t\bar{b}$	$-9.154 \cdot 10^{-8}$	$-9.154 \cdot 10^{-8}$	0	$5.844 \cdot 10^{-8}$	$5.844 \cdot 10^{-8}$	0
$HW^+ \rightarrow \gamma u\bar{d}$	$-2.275 \cdot 10^{-7}$	$-2.275 \cdot 10^{-7}$	0	$5.974 \cdot 10^{-7}$	$5.974 \cdot 10^{-7}$	0

$HW^- \rightarrow \gamma e^- \bar{\nu}_e$	$5.764 \cdot 10^{-9}$	$5.764 \cdot 10^{-9}$	0	$9.064 \cdot 10^{-9}$	$9.064 \cdot 10^{-9}$	0
$W^+W^- \rightarrow Hb\bar{b}$	$2.576 \cdot 10^{-7}$	$2.576 \cdot 10^{-7}$	0	$9.119 \cdot 10^{-7}$	$9.119 \cdot 10^{-7}$	0
$W^+W^- \rightarrow Hc\bar{c}$	$1.869 \cdot 10^{-7}$	$1.869 \cdot 10^{-7}$	0	$4.056 \cdot 10^{-7}$	$4.056 \cdot 10^{-7}$	0
$W^+W^- \rightarrow Hdd\bar{d}$	$6.746 \cdot 10^{-7}$	$6.746 \cdot 10^{-7}$	0	$1.108 \cdot 10^{-6}$	$1.108 \cdot 10^{-6}$	0
$W^+W^- \rightarrow Ht\bar{t}$	$4.504 \cdot 10^{-7}$	$4.504 \cdot 10^{-7}$	0	$7.428 \cdot 10^{-6}$	$7.428 \cdot 10^{-6}$	0
$W^+W^- \rightarrow W^+W^-$	-0.102	-0.102	0	9.664	9.664	0
$W^+W^- \rightarrow \gamma\gamma$	-0.0008358	-0.0008358	0	0.7162	0.7162	0
$W^+W^- \rightarrow \gamma\gamma\gamma$	$1.042 \cdot 10^{-6}$	$1.042 \cdot 10^{-6}$	0	$5.21 \cdot 10^{-6}$	$5.21 \cdot 10^{-6}$	0
$\gamma W^+ \rightarrow zW^+$	-0.007777	-0.007777	0	1.091	1.091	0
$zz \rightarrow W^+W^-$	0.1243	0.1243	0	14.82	14.82	0

## 2.25 cdp

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$HH \rightarrow HH$	0.4212	0.4212	0	0.2287	0.2287	0
$HH \rightarrow HHH$	$-3.487 \cdot 10^{-6}$	$-3.487 \cdot 10^{-6}$	0	$2.229 \cdot 10^{-6}$	$2.229 \cdot 10^{-6}$	0
$HH \rightarrow Ht\bar{t}$	$-2.305 \cdot 10^{-5}$	$-2.305 \cdot 10^{-5}$	0	$1.013 \cdot 10^{-5}$	$1.013 \cdot 10^{-5}$	0
$HH \rightarrow Hzz$	$-1.679 \cdot 10^{-6}$	$-1.679 \cdot 10^{-6}$	0	$2.503 \cdot 10^{-6}$	$2.503 \cdot 10^{-6}$	0
$HH \rightarrow W^+W^-$	0.1749	0.1749	0	4.043	4.043	0
$HH \rightarrow W^+W^-\gamma$	$1.978 \cdot 10^{-6}$	$1.978 \cdot 10^{-6}$	0	$4.951 \cdot 10^{-6}$	$4.951 \cdot 10^{-6}$	0
$HH \rightarrow W^+\bar{t}b$	-0.0002117	-0.0002117	0	$7.207 \cdot 10^{-5}$	$7.207 \cdot 10^{-5}$	0
$HH \rightarrow W^+e^-\bar{\nu}_e$	$2.576 \cdot 10^{-8}$	$2.576 \cdot 10^{-8}$	0	$5.606 \cdot 10^{-9}$	$5.606 \cdot 10^{-9}$	0
$HH \rightarrow W^-u\bar{d}$	$8.425 \cdot 10^{-8}$	$8.425 \cdot 10^{-8}$	0	$1.099 \cdot 10^{-7}$	$1.099 \cdot 10^{-7}$	0
$HH \rightarrow z\bar{b}b$	-0.0001366	-0.0001366	0	$5.95 \cdot 10^{-5}$	$5.95 \cdot 10^{-5}$	0
$HH \rightarrow z\nu_e\bar{\nu}_e$	$1.67 \cdot 10^{-8}$	$1.67 \cdot 10^{-8}$	0	$1.297 \cdot 10^{-8}$	$1.297 \cdot 10^{-8}$	0
$HH \rightarrow zc\bar{c}$	$2.022 \cdot 10^{-8}$	$2.022 \cdot 10^{-8}$	0	$6.52 \cdot 10^{-8}$	$6.52 \cdot 10^{-8}$	0
$HH \rightarrow zdd\bar{d}$	$1.439 \cdot 10^{-7}$	$1.439 \cdot 10^{-7}$	0	$8.176 \cdot 10^{-9}$	$8.176 \cdot 10^{-9}$	0
$HH \rightarrow ze^+e^-$	$2.496 \cdot 10^{-8}$	$2.496 \cdot 10^{-8}$	0	$2.355 \cdot 10^{-9}$	$2.355 \cdot 10^{-9}$	0

$HH \rightarrow zt\bar{t}$	$6.392 \cdot 10^{-5}$	$6.392 \cdot 10^{-5}$	0	$5.722 \cdot 10^{-5}$	$5.722 \cdot 10^{-5}$	0
$HH \rightarrow zz$	-3.718	-3.718	0	1.511	1.511	0
$HW^+ \rightarrow \gamma t\bar{b}$	$4.854 \cdot 10^{-7}$	$4.854 \cdot 10^{-7}$	0	$1.471 \cdot 10^{-8}$	$1.471 \cdot 10^{-8}$	0
$HW^+ \rightarrow \gamma u\bar{d}$	$1.258 \cdot 10^{-8}$	$1.258 \cdot 10^{-8}$	0	$3.813 \cdot 10^{-10}$	$3.813 \cdot 10^{-10}$	0
$HW^+ \rightarrow u\bar{d}$	0.001511	0.001511	0	$4.581 \cdot 10^{-5}$	$4.581 \cdot 10^{-5}$	0
$HW^- \rightarrow \bar{t}b$	0.1642	0.1642	0	0.004978	0.004978	0
$HW^- \rightarrow \gamma e^- \bar{\nu}_e$	$2.397 \cdot 10^{-9}$	$2.397 \cdot 10^{-9}$	0	$7.266 \cdot 10^{-11}$	$7.266 \cdot 10^{-11}$	0
$HW^- \rightarrow \mu^- \bar{\nu}_\mu$	0.000772	0.000772	0	$2.34 \cdot 10^{-5}$	$2.34 \cdot 10^{-5}$	0
$H\gamma \rightarrow t\bar{t}$	0.04926	0.04926	0	0.001493	0.001493	0
$H z \rightarrow \mu^+ \mu^-$	0.0003923	0.0003923	0	$1.189 \cdot 10^{-5}$	$1.189 \cdot 10^{-5}$	0
$H z \rightarrow \nu_\tau \bar{\nu}_\tau$	0.0005201	0.0005201	0	$1.576 \cdot 10^{-5}$	$1.576 \cdot 10^{-5}$	0
$H z \rightarrow b\bar{b}$	0.0008172	0.0008172	0	$2.477 \cdot 10^{-5}$	$2.477 \cdot 10^{-5}$	0
$H z \rightarrow s\bar{s}$	0.0004593	0.0004593	0	$1.392 \cdot 10^{-5}$	$1.392 \cdot 10^{-5}$	0
$H z \rightarrow t\bar{t}$	0.2116	0.2116	0	0.006415	0.006415	0
$H z \rightarrow u\bar{u}$	0.0009471	0.0009471	0	$2.871 \cdot 10^{-5}$	$2.871 \cdot 10^{-5}$	0
$W^+ W^- \rightarrow H b\bar{b}$	$1.255 \cdot 10^{-8}$	$1.255 \cdot 10^{-8}$	0	$3.803 \cdot 10^{-10}$	$3.803 \cdot 10^{-10}$	0
$W^+ W^- \rightarrow H c\bar{c}$	$5.591 \cdot 10^{-8}$	$5.591 \cdot 10^{-8}$	0	$1.695 \cdot 10^{-9}$	$1.695 \cdot 10^{-9}$	0
$W^+ W^- \rightarrow H d\bar{d}$	$6.085 \cdot 10^{-7}$	$6.085 \cdot 10^{-7}$	0	$1.844 \cdot 10^{-8}$	$1.844 \cdot 10^{-8}$	0
$W^+ W^- \rightarrow H t\bar{t}$	$-4.352 \cdot 10^{-7}$	$-4.352 \cdot 10^{-7}$	0	$7.212 \cdot 10^{-6}$	$7.212 \cdot 10^{-6}$	0
$W^+ W^- \rightarrow W^+ W^-$	-0.1306	-0.1306	0	0.006302	0.006302	0
$t\bar{t} \rightarrow t\bar{t}$	-0.04156	-0.04156	0	0.008194	0.008194	0
$zz \rightarrow W^+ W^-$	7.133	7.133	0	0.4473	0.4473	0
$zz \rightarrow zz$	0.01712	0.01712	0	0.001038	0.001038	0

## 2.26 cll1111

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$e^+ \nu_e \rightarrow e^+ \nu_e$	0.198	0	1	0.6012	0	1
$e^+ e^- \rightarrow e^+ e^-$	-1.993	0	1	9.261	0	1

## 2.27 cll1122

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$\nu_e \bar{\nu}_e \rightarrow \nu_\mu \bar{\nu}_\mu$	0.4269	0	1	3.087	0	1
$e^+ \nu_\mu \rightarrow e^+ \nu_\mu$	0.6154	0	1	2.219	0	1
$e^+ e^- \rightarrow \mu^+ \mu^-$	0.1268	0	1	0.9224	0	1

## 2.28 cll1133

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$e^+ \tau^- \rightarrow e^+ \tau^-$	-0.007297	0	1	0.04752	0	1

## 2.29 cll1221

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$HH \rightarrow HH$	0.02352	0.02352	0	0.0007129	0.0007129	0
$HH \rightarrow HHH$	$2.481 \cdot 10^{-7}$	$2.481 \cdot 10^{-7}$	0	$1.128 \cdot 10^{-8}$	$1.128 \cdot 10^{-8}$	0
$HH \rightarrow Ht\bar{t}$	$2.661 \cdot 10^{-6}$	$2.661 \cdot 10^{-6}$	0	$1.21 \cdot 10^{-7}$	$1.21 \cdot 10^{-7}$	0
$HH \rightarrow Hzz$	$1.483 \cdot 10^{-6}$	$1.483 \cdot 10^{-6}$	0	$6.742 \cdot 10^{-8}$	$6.742 \cdot 10^{-8}$	0
$HH \rightarrow W^+ W^-$	0.01098	0.01098	0	0.0003328	0.0003328	0
$HH \rightarrow W^+ W^- \gamma$	$6.444 \cdot 10^{-8}$	$6.444 \cdot 10^{-8}$	0	$2.93 \cdot 10^{-9}$	$2.93 \cdot 10^{-9}$	0
$HH \rightarrow W^+ \bar{t} b$	0.0001159	0.0001159	0	$5.269 \cdot 10^{-6}$	$5.269 \cdot 10^{-6}$	0
$HH \rightarrow W^+ e^- \bar{\nu}_e$	$2.471 \cdot 10^{-8}$	$2.471 \cdot 10^{-8}$	0	$1.124 \cdot 10^{-9}$	$1.124 \cdot 10^{-9}$	0
$HH \rightarrow W^- u \bar{d}$	$3.434 \cdot 10^{-8}$	$3.434 \cdot 10^{-8}$	0	$1.562 \cdot 10^{-9}$	$1.562 \cdot 10^{-9}$	0
$HH \rightarrow z \bar{b} b$	$1.538 \cdot 10^{-5}$	$1.538 \cdot 10^{-5}$	0	$6.991 \cdot 10^{-7}$	$6.991 \cdot 10^{-7}$	0
$HH \rightarrow z \nu_e \bar{\nu}_e$	$2.801 \cdot 10^{-8}$	$2.801 \cdot 10^{-8}$	0	$1.273 \cdot 10^{-9}$	$1.273 \cdot 10^{-9}$	0

$HH \rightarrow zc\bar{c}$	$2.919 \cdot 10^{-8}$	$2.919 \cdot 10^{-8}$	0	$1.327 \cdot 10^{-9}$	$1.327 \cdot 10^{-9}$	0
$HH \rightarrow zd\bar{d}$	$1.306 \cdot 10^{-7}$	$1.306 \cdot 10^{-7}$	0	$5.937 \cdot 10^{-9}$	$5.937 \cdot 10^{-9}$	0
$HH \rightarrow ze^+e^-$	$2.522 \cdot 10^{-8}$	$2.522 \cdot 10^{-8}$	0	$1.147 \cdot 10^{-9}$	$1.147 \cdot 10^{-9}$	0
$HH \rightarrow zt\bar{t}$	$5.072 \cdot 10^{-6}$	$5.072 \cdot 10^{-6}$	0	$2.306 \cdot 10^{-7}$	$2.306 \cdot 10^{-7}$	0
$HH \rightarrow zz$	0.2909	0.2909	0	0.008817	0.008817	0
$HW^+ \rightarrow \gamma t\bar{b}$	$7.28 \cdot 10^{-7}$	$7.28 \cdot 10^{-7}$	0	$3.31 \cdot 10^{-8}$	$3.31 \cdot 10^{-8}$	0
$HW^+ \rightarrow \gamma u\bar{d}$	$1.887 \cdot 10^{-8}$	$1.887 \cdot 10^{-8}$	0	$8.578 \cdot 10^{-10}$	$8.578 \cdot 10^{-10}$	0
$HW^+ \rightarrow u\bar{d}$	0.001511	0.001511	0	$4.581 \cdot 10^{-5}$	$4.581 \cdot 10^{-5}$	0
$HW^- \rightarrow \bar{t}b$	0.1642	0.1642	0	0.004978	0.004978	0
$HW^- \rightarrow \gamma e^-\bar{\nu}_e$	$3.596 \cdot 10^{-9}$	$3.596 \cdot 10^{-9}$	0	$1.635 \cdot 10^{-10}$	$1.635 \cdot 10^{-10}$	0
$HW^- \rightarrow \mu^-\bar{\nu}_\mu$	0.000772	0.000772	0	$2.34 \cdot 10^{-5}$	$2.34 \cdot 10^{-5}$	0
$H\gamma \rightarrow t\bar{t}$	0.04926	0.04926	0	0.001493	0.001493	0
$H z \rightarrow \mu^+\mu^-$	0.0003923	0.0003923	0	$1.189 \cdot 10^{-5}$	$1.189 \cdot 10^{-5}$	0
$H z \rightarrow \nu_\tau\bar{\nu}_\tau$	0.0005201	0.0005201	0	$1.576 \cdot 10^{-5}$	$1.576 \cdot 10^{-5}$	0
$H z \rightarrow b\bar{b}$	0.0008172	0.0008172	0	$2.477 \cdot 10^{-5}$	$2.477 \cdot 10^{-5}$	0
$H z \rightarrow s\bar{s}$	0.0004593	0.0004593	0	$1.392 \cdot 10^{-5}$	$1.392 \cdot 10^{-5}$	0
$H z \rightarrow t\bar{t}$	0.2116	0.2116	0	0.006415	0.006415	0
$H z \rightarrow u\bar{u}$	0.0009471	0.0009471	0	$2.871 \cdot 10^{-5}$	$2.871 \cdot 10^{-5}$	0
$W^+W^- \rightarrow Hb\bar{b}$	$1.882 \cdot 10^{-8}$	$1.882 \cdot 10^{-8}$	0	$8.556 \cdot 10^{-10}$	$8.556 \cdot 10^{-10}$	0
$W^+W^- \rightarrow Hc\bar{c}$	$8.387 \cdot 10^{-8}$	$8.387 \cdot 10^{-8}$	0	$3.813 \cdot 10^{-9}$	$3.813 \cdot 10^{-9}$	0
$W^+W^- \rightarrow Hdd\bar{d}$	$9.127 \cdot 10^{-7}$	$9.127 \cdot 10^{-7}$	0	$4.15 \cdot 10^{-8}$	$4.15 \cdot 10^{-8}$	0
$W^+W^- \rightarrow Ht\bar{t}$	$4.16 \cdot 10^{-6}$	$4.16 \cdot 10^{-6}$	0	$1.892 \cdot 10^{-7}$	$1.892 \cdot 10^{-7}$	0
$W^+W^- \rightarrow W^+W^-$	0.8922	0.8922	0	0.02704	0.02704	0
$W^+W^- \rightarrow \gamma\gamma$	0.01439	0.01439	0	0.0004361	0.0004361	0
$W^+W^- \rightarrow \gamma\gamma\gamma$	$1.342 \cdot 10^{-7}$	$1.342 \cdot 10^{-7}$	0	$6.104 \cdot 10^{-9}$	$6.104 \cdot 10^{-9}$	0
$\bar{b}t \rightarrow \bar{d}u$	0.001603	0.001603	0	$4.859 \cdot 10^{-5}$	$4.859 \cdot 10^{-5}$	0
$\gamma W^+ \rightarrow zW^+$	6.135	6.135	0	0.186	0.186	0
$\mu^+\mu^- \rightarrow \tau^+\tau^-$	0.0008057	0.0008057	0	$2.442 \cdot 10^{-5}$	$2.442 \cdot 10^{-5}$	0
$\nu_\tau\bar{\nu}_\tau \rightarrow \nu_\tau\bar{\nu}_\tau$	0.04632	0.04632	0	0.001404	0.001404	0

$\nu_e \bar{\nu}_e \rightarrow \nu_\mu \bar{\nu}_\mu$	0.002913	$1.216 \cdot 10^{-5}$	0.9958	0.02115	$3.687 \cdot 10^{-7}$	1
$b\bar{b} \rightarrow \gamma\gamma$	$1.337 \cdot 10^{-5}$	$1.337 \cdot 10^{-5}$	0	$4.052 \cdot 10^{-7}$	$4.052 \cdot 10^{-7}$	0
$b\bar{b} \rightarrow \mu^+ \mu^-$	$5.691 \cdot 10^{-5}$	$5.691 \cdot 10^{-5}$	0	$1.725 \cdot 10^{-6}$	$1.725 \cdot 10^{-6}$	0
$b\bar{b} \rightarrow \nu_e \bar{\nu}_e$	0.0002663	0.0002663	0	$8.072 \cdot 10^{-6}$	$8.072 \cdot 10^{-6}$	0
$b\bar{b} \rightarrow b\bar{b}$	-0.058	-0.058	0	0.00277	0.00277	0
$b\bar{b} \rightarrow d\bar{d}$	0.0007726	0.0007726	0	$2.342 \cdot 10^{-5}$	$2.342 \cdot 10^{-5}$	0
$b\bar{b} \rightarrow t\bar{t}$	0.02906	0.02906	0	0.002261	0.002261	0
$b\bar{b} \rightarrow u\bar{u}$	0.0005912	0.0005912	0	$1.792 \cdot 10^{-5}$	$1.792 \cdot 10^{-5}$	0
$b\bar{t} \rightarrow e^- \bar{\nu}_e$	0.0003993	0.0003993	0	$1.21 \cdot 10^{-5}$	$1.21 \cdot 10^{-5}$	0
$c\bar{c} \rightarrow \mu^+ \mu^-$	0.0008066	0.0008066	0	$2.445 \cdot 10^{-5}$	$2.445 \cdot 10^{-5}$	0
$c\bar{s} \rightarrow \tau^+ \nu_\tau$	0.0008027	0.0008027	0	$2.433 \cdot 10^{-5}$	$2.433 \cdot 10^{-5}$	0
$d\bar{d} \rightarrow c\bar{c}$	0.000695	0.000695	0	$2.107 \cdot 10^{-5}$	$2.107 \cdot 10^{-5}$	0
$d\bar{d} \rightarrow e^+ e^-$	$4.933 \cdot 10^{-5}$	$4.933 \cdot 10^{-5}$	0	$1.495 \cdot 10^{-6}$	$1.495 \cdot 10^{-6}$	0
$d\bar{d} \rightarrow s\bar{s}$	0.0003642	0.0003642	0	$1.104 \cdot 10^{-5}$	$1.104 \cdot 10^{-5}$	0
$e^+ \nu_\mu \rightarrow e^+ \nu_\mu$	0.1368	0.1368	0	0.004147	0.004147	0
$e^+ \nu_e \rightarrow \mu^+ \nu_\mu$	0.003317	$2.113 \cdot 10^{-5}$	0.9936	0.01578	$6.406 \cdot 10^{-7}$	1
$e^+ \nu_e \rightarrow e^+ \nu_e$	0.001149	0.001149	0	$3.483 \cdot 10^{-5}$	$3.483 \cdot 10^{-5}$	0
$e^+ \tau^- \rightarrow e^+ \tau^-$	0.001331	0.001331	0	$4.036 \cdot 10^{-5}$	$4.036 \cdot 10^{-5}$	0
$e^+ e^- \rightarrow \mu^+ \mu^-$	0.3999	0.00312	0.9922	2.91	$9.457 \cdot 10^{-5}$	1
$e^+ e^- \rightarrow e^+ e^-$	0.1253	0.1253	0	0.003799	0.003799	0
$s\bar{s} \rightarrow \nu_\tau \bar{\nu}_\tau$	0.0003597	0.0003597	0	$1.09 \cdot 10^{-5}$	$1.09 \cdot 10^{-5}$	0
$s\bar{s} \rightarrow s\bar{s}$	-0.005538	-0.005538	0	$2.444 \cdot 10^{-5}$	$2.444 \cdot 10^{-5}$	0
$t\bar{t} \rightarrow \nu_\mu \bar{\nu}_\mu$	0.0003263	0.0003263	0	$9.892 \cdot 10^{-6}$	$9.892 \cdot 10^{-6}$	0
$t\bar{t} \rightarrow \tau^+ \tau^-$	0.0003402	0.0003402	0	$1.031 \cdot 10^{-5}$	$1.031 \cdot 10^{-5}$	0
$t\bar{t} \rightarrow c\bar{c}$	0.0001454	0.0001454	0	$4.409 \cdot 10^{-6}$	$4.409 \cdot 10^{-6}$	0
$t\bar{t} \rightarrow d\bar{d}$	$5.27 \cdot 10^{-5}$	$5.27 \cdot 10^{-5}$	0	$1.597 \cdot 10^{-6}$	$1.597 \cdot 10^{-6}$	0
$t\bar{t} \rightarrow s\bar{s}$	0.0002375	0.0002375	0	$7.2 \cdot 10^{-6}$	$7.2 \cdot 10^{-6}$	0
$t\bar{t} \rightarrow t\bar{t}$	-0.04278	-0.04278	0	0.003444	0.003444	0
$u\bar{d} \rightarrow \mu^+ \nu_\mu$	0.0008037	0.0008037	0	$2.436 \cdot 10^{-5}$	$2.436 \cdot 10^{-5}$	0

$u\bar{d} \rightarrow c\bar{s}$	0.0005098	0.0005098	0	$1.545 \cdot 10^{-5}$	$1.545 \cdot 10^{-5}$	0
$u\bar{d} \rightarrow u\bar{d}$	6.933	6.933	0	0.2752	0.2752	0
$u\bar{u} \rightarrow \nu_e \bar{\nu}_e$	$7.021 \cdot 10^{-5}$	$7.021 \cdot 10^{-5}$	0	$2.128 \cdot 10^{-6}$	$2.128 \cdot 10^{-6}$	0
$u\bar{u} \rightarrow c\bar{c}$	0.0003128	0.0003128	0	$9.483 \cdot 10^{-6}$	$9.483 \cdot 10^{-6}$	0
$u\bar{u} \rightarrow u\bar{u}$	-0.03783	-0.03783	0	0.0003419	0.0003419	0
$zz \rightarrow W^+W^-$	9.119	9.119	0	0.2764	0.2764	0
$zz \rightarrow zz$	0.008561	0.008561	0	0.0002595	0.0002595	0

### 2.30 cll1331

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$e^+\tau^- \rightarrow e^+\tau^-$	-0.1649	0	1	0.7017	0	1

### 2.31 cll2233

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$\mu^+\mu^- \rightarrow \tau^+\tau^-$	0.02419	0	1	0.176	0	1

### 2.32 cll2332

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$\mu^+\mu^- \rightarrow \tau^+\tau^-$	0.02419	0	1	0.176	0	1

### 2.33 cll3333

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$\nu_\tau \bar{\nu}_\tau \rightarrow \nu_\tau \bar{\nu}_\tau$	-0.0004255	0	1	0.0949	0	1

## 2.34 cp

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$HH \rightarrow HH$	0.4576	0.4576	0	0.5426	0.5426	0
$HH \rightarrow HHH$	$2.751 \cdot 10^{-6}$	$2.751 \cdot 10^{-6}$	0	$7.251 \cdot 10^{-5}$	$7.251 \cdot 10^{-5}$	0
$HH \rightarrow Ht\bar{t}$	$3.488 \cdot 10^{-5}$	$3.488 \cdot 10^{-5}$	0	$3.236 \cdot 10^{-5}$	$3.236 \cdot 10^{-5}$	0
$HH \rightarrow Hzz$	$-1.755 \cdot 10^{-5}$	$-1.755 \cdot 10^{-5}$	0	$3.184 \cdot 10^{-5}$	$3.184 \cdot 10^{-5}$	0
$HH \rightarrow W^+W^-$	6.695	6.695	0	0.1331	0.1331	0
$HH \rightarrow W^+W^-\gamma$	$-1.158 \cdot 10^{-7}$	$-1.158 \cdot 10^{-7}$	0	$2.358 \cdot 10^{-8}$	$2.358 \cdot 10^{-8}$	0
$HH \rightarrow W^+\bar{t}b$	$2.686 \cdot 10^{-5}$	$2.686 \cdot 10^{-5}$	0	$2.698 \cdot 10^{-6}$	$2.698 \cdot 10^{-6}$	0
$HH \rightarrow W^+e^-\bar{\nu}_e$	$2.544 \cdot 10^{-10}$	$2.544 \cdot 10^{-10}$	0	$7.382 \cdot 10^{-9}$	$7.382 \cdot 10^{-9}$	0
$HH \rightarrow W^-u\bar{d}$	$2.707 \cdot 10^{-10}$	$2.707 \cdot 10^{-10}$	0	$1.98 \cdot 10^{-9}$	$1.98 \cdot 10^{-9}$	0
$HH \rightarrow z\bar{b}b$	$1.198 \cdot 10^{-7}$	$1.198 \cdot 10^{-7}$	0	$2.979 \cdot 10^{-8}$	$2.979 \cdot 10^{-8}$	0
$HH \rightarrow z\nu_e\bar{\nu}_e$	$5.177 \cdot 10^{-8}$	$5.177 \cdot 10^{-8}$	0	$5.956 \cdot 10^{-8}$	$5.956 \cdot 10^{-8}$	0
$HH \rightarrow z\bar{c}c$	$5.144 \cdot 10^{-9}$	$5.144 \cdot 10^{-9}$	0	$3.153 \cdot 10^{-9}$	$3.153 \cdot 10^{-9}$	0
$HH \rightarrow z\bar{d}d$	$8.973 \cdot 10^{-7}$	$8.973 \cdot 10^{-7}$	0	$2.656 \cdot 10^{-7}$	$2.656 \cdot 10^{-7}$	0
$HH \rightarrow ze^+e^-$	$8.86 \cdot 10^{-10}$	$8.86 \cdot 10^{-10}$	0	$4.311 \cdot 10^{-11}$	$4.311 \cdot 10^{-11}$	0
$HH \rightarrow zt\bar{t}$	$-3.328 \cdot 10^{-6}$	$-3.328 \cdot 10^{-6}$	0	$5.967 \cdot 10^{-7}$	$5.967 \cdot 10^{-7}$	0
$HH \rightarrow zz$	0.02066	0.02066	0	0.06606	0.06606	0
$W^+W^- \rightarrow Ht\bar{t}$	$4.605 \cdot 10^{-7}$	$4.605 \cdot 10^{-7}$	0	$6.752 \cdot 10^{-8}$	$6.752 \cdot 10^{-8}$	0

## 2.35 cpBB

interference square



	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$HH \rightarrow Hzz$	$-3.266 \cdot 10^{-6}$	$-3.266 \cdot 10^{-6}$	0	$8.843 \cdot 10^{-7}$	$8.843 \cdot 10^{-7}$	0
$HH \rightarrow W^+W^-\gamma$	$-7.915 \cdot 10^{-7}$	$-7.915 \cdot 10^{-7}$	0	$1.909 \cdot 10^{-6}$	$1.909 \cdot 10^{-6}$	0
$HH \rightarrow z\bar{b}b$	$4.72 \cdot 10^{-7}$	$4.72 \cdot 10^{-7}$	0	$6.059 \cdot 10^{-7}$	$6.059 \cdot 10^{-7}$	0
$HH \rightarrow z\nu_e\bar{\nu}_e$	$-4.632 \cdot 10^{-7}$	$-4.632 \cdot 10^{-7}$	0	$1.286 \cdot 10^{-6}$	$1.286 \cdot 10^{-6}$	0
$HH \rightarrow z c\bar{c}$	$7.005 \cdot 10^{-8}$	$7.005 \cdot 10^{-8}$	0	$5.514 \cdot 10^{-7}$	$5.514 \cdot 10^{-7}$	0
$HH \rightarrow z d\bar{d}$	$-5.101 \cdot 10^{-7}$	$-5.101 \cdot 10^{-7}$	0	$4.322 \cdot 10^{-6}$	$4.322 \cdot 10^{-6}$	0
$HH \rightarrow ze^+e^-$	$2.885 \cdot 10^{-8}$	$2.885 \cdot 10^{-8}$	0	$1.347 \cdot 10^{-7}$	$1.347 \cdot 10^{-7}$	0
$HH \rightarrow z t\bar{t}$	$-1.311 \cdot 10^{-6}$	$-1.311 \cdot 10^{-6}$	0	$7.236 \cdot 10^{-7}$	$7.236 \cdot 10^{-7}$	0
$HH \rightarrow zz$	0.006265	0.006265	0	0.2052	0.2052	0
$HW^+ \rightarrow \gamma t\bar{b}$	$4.237 \cdot 10^{-7}$	$4.237 \cdot 10^{-7}$	0	$5.742 \cdot 10^{-8}$	$5.742 \cdot 10^{-8}$	0
$HW^+ \rightarrow \gamma u\bar{d}$	$1.307 \cdot 10^{-7}$	$1.307 \cdot 10^{-7}$	0	$5.314 \cdot 10^{-8}$	$5.314 \cdot 10^{-8}$	0
$HW^- \rightarrow \gamma e^-\bar{\nu}_e$	$4.503 \cdot 10^{-9}$	$4.503 \cdot 10^{-9}$	0	$4.332 \cdot 10^{-8}$	$4.332 \cdot 10^{-8}$	0
$H\gamma \rightarrow b\bar{b}$	0	0	0	0.005709	0.005709	0
$H\gamma \rightarrow c\bar{c}$	0	0	0	0.01702	0.01702	0
$H\gamma \rightarrow d\bar{d}$	0	0	0	0.005495	0.005495	0
$H\gamma \rightarrow e^+e^-$	0	0	0	0.02115	0.02115	0
$H\gamma \rightarrow t\bar{t}$	-0.01963	-0.01963	0	0.01964	0.01964	0
$H z \rightarrow \mu^+\mu^-$	0.0003061	0.0003061	0	0.003186	0.003186	0
$H z \rightarrow \nu_\tau\bar{\nu}_\tau$	0.001242	0.001242	0	0.001058	0.001058	0
$H z \rightarrow b\bar{b}$	0.001086	0.001086	0	0.001317	0.001317	0
$H z \rightarrow s\bar{s}$	0.001019	0.001019	0	0.001236	0.001236	0
$H z \rightarrow t\bar{t}$	-0.01362	-0.01362	0	0.005496	0.005496	0
$H z \rightarrow u\bar{u}$	0.0006424	0.0006424	0	0.005382	0.005382	0
$W^+W^- \rightarrow H b\bar{b}$	$-1.984 \cdot 10^{-8}$	$-1.984 \cdot 10^{-8}$	0	$2.331 \cdot 10^{-10}$	$2.331 \cdot 10^{-10}$	0
$W^+W^- \rightarrow H c\bar{c}$	$4.333 \cdot 10^{-9}$	$4.333 \cdot 10^{-9}$	0	$3.515 \cdot 10^{-10}$	$3.515 \cdot 10^{-10}$	0
$W^+W^- \rightarrow H d\bar{d}$	$-1.538 \cdot 10^{-8}$	$-1.538 \cdot 10^{-8}$	0	$2.251 \cdot 10^{-10}$	$2.251 \cdot 10^{-10}$	0
$W^+W^- \rightarrow H t\bar{t}$	$-5.907 \cdot 10^{-8}$	$-5.907 \cdot 10^{-8}$	0	$7.311 \cdot 10^{-10}$	$7.311 \cdot 10^{-10}$	0
$W^+W^- \rightarrow \gamma\gamma$	-0.04593	-0.04593	0	0.2694	0.2694	0

$W^+W^- \rightarrow \gamma\gamma\gamma$	$-1.797 \cdot 10^{-7}$	$-1.797 \cdot 10^{-7}$	0	$1.775 \cdot 10^{-6}$	$1.775 \cdot 10^{-6}$	0
$\gamma W^+ \rightarrow zW^+$	-0.03644	-0.03644	0	0.03653	0.03653	0
$zz \rightarrow W^+W^-$	-0.02347	-0.02347	0	0.04883	0.04883	0
$zz \rightarrow zz$	0.001833	0.001833	0	0.07348	0.07348	0

## 2.36 cpDC

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$HH \rightarrow HH$	0.04125	0.04125	0	0.00441	0.00441	0
$HH \rightarrow HHH$	$2.366 \cdot 10^{-7}$	$2.366 \cdot 10^{-7}$	0	$5.364 \cdot 10^{-7}$	$5.364 \cdot 10^{-7}$	0
$HH \rightarrow Ht\bar{t}$	$4.392 \cdot 10^{-6}$	$4.392 \cdot 10^{-6}$	0	$8.214 \cdot 10^{-7}$	$8.214 \cdot 10^{-7}$	0
$HH \rightarrow Hzz$	$2.692 \cdot 10^{-6}$	$2.692 \cdot 10^{-6}$	0	$2.202 \cdot 10^{-6}$	$2.202 \cdot 10^{-6}$	0
$HH \rightarrow W^+W^-$	4.09	4.09	0	0.04999	0.04999	0
$HH \rightarrow W^+W^-\gamma$	$-2.041 \cdot 10^{-7}$	$-2.041 \cdot 10^{-7}$	0	$5.909 \cdot 10^{-8}$	$5.909 \cdot 10^{-8}$	0
$HH \rightarrow W^+\bar{t}b$	$3.33 \cdot 10^{-5}$	$3.33 \cdot 10^{-5}$	0	$4.33 \cdot 10^{-6}$	$4.33 \cdot 10^{-6}$	0
$HH \rightarrow W^+e^-\bar{\nu}_e$	$-8.299 \cdot 10^{-9}$	$-8.299 \cdot 10^{-9}$	0	$1.407 \cdot 10^{-8}$	$1.407 \cdot 10^{-8}$	0
$HH \rightarrow W^-u\bar{d}$	$-6.974 \cdot 10^{-9}$	$-6.974 \cdot 10^{-9}$	0	$3.841 \cdot 10^{-9}$	$3.841 \cdot 10^{-9}$	0
$HH \rightarrow z\bar{b}b$	$-2.752 \cdot 10^{-7}$	$-2.752 \cdot 10^{-7}$	0	$1.961 \cdot 10^{-7}$	$1.961 \cdot 10^{-7}$	0
$HH \rightarrow z\nu_e\bar{\nu}_e$	$-1.172 \cdot 10^{-7}$	$-1.172 \cdot 10^{-7}$	0	$4.07 \cdot 10^{-7}$	$4.07 \cdot 10^{-7}$	0
$HH \rightarrow zc\bar{c}$	$4.1 \cdot 10^{-10}$	$4.1 \cdot 10^{-10}$	0	$2.199 \cdot 10^{-8}$	$2.199 \cdot 10^{-8}$	0
$HH \rightarrow zd\bar{d}$	$-2.128 \cdot 10^{-6}$	$-2.128 \cdot 10^{-6}$	0	$1.759 \cdot 10^{-6}$	$1.759 \cdot 10^{-6}$	0
$HH \rightarrow ze^+e^-$	$1.625 \cdot 10^{-9}$	$1.625 \cdot 10^{-9}$	0	$1.086 \cdot 10^{-9}$	$1.086 \cdot 10^{-9}$	0
$HH \rightarrow zt\bar{t}$	$1.542 \cdot 10^{-5}$	$1.542 \cdot 10^{-5}$	0	$1.268 \cdot 10^{-5}$	$1.268 \cdot 10^{-5}$	0
$HH \rightarrow zz$	-0.04948	-0.04948	0	0.452	0.452	0
$HW^+ \rightarrow \gamma t\bar{b}$	$-3.249 \cdot 10^{-7}$	$-3.249 \cdot 10^{-7}$	0	$1.054 \cdot 10^{-8}$	$1.054 \cdot 10^{-8}$	0
$HW^+ \rightarrow \gamma u\bar{d}$	$-1.625 \cdot 10^{-8}$	$-1.625 \cdot 10^{-8}$	0	$5.269 \cdot 10^{-10}$	$5.269 \cdot 10^{-10}$	0
$HW^+ \rightarrow u\bar{d}$	-0.0006467	-0.0006467	0	$4.9 \cdot 10^{-6}$	$4.9 \cdot 10^{-6}$	0
$HW^- \rightarrow \bar{t}b$	-0.04557	-0.04557	0	0.0003453	0.0003453	0

$HW^- \rightarrow \gamma e^- \bar{\nu}_e$	$-4.267 \cdot 10^{-10}$	$-4.267 \cdot 10^{-10}$	0	$1.384 \cdot 10^{-11}$	$1.384 \cdot 10^{-11}$	0
$HW^- \rightarrow \mu^- \bar{\nu}_\mu$	-0.00015	-0.00015	0	$1.137 \cdot 10^{-6}$	$1.137 \cdot 10^{-6}$	0
$H\gamma \rightarrow b\bar{b}$	0	0	0	0	$1.219 \cdot 10^{-38}$	$\infty$
$H\gamma \rightarrow c\bar{c}$	0	0	0	0	$8.363 \cdot 10^{-39}$	$\infty$
$H\gamma \rightarrow d\bar{d}$	0	0	0	0	$1.173 \cdot 10^{-38}$	$\infty$
$H\gamma \rightarrow e^+ e^-$	0	0	0	0	$3.453 \cdot 10^{-39}$	$\infty$
$H\gamma \rightarrow t\bar{t}$	-0.05908	-0.05908	0	0.001916	0.001916	0
$H z \rightarrow \mu^+ \mu^-$	$3.801 \cdot 10^{-5}$	$3.801 \cdot 10^{-5}$	0	$2.708 \cdot 10^{-5}$	$2.708 \cdot 10^{-5}$	0
$H z \rightarrow \nu_\tau \bar{\nu}_\tau$	$-1.103 \cdot 10^{-18}$	$4.004 \cdot 10^{-19}$	1.363	$1.757 \cdot 10^{-34}$	$2.838 \cdot 10^{-35}$	0.8384
$H z \rightarrow b\bar{b}$	0.0003035	0.0003035	0	$6.827 \cdot 10^{-6}$	$6.827 \cdot 10^{-6}$	0
$H z \rightarrow s\bar{s}$	0.0003383	0.0003383	0	$7.611 \cdot 10^{-6}$	$7.611 \cdot 10^{-6}$	0
$H z \rightarrow t\bar{t}$	0.01045	0.01045	0	0.01722	0.01722	0
$H z \rightarrow u\bar{u}$	0.000217	0.000217	0	$1.784 \cdot 10^{-5}$	$1.784 \cdot 10^{-5}$	0
$W^+ W^- \rightarrow H b\bar{b}$	$-1.534 \cdot 10^{-7}$	$-1.534 \cdot 10^{-7}$	0	$2.771 \cdot 10^{-9}$	$2.771 \cdot 10^{-9}$	0
$W^+ W^- \rightarrow H c\bar{c}$	$-2.305 \cdot 10^{-8}$	$-2.305 \cdot 10^{-8}$	0	$5.558 \cdot 10^{-10}$	$5.558 \cdot 10^{-10}$	0
$W^+ W^- \rightarrow H d\bar{d}$	$-1.157 \cdot 10^{-7}$	$-1.157 \cdot 10^{-7}$	0	$2.493 \cdot 10^{-9}$	$2.493 \cdot 10^{-9}$	0
$W^+ W^- \rightarrow H t\bar{t}$	$-1.492 \cdot 10^{-6}$	$-1.492 \cdot 10^{-6}$	0	$5.388 \cdot 10^{-7}$	$5.388 \cdot 10^{-7}$	0
$W^+ W^- \rightarrow W^+ W^-$	2.034	2.034	0	0.03117	0.03117	0
$W^+ W^- \rightarrow \gamma\gamma$	-0.02789	-0.02789	0	0.001386	0.001386	0
$W^+ W^- \rightarrow \gamma\gamma\gamma$	$-4.507 \cdot 10^{-6}$	$-4.507 \cdot 10^{-6}$	0	$3.36 \cdot 10^{-7}$	$3.36 \cdot 10^{-7}$	0
$\gamma W^+ \rightarrow z W^+$	-0.02044	-0.02044	0	0.000353	0.000353	0
$\mu^+ \mu^- \rightarrow \tau^+ \tau^-$	-0.003819	-0.003819	0	0.0002088	0.0002088	0
$\nu_\tau \bar{\nu}_\tau \rightarrow \nu_\tau \bar{\nu}_\tau$	$-2.892 \cdot 10^{-8}$	$-2.892 \cdot 10^{-8}$	0	$4.383 \cdot 10^{-10}$	$4.383 \cdot 10^{-10}$	0
$\nu_e \bar{\nu}_e \rightarrow \nu_\mu \bar{\nu}_\mu$	-0.0002716	-0.0002716	0	$4.116 \cdot 10^{-6}$	$4.116 \cdot 10^{-6}$	0
$b\bar{b} \rightarrow \gamma\gamma$	$-1.673 \cdot 10^{-5}$	$-1.673 \cdot 10^{-5}$	0	$8.316 \cdot 10^{-7}$	$8.316 \cdot 10^{-7}$	0
$b\bar{b} \rightarrow \mu^+ \mu^-$	$-7.163 \cdot 10^{-5}$	$-7.163 \cdot 10^{-5}$	0	$4.666 \cdot 10^{-6}$	$4.666 \cdot 10^{-6}$	0
$b\bar{b} \rightarrow \nu_e \bar{\nu}_e$	$-5.875 \cdot 10^{-5}$	$-5.875 \cdot 10^{-5}$	0	$5.448 \cdot 10^{-7}$	$5.448 \cdot 10^{-7}$	0
$b\bar{b} \rightarrow b\bar{b}$	$-5.122 \cdot 10^{-5}$	$-5.122 \cdot 10^{-5}$	0	$3.411 \cdot 10^{-6}$	$3.411 \cdot 10^{-6}$	0
$b\bar{b} \rightarrow d\bar{d}$	$-4.099 \cdot 10^{-5}$	$-4.099 \cdot 10^{-5}$	0	$1.296 \cdot 10^{-6}$	$1.296 \cdot 10^{-6}$	0

$b\bar{b} \rightarrow t\bar{t}$	0.0004828	0.0004828	0	$1.023 \cdot 10^{-5}$	$1.023 \cdot 10^{-5}$	0
$b\bar{b} \rightarrow u\bar{u}$	$-5.078 \cdot 10^{-5}$	$-5.078 \cdot 10^{-5}$	0	$5.632 \cdot 10^{-6}$	$5.632 \cdot 10^{-6}$	0
$c\bar{c} \rightarrow \mu^+\mu^-$	-0.0001692	-0.0001692	0	$1.097 \cdot 10^{-5}$	$1.097 \cdot 10^{-5}$	0
$d\bar{d} \rightarrow c\bar{c}$	$-4.226 \cdot 10^{-5}$	$-4.226 \cdot 10^{-5}$	0	$3.728 \cdot 10^{-6}$	$3.728 \cdot 10^{-6}$	0
$d\bar{d} \rightarrow e^+e^-$	$-3.701 \cdot 10^{-5}$	$-3.701 \cdot 10^{-5}$	0	$4.31 \cdot 10^{-6}$	$4.31 \cdot 10^{-6}$	0
$d\bar{d} \rightarrow s\bar{s}$	$-2.328 \cdot 10^{-5}$	$-2.328 \cdot 10^{-5}$	0	$1.323 \cdot 10^{-6}$	$1.323 \cdot 10^{-6}$	0
$e^+\nu_\mu \rightarrow e^+\nu_\mu$	-0.01735	-0.01735	0	0.002101	0.002101	0
$e^+\nu_e \rightarrow e^+\nu_e$	-0.002105	-0.002105	0	0.0001863	0.0001863	0
$e^+\tau^- \rightarrow e^+\tau^-$	-0.009172	-0.009172	0	0.0005627	0.0005627	0
$e^+e^- \rightarrow \mu^+\mu^-$	-0.004994	-0.004994	0	0.0002723	0.0002723	0
$e^+e^- \rightarrow e^+e^-$	-0.06949	-0.06949	0	0.004124	0.004124	0
$s\bar{s} \rightarrow \nu_\tau\bar{\nu}_\tau$	$-2.948 \cdot 10^{-5}$	$-2.948 \cdot 10^{-5}$	0	$1.328 \cdot 10^{-6}$	$1.328 \cdot 10^{-6}$	0
$s\bar{s} \rightarrow s\bar{s}$	0.01167	0.01167	0	$4.977 \cdot 10^{-5}$	$4.977 \cdot 10^{-5}$	0
$t\bar{t} \rightarrow \nu_\mu\bar{\nu}_\mu$	-0.0001323	-0.0001323	0	$9.386 \cdot 10^{-6}$	$9.386 \cdot 10^{-6}$	0
$t\bar{t} \rightarrow \tau^+\tau^-$	-0.0004224	-0.0004224	0	$2.352 \cdot 10^{-5}$	$2.352 \cdot 10^{-5}$	0
$t\bar{t} \rightarrow c\bar{c}$	-0.0004305	-0.0004305	0	$2.477 \cdot 10^{-5}$	$2.477 \cdot 10^{-5}$	0
$t\bar{t} \rightarrow d\bar{d}$	$-7.715 \cdot 10^{-5}$	$-7.715 \cdot 10^{-5}$	0	$1.068 \cdot 10^{-5}$	$1.068 \cdot 10^{-5}$	0
$t\bar{t} \rightarrow s\bar{s}$	$-4.851 \cdot 10^{-5}$	$-4.851 \cdot 10^{-5}$	0	$4.023 \cdot 10^{-6}$	$4.023 \cdot 10^{-6}$	0
$t\bar{t} \rightarrow t\bar{t}$	0.09131	0.09131	0	0.001097	0.001097	0
$u\bar{d} \rightarrow u\bar{d}$	-0.0001104	-0.0001104	0	$7.88 \cdot 10^{-6}$	$7.88 \cdot 10^{-6}$	0
$u\bar{u} \rightarrow \nu_e\bar{\nu}_e$	-0.0001434	-0.0001434	0	$9.317 \cdot 10^{-6}$	$9.317 \cdot 10^{-6}$	0
$u\bar{u} \rightarrow c\bar{c}$	-0.0005692	-0.0005692	0	$3.343 \cdot 10^{-5}$	$3.343 \cdot 10^{-5}$	0
$u\bar{u} \rightarrow u\bar{u}$	0.001613	0.001613	0	$2.422 \cdot 10^{-5}$	$2.422 \cdot 10^{-5}$	0
$zz \rightarrow W^+W^-$	1.397	1.397	0	0.0221	0.0221	0
$zz \rightarrow zz$	0.004939	0.004939	0	$7.486 \cdot 10^{-5}$	$7.486 \cdot 10^{-5}$	0

## 2.37 cpG

interference

square

	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$gg \rightarrow t\bar{t}$	-0.04838	-0.04838	0	0.04035	0.04035	0

### 2.38 cpQ3

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$HH \rightarrow W^+ \bar{t}b$	$4.433 \cdot 10^{-5}$	$4.433 \cdot 10^{-5}$	0	$2.566 \cdot 10^{-5}$	$2.566 \cdot 10^{-5}$	0
$HH \rightarrow z \bar{b}b$	$2.088 \cdot 10^{-6}$	$2.088 \cdot 10^{-6}$	0	$1.722 \cdot 10^{-6}$	$1.722 \cdot 10^{-6}$	0
$HW^+ \rightarrow \gamma t \bar{b}$	$-3.811 \cdot 10^{-6}$	$-3.811 \cdot 10^{-6}$	0	$4.813 \cdot 10^{-6}$	$4.813 \cdot 10^{-6}$	0
$HW^- \rightarrow \bar{t}b$	-2.241	-2.241	0	1.488	1.488	0
$H z \rightarrow b \bar{b}$	0.3524	0.3524	0	3.06	3.06	0
$W^+ W^- \rightarrow H b \bar{b}$	$-1.211 \cdot 10^{-6}$	$-1.211 \cdot 10^{-6}$	0	$3.18 \cdot 10^{-7}$	$3.18 \cdot 10^{-7}$	0
$W^+ W^- \rightarrow H t \bar{t}$	$1.097 \cdot 10^{-5}$	$1.097 \cdot 10^{-5}$	0	$1.826 \cdot 10^{-5}$	$1.826 \cdot 10^{-5}$	0
$\bar{b}t \rightarrow \bar{d}u$	0.001958	0.001958	0	$5.935 \cdot 10^{-5}$	$5.935 \cdot 10^{-5}$	0
$b \bar{b} \rightarrow \mu^+ \mu^-$	0.0001032	0.0001032	0	$1.829 \cdot 10^{-5}$	$1.829 \cdot 10^{-5}$	0
$b \bar{b} \rightarrow \nu_e \bar{\nu}_e$	0.0006656	0.0006656	0	$4.78 \cdot 10^{-5}$	$4.78 \cdot 10^{-5}$	0
$b \bar{b} \rightarrow b \bar{b}$	0.0001324	0.0001324	0	$2.706 \cdot 10^{-5}$	$2.706 \cdot 10^{-5}$	0
$b \bar{b} \rightarrow d \bar{d}$	0.0006834	0.0006834	0	$4.543 \cdot 10^{-5}$	$4.543 \cdot 10^{-5}$	0
$b \bar{b} \rightarrow t \bar{t}$	0.3712	0.3712	0	0.03529	0.03529	0
$b \bar{b} \rightarrow u \bar{u}$	0.0008527	0.0008527	0	$5.127 \cdot 10^{-5}$	$5.127 \cdot 10^{-5}$	0
$b \bar{t} \rightarrow e^- \bar{\nu}_e$	0.0001195	0.0001195	0	$3.622 \cdot 10^{-6}$	$3.622 \cdot 10^{-6}$	0

### 2.39 cpQM

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$HH \rightarrow z \bar{b}b$	$1.044 \cdot 10^{-6}$	$1.044 \cdot 10^{-6}$	0	$4.304 \cdot 10^{-7}$	$4.304 \cdot 10^{-7}$	0
$HH \rightarrow z t \bar{t}$	$2.203 \cdot 10^{-5}$	$2.203 \cdot 10^{-5}$	0	$2.636 \cdot 10^{-5}$	$2.636 \cdot 10^{-5}$	0

$H z \rightarrow b\bar{b}$	0.1762	0.1762	0	0.7651	0.7651	0
$H z \rightarrow t\bar{t}$	2.065	2.065	0	1.143	1.143	0
$W^+W^- \rightarrow Hb\bar{b}$	$1.107 \cdot 10^{-6}$	$1.107 \cdot 10^{-6}$	0	$1.953 \cdot 10^{-7}$	$1.953 \cdot 10^{-7}$	0
$W^+W^- \rightarrow Ht\bar{t}$	$-4.575 \cdot 10^{-7}$	$-4.575 \cdot 10^{-7}$	0	$3.294 \cdot 10^{-6}$	$3.294 \cdot 10^{-6}$	0
$b\bar{b} \rightarrow \mu^+\mu^-$	$5.161 \cdot 10^{-5}$	$5.161 \cdot 10^{-5}$	0	$4.573 \cdot 10^{-6}$	$4.573 \cdot 10^{-6}$	0
$b\bar{b} \rightarrow \nu_e\bar{\nu}_e$	0.0003328	0.0003328	0	$1.195 \cdot 10^{-5}$	$1.195 \cdot 10^{-5}$	0
$b\bar{b} \rightarrow b\bar{b}$	$6.618 \cdot 10^{-5}$	$6.618 \cdot 10^{-5}$	0	$6.766 \cdot 10^{-6}$	$6.766 \cdot 10^{-6}$	0
$b\bar{b} \rightarrow d\bar{d}$	0.0003417	0.0003417	0	$1.136 \cdot 10^{-5}$	$1.136 \cdot 10^{-5}$	0
$b\bar{b} \rightarrow t\bar{t}$	-0.001474	-0.001474	0	$1.624 \cdot 10^{-6}$	$1.624 \cdot 10^{-6}$	0
$b\bar{b} \rightarrow u\bar{u}$	0.0004264	0.0004264	0	$1.282 \cdot 10^{-5}$	$1.282 \cdot 10^{-5}$	0
$t\bar{t} \rightarrow \nu_\mu\bar{\nu}_\mu$	$2.968 \cdot 10^{-6}$	$2.968 \cdot 10^{-6}$	0	$1.831 \cdot 10^{-7}$	$1.831 \cdot 10^{-7}$	0
$t\bar{t} \rightarrow \tau^+\tau^-$	-0.0001698	-0.0001698	0	$3.92 \cdot 10^{-6}$	$3.92 \cdot 10^{-6}$	0
$t\bar{t} \rightarrow c\bar{c}$	-0.0005089	-0.0005089	0	$1.485 \cdot 10^{-5}$	$1.485 \cdot 10^{-5}$	0
$t\bar{t} \rightarrow d\bar{d}$	-0.001057	-0.001057	0	$3.694 \cdot 10^{-5}$	$3.694 \cdot 10^{-5}$	0
$t\bar{t} \rightarrow s\bar{s}$	$-2.076 \cdot 10^{-6}$	$-2.076 \cdot 10^{-6}$	0	$2.245 \cdot 10^{-6}$	$2.245 \cdot 10^{-6}$	0
$t\bar{t} \rightarrow t\bar{t}$	0.1617	0.1617	0	0.009126	0.009126	0

## 2.40 cpW

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$HH \rightarrow Hzz$	$1.094 \cdot 10^{-6}$	$1.094 \cdot 10^{-6}$	0	$6.607 \cdot 10^{-6}$	$6.607 \cdot 10^{-6}$	0
$HH \rightarrow W^+W^-$	-0.03036	-0.03036	0	7.804	7.804	0
$HH \rightarrow W^+W^-\gamma$	$1.264 \cdot 10^{-7}$	$1.264 \cdot 10^{-7}$	0	$6.278 \cdot 10^{-5}$	$6.278 \cdot 10^{-5}$	0
$HH \rightarrow W^+t\bar{b}$	$-2.643 \cdot 10^{-7}$	$-2.643 \cdot 10^{-7}$	0	$4.011 \cdot 10^{-6}$	$4.011 \cdot 10^{-6}$	0
$HH \rightarrow W^+e^-\bar{\nu}_e$	$-1.156 \cdot 10^{-7}$	$-1.156 \cdot 10^{-7}$	0	$4.092 \cdot 10^{-7}$	$4.092 \cdot 10^{-7}$	0
$HH \rightarrow W^-u\bar{d}$	$-3.922 \cdot 10^{-6}$	$-3.922 \cdot 10^{-6}$	0	$4.498 \cdot 10^{-5}$	$4.498 \cdot 10^{-5}$	0
$HH \rightarrow z\bar{b}b$	$5.018 \cdot 10^{-7}$	$5.018 \cdot 10^{-7}$	0	$1.413 \cdot 10^{-6}$	$1.413 \cdot 10^{-6}$	0
$HH \rightarrow z\nu_e\bar{\nu}_e$	$5.923 \cdot 10^{-8}$	$5.923 \cdot 10^{-8}$	0	$6.042 \cdot 10^{-7}$	$6.042 \cdot 10^{-7}$	0

$HH \rightarrow zc\bar{c}$	$1.241 \cdot 10^{-6}$	$1.241 \cdot 10^{-6}$	0	$4.793 \cdot 10^{-6}$	$4.793 \cdot 10^{-6}$	0
$HH \rightarrow zd\bar{d}$	$-3.143 \cdot 10^{-6}$	$-3.143 \cdot 10^{-6}$	0	$2.225 \cdot 10^{-5}$	$2.225 \cdot 10^{-5}$	0
$HH \rightarrow ze^+e^-$	$-1.149 \cdot 10^{-8}$	$-1.149 \cdot 10^{-8}$	0	$5.327 \cdot 10^{-7}$	$5.327 \cdot 10^{-7}$	0
$HH \rightarrow zt\bar{t}$	$-3.117 \cdot 10^{-6}$	$-3.117 \cdot 10^{-6}$	0	$5.899 \cdot 10^{-6}$	$5.899 \cdot 10^{-6}$	0
$HH \rightarrow zz$	0.03222	0.03222	0	2.276	2.276	0
$HW^+ \rightarrow \gamma t\bar{b}$	$-4.232 \cdot 10^{-7}$	$-4.232 \cdot 10^{-7}$	0	$2.496 \cdot 10^{-7}$	$2.496 \cdot 10^{-7}$	0
$HW^+ \rightarrow \gamma u\bar{d}$	$-1.01 \cdot 10^{-7}$	$-1.01 \cdot 10^{-7}$	0	$2.121 \cdot 10^{-6}$	$2.121 \cdot 10^{-6}$	0
$HW^+ \rightarrow u\bar{d}$	0.01179	0.01179	0	0.05611	0.05611	0
$HW^- \rightarrow t\bar{b}$	-0.1427	-0.1427	0	0.07302	0.07302	0
$HW^- \rightarrow \gamma e^- \bar{\nu}_e$	$1.871 \cdot 10^{-7}$	$1.871 \cdot 10^{-7}$	0	$8.83 \cdot 10^{-7}$	$8.83 \cdot 10^{-7}$	0
$HW^- \rightarrow \mu^- \bar{\nu}_\mu$	0.003829	0.003829	0	0.01821	0.01821	0
$H\gamma \rightarrow b\bar{b}$	0	0	0	0.01375	0.01375	0
$H\gamma \rightarrow c\bar{c}$	0	0	0	0.01166	0.01166	0
$H\gamma \rightarrow d\bar{d}$	0	0	0	0.01398	0.01398	0
$H\gamma \rightarrow e^+e^-$	0	0	0	0.004833	0.004833	0
$H\gamma \rightarrow t\bar{t}$	-0.02755	-0.02755	0	0.01171	0.01171	0
$H z \rightarrow \mu^+ \mu^-$	0.001307	0.001307	0	0.006804	0.006804	0
$H z \rightarrow \nu_\tau \bar{\nu}_\tau$	0.004219	0.004219	0	0.01179	0.01179	0
$H z \rightarrow b\bar{b}$	0.01026	0.01026	0	0.0339	0.0339	0
$H z \rightarrow s\bar{s}$	0.006168	0.006168	0	0.02038	0.02038	0
$H z \rightarrow t\bar{t}$	-0.04291	-0.04291	0	0.02495	0.02495	0
$H z \rightarrow u\bar{u}$	0.007544	0.007544	0	0.0305	0.0305	0
$W^+W^- \rightarrow Hb\bar{b}$	$-1.59 \cdot 10^{-7}$	$-1.59 \cdot 10^{-7}$	0	$1.318 \cdot 10^{-7}$	$1.318 \cdot 10^{-7}$	0
$W^+W^- \rightarrow Hc\bar{c}$	$-1.612 \cdot 10^{-7}$	$-1.612 \cdot 10^{-7}$	0	$7.903 \cdot 10^{-8}$	$7.903 \cdot 10^{-8}$	0
$W^+W^- \rightarrow Hd\bar{d}$	$-1.193 \cdot 10^{-6}$	$-1.193 \cdot 10^{-6}$	0	$1.569 \cdot 10^{-7}$	$1.569 \cdot 10^{-7}$	0
$W^+W^- \rightarrow Ht\bar{t}$	$5.619 \cdot 10^{-6}$	$5.619 \cdot 10^{-6}$	0	$2.172 \cdot 10^{-5}$	$2.172 \cdot 10^{-5}$	0
$W^+W^- \rightarrow W^+W^-$	0.1914	0.1914	0	1.993	1.993	0
$W^+W^- \rightarrow \gamma\gamma$	-0.01269	-0.01269	0	0.02506	0.02506	0
$W^+W^- \rightarrow \gamma\gamma\gamma$	$-3.474 \cdot 10^{-9}$	$-3.474 \cdot 10^{-9}$	0	$1.199 \cdot 10^{-8}$	$1.199 \cdot 10^{-8}$	0

$\gamma W^+ \rightarrow z W^+$	0.02377	0.02377	0	0.01592	0.01592	0
$zz \rightarrow W^+ W^-$	-0.3635	-0.3635	0	1.42	1.42	0
$zz \rightarrow zz$	0.006009	0.006009	0	0.7956	0.7956	0

## 2.41 cpWB

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$HH \rightarrow Hzz$	$6.04 \cdot 10^{-7}$	$6.04 \cdot 10^{-7}$	0	$2.015 \cdot 10^{-6}$	$2.015 \cdot 10^{-6}$	0
$HH \rightarrow W^+ W^- \gamma$	$-4.036 \cdot 10^{-7}$	$-4.036 \cdot 10^{-7}$	0	$1.026 \cdot 10^{-5}$	$1.026 \cdot 10^{-5}$	0
$HH \rightarrow z \bar{b} b$	$2.143 \cdot 10^{-7}$	$2.143 \cdot 10^{-7}$	0	$2.364 \cdot 10^{-7}$	$2.364 \cdot 10^{-7}$	0
$HH \rightarrow z \nu_e \bar{\nu}_e$	$3.271 \cdot 10^{-8}$	$3.271 \cdot 10^{-8}$	0	$1.843 \cdot 10^{-7}$	$1.843 \cdot 10^{-7}$	0
$HH \rightarrow z c \bar{c}$	$4.479 \cdot 10^{-7}$	$4.479 \cdot 10^{-7}$	0	$8.047 \cdot 10^{-7}$	$8.047 \cdot 10^{-7}$	0
$HH \rightarrow z d \bar{d}$	$-1.321 \cdot 10^{-6}$	$-1.321 \cdot 10^{-6}$	0	$3.933 \cdot 10^{-6}$	$3.933 \cdot 10^{-6}$	0
$HH \rightarrow z e^+ e^-$	$-5.34 \cdot 10^{-9}$	$-5.34 \cdot 10^{-9}$	0	$1.635 \cdot 10^{-7}$	$1.635 \cdot 10^{-7}$	0
$HH \rightarrow z t \bar{t}$	$-1.493 \cdot 10^{-6}$	$-1.493 \cdot 10^{-6}$	0	$1.013 \cdot 10^{-6}$	$1.013 \cdot 10^{-6}$	0
$HH \rightarrow zz$	0.01779	0.01779	0	0.6941	0.6941	0
$HW^+ \rightarrow \gamma t \bar{b}$	$-1.656 \cdot 10^{-7}$	$-1.656 \cdot 10^{-7}$	0	$6.487 \cdot 10^{-7}$	$6.487 \cdot 10^{-7}$	0
$HW^+ \rightarrow \gamma u \bar{d}$	$-3.397 \cdot 10^{-8}$	$-3.397 \cdot 10^{-8}$	0	$3.366 \cdot 10^{-6}$	$3.366 \cdot 10^{-6}$	0
$HW^- \rightarrow \gamma e^- \bar{\nu}_e$	$-9.562 \cdot 10^{-8}$	$-9.562 \cdot 10^{-8}$	0	$1.13 \cdot 10^{-8}$	$1.13 \cdot 10^{-8}$	0
$H\gamma \rightarrow b \bar{b}$	0	0	0	0.009526	0.009526	0
$H\gamma \rightarrow c \bar{c}$	0	0	0	0.0131	0.0131	0
$H\gamma \rightarrow d \bar{d}$	0	0	0	0.009679	0.009679	0
$H\gamma \rightarrow e^+ e^-$	0	0	0	0.008167	0.008167	0
$H\gamma \rightarrow t \bar{t}$	-0.09067	-0.09067	0	0.01685	0.01685	0
$H z \rightarrow \mu^+ \mu^-$	0.0006766	0.0006766	0	0.002037	0.002037	0
$H z \rightarrow \nu_\tau \bar{\nu}_\tau$	0.00233	0.00233	0	0.003595	0.003595	0
$H z \rightarrow b \bar{b}$	0.004289	0.004289	0	0.005812	0.005812	0
$H z \rightarrow s \bar{s}$	0.00294	0.00294	0	0.003503	0.003503	0



$H z \rightarrow t \bar{t}$	-0.01136	-0.01136	0	0.00502	0.00502	0
$H z \rightarrow u \bar{u}$	0.002907	0.002907	0	0.005131	0.005131	0
$W^+ W^- \rightarrow H b \bar{b}$	$-8.69 \cdot 10^{-8}$	$-8.69 \cdot 10^{-8}$	0	$4.395 \cdot 10^{-8}$	$4.395 \cdot 10^{-8}$	0
$W^+ W^- \rightarrow H c \bar{c}$	$1.207 \cdot 10^{-8}$	$1.207 \cdot 10^{-8}$	0	$6.431 \cdot 10^{-8}$	$6.431 \cdot 10^{-8}$	0
$W^+ W^- \rightarrow H d \bar{d}$	$-9.669 \cdot 10^{-8}$	$-9.669 \cdot 10^{-8}$	0	$3.78 \cdot 10^{-8}$	$3.78 \cdot 10^{-8}$	0
$W^+ W^- \rightarrow H t \bar{t}$	$1.223 \cdot 10^{-5}$	$1.223 \cdot 10^{-5}$	0	$5.789 \cdot 10^{-7}$	$5.789 \cdot 10^{-7}$	0
$W^+ W^- \rightarrow W^+ W^-$	-0.1023	-0.1023	0	0.02642	0.02642	0
$W^+ W^- \rightarrow \gamma \gamma$	-0.1811	-0.1811	0	0.1121	0.1121	0
$W^+ W^- \rightarrow \gamma \gamma \gamma$	$-2.948 \cdot 10^{-7}$	$-2.948 \cdot 10^{-7}$	0	$9.748 \cdot 10^{-8}$	$9.748 \cdot 10^{-8}$	0
$\gamma W^+ \rightarrow z W^+$	0.08442	0.08442	0	0.698	0.698	0
$\mu^+ \mu^- \rightarrow \tau^+ \tau^-$	-0.003996	-0.003996	0	0.0004694	0.0004694	0
$\nu_\tau \bar{\nu}_\tau \rightarrow \nu_\tau \bar{\nu}_\tau$	$-1.97 \cdot 10^{-24}$	0	1	$1.148 \cdot 10^{-41}$	0	1
$\nu_e \bar{\nu}_e \rightarrow \nu_\mu \bar{\nu}_\mu$	$3.319 \cdot 10^{-19}$	0	1	$1.881 \cdot 10^{-36}$	0	1
$b \bar{b} \rightarrow \gamma \gamma$	$-3.908 \cdot 10^{-5}$	$-3.908 \cdot 10^{-5}$	0	$4.29 \cdot 10^{-6}$	$4.29 \cdot 10^{-6}$	0
$b \bar{b} \rightarrow \mu^+ \mu^-$	-0.0002034	-0.0002034	0	$2.282 \cdot 10^{-5}$	$2.282 \cdot 10^{-5}$	0
$b \bar{b} \rightarrow \nu_e \bar{\nu}_e$	$-3.086 \cdot 10^{-5}$	$-3.086 \cdot 10^{-5}$	0	$1.715 \cdot 10^{-6}$	$1.715 \cdot 10^{-6}$	0
$b \bar{b} \rightarrow b \bar{b}$	0.006994	0.006994	0	$5.884 \cdot 10^{-5}$	$5.884 \cdot 10^{-5}$	0
$b \bar{b} \rightarrow d \bar{d}$	$2.213 \cdot 10^{-5}$	$2.213 \cdot 10^{-5}$	0	$1.137 \cdot 10^{-6}$	$1.137 \cdot 10^{-6}$	0
$b \bar{b} \rightarrow t \bar{t}$	0.0005079	0.0005079	0	$3.127 \cdot 10^{-5}$	$3.127 \cdot 10^{-5}$	0
$b \bar{b} \rightarrow u \bar{u}$	-0.0001547	-0.0001547	0	$3.296 \cdot 10^{-5}$	$3.296 \cdot 10^{-5}$	0
$c \bar{c} \rightarrow \mu^+ \mu^-$	-0.0004312	-0.0004312	0	$7.957 \cdot 10^{-5}$	$7.957 \cdot 10^{-5}$	0
$d \bar{d} \rightarrow c \bar{c}$	$-2.079 \cdot 10^{-5}$	$-2.079 \cdot 10^{-5}$	0	$1.223 \cdot 10^{-5}$	$1.223 \cdot 10^{-5}$	0
$d \bar{d} \rightarrow e^+ e^-$	-0.0001595	-0.0001595	0	$1.835 \cdot 10^{-5}$	$1.835 \cdot 10^{-5}$	0
$d \bar{d} \rightarrow s \bar{s}$	$5.833 \cdot 10^{-5}$	$5.833 \cdot 10^{-5}$	0	$2.809 \cdot 10^{-6}$	$2.809 \cdot 10^{-6}$	0
$e^+ \nu_\mu \rightarrow e^+ \nu_\mu$	-0.004781	-0.004781	0	0.00111	0.00111	0
$e^+ \nu_e \rightarrow e^+ \nu_e$	-0.001128	-0.001128	0	$7.066 \cdot 10^{-5}$	$7.066 \cdot 10^{-5}$	0
$e^+ \tau^- \rightarrow e^+ \tau^-$	-0.01298	-0.01298	0	0.001978	0.001978	0
$e^+ e^- \rightarrow \mu^+ \mu^-$	-0.004016	-0.004016	0	0.0004695	0.0004695	0
$e^+ e^- \rightarrow e^+ e^-$	-0.04051	-0.04051	0	0.006049	0.006049	0

$s\bar{s} \rightarrow \nu_\tau \bar{\nu}_\tau$	0.0001004	0.0001004	0	$1.159 \cdot 10^{-6}$	$1.159 \cdot 10^{-6}$	0
$s\bar{s} \rightarrow s\bar{s}$	0.00288	0.00288	0	$2.018 \cdot 10^{-5}$	$2.018 \cdot 10^{-5}$	0
$t\bar{t} \rightarrow \nu_\mu \bar{\nu}_\mu$	$-8.371 \cdot 10^{-5}$	$-8.371 \cdot 10^{-5}$	0	$6.074 \cdot 10^{-6}$	$6.074 \cdot 10^{-6}$	0
$t\bar{t} \rightarrow \tau^+ \tau^-$	-0.0006308	-0.0006308	0	$7.119 \cdot 10^{-5}$	$7.119 \cdot 10^{-5}$	0
$t\bar{t} \rightarrow c\bar{c}$	-0.0005234	-0.0005234	0	$8.577 \cdot 10^{-5}$	$8.577 \cdot 10^{-5}$	0
$t\bar{t} \rightarrow d\bar{d}$	-0.000139	-0.000139	0	$2.763 \cdot 10^{-5}$	$2.763 \cdot 10^{-5}$	0
$t\bar{t} \rightarrow s\bar{s}$	$-7.868 \cdot 10^{-5}$	$-7.868 \cdot 10^{-5}$	0	$1.754 \cdot 10^{-5}$	$1.754 \cdot 10^{-5}$	0
$t\bar{t} \rightarrow t\bar{t}$	0.00937	0.00937	0	0.0002451	0.0002451	0
$u\bar{d} \rightarrow u\bar{d}$	-0.0009041	-0.0009041	0	0.0003189	0.0003189	0
$u\bar{u} \rightarrow \nu_e \bar{\nu}_e$	$-4.649 \cdot 10^{-5}$	$-4.649 \cdot 10^{-5}$	0	$4.445 \cdot 10^{-6}$	$4.445 \cdot 10^{-6}$	0
$u\bar{u} \rightarrow c\bar{c}$	-0.0009566	-0.0009566	0	$8.611 \cdot 10^{-5}$	$8.611 \cdot 10^{-5}$	0
$u\bar{u} \rightarrow u\bar{u}$	0.0609	0.0609	0	0.002772	0.002772	0
$zz \rightarrow W^+ W^-$	0.2166	0.2166	0	0.1816	0.1816	0
$zz \rightarrow zz$	0.003318	0.003318	0	0.2426	0.2426	0

## 2.42 cpd

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$HH \rightarrow z\bar{b}b$	$-1.919 \cdot 10^{-7}$	$-1.919 \cdot 10^{-7}$	0	$4.286 \cdot 10^{-7}$	$4.286 \cdot 10^{-7}$	0
$HH \rightarrow z\bar{d}d$	$-3.371 \cdot 10^{-7}$	$-3.371 \cdot 10^{-7}$	0	$2.289 \cdot 10^{-7}$	$2.289 \cdot 10^{-7}$	0
$H z \rightarrow b\bar{b}$	-0.03252	-0.03252	0	0.7651	0.7651	0
$H z \rightarrow s\bar{s}$	-0.03605	-0.03605	0	0.8436	0.8436	0
$W^+ W^- \rightarrow H b\bar{b}$	$-2.695 \cdot 10^{-8}$	$-2.695 \cdot 10^{-8}$	0	$1.95 \cdot 10^{-7}$	$1.95 \cdot 10^{-7}$	0
$W^+ W^- \rightarrow H d\bar{d}$	$-4.074 \cdot 10^{-8}$	$-4.074 \cdot 10^{-8}$	0	$2.813 \cdot 10^{-7}$	$2.813 \cdot 10^{-7}$	0
$b\bar{b} \rightarrow \mu^+ \mu^-$	$5.594 \cdot 10^{-5}$	$5.594 \cdot 10^{-5}$	0	$5.927 \cdot 10^{-6}$	$5.927 \cdot 10^{-6}$	0
$b\bar{b} \rightarrow \nu_e \bar{\nu}_e$	$-9.847 \cdot 10^{-6}$	$-9.847 \cdot 10^{-6}$	0	$1.916 \cdot 10^{-6}$	$1.916 \cdot 10^{-6}$	0
$b\bar{b} \rightarrow b\bar{b}$	-0.0003979	-0.0003979	0	0.0001969	0.0001969	0
$b\bar{b} \rightarrow d\bar{d}$	$-7.496 \cdot 10^{-5}$	$-7.496 \cdot 10^{-5}$	0	$3.008 \cdot 10^{-5}$	$3.008 \cdot 10^{-5}$	0

$b\bar{b} \rightarrow t\bar{t}$	$-9.445 \cdot 10^{-5}$	$-9.445 \cdot 10^{-5}$	0	$4.774 \cdot 10^{-6}$	$4.774 \cdot 10^{-6}$	0
$b\bar{b} \rightarrow u\bar{u}$	$-3.886 \cdot 10^{-5}$	$-3.886 \cdot 10^{-5}$	0	$7.936 \cdot 10^{-6}$	$7.936 \cdot 10^{-6}$	0
$d\bar{d} \rightarrow c\bar{c}$	$8.458 \cdot 10^{-6}$	$8.458 \cdot 10^{-6}$	0	$1.361 \cdot 10^{-5}$	$1.361 \cdot 10^{-5}$	0
$d\bar{d} \rightarrow e^+e^-$	$-1.931 \cdot 10^{-5}$	$-1.931 \cdot 10^{-5}$	0	$2.899 \cdot 10^{-6}$	$2.899 \cdot 10^{-6}$	0
$d\bar{d} \rightarrow s\bar{s}$	$-0.0001438$	$-0.0001438$	0	$6.91 \cdot 10^{-5}$	$6.91 \cdot 10^{-5}$	0
$s\bar{s} \rightarrow \nu_\tau \bar{\nu}_\tau$	$-5.87 \cdot 10^{-5}$	$-5.87 \cdot 10^{-5}$	0	$1.142 \cdot 10^{-5}$	$1.142 \cdot 10^{-5}$	0
$s\bar{s} \rightarrow s\bar{s}$	0.01134	0.01134	0	0.001469	0.001469	0
$t\bar{t} \rightarrow d\bar{d}$	$-9.88 \cdot 10^{-5}$	$-9.88 \cdot 10^{-5}$	0	$5.114 \cdot 10^{-6}$	$5.114 \cdot 10^{-6}$	0
$t\bar{t} \rightarrow s\bar{s}$	$7.122 \cdot 10^{-5}$	$7.122 \cdot 10^{-5}$	0	$2.608 \cdot 10^{-5}$	$2.608 \cdot 10^{-5}$	0
$u\bar{d} \rightarrow u\bar{d}$	0.0001238	0.0001238	0	$5.319 \cdot 10^{-5}$	$5.319 \cdot 10^{-5}$	0

## 2.43 cpe

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$HH \rightarrow ze^+e^-$	$-6.714 \cdot 10^{-7}$	$-6.714 \cdot 10^{-7}$	0	$2.781 \cdot 10^{-6}$	$2.781 \cdot 10^{-6}$	0
$d\bar{d} \rightarrow e^+e^-$	$-3.264 \cdot 10^{-5}$	$-3.264 \cdot 10^{-5}$	0	$3.693 \cdot 10^{-6}$	$3.693 \cdot 10^{-6}$	0
$e^+\nu_\mu \rightarrow e^+\nu_\mu$	-0.02781	-0.02781	0	0.001803	0.001803	0
$e^+\nu_e \rightarrow e^+\nu_e$	-0.002768	-0.002768	0	0.0001795	0.0001795	0
$e^+\tau^- \rightarrow e^+\tau^-$	0.001161	0.001161	0	$6.407 \cdot 10^{-5}$	$6.407 \cdot 10^{-5}$	0
$e^+e^- \rightarrow \mu^+\mu^-$	-0.0009266	-0.0009266	0	$1.418 \cdot 10^{-5}$	$1.418 \cdot 10^{-5}$	0
$e^+e^- \rightarrow e^+e^-$	0.008586	0.008586	0	0.0009639	0.0009639	0

## 2.44 cpl1

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$HH \rightarrow z\nu_e \bar{\nu}_e$	$-5.607 \cdot 10^{-7}$	$-5.607 \cdot 10^{-7}$	0	$7.476 \cdot 10^{-7}$	$7.476 \cdot 10^{-7}$	0
$HH \rightarrow ze^+e^-$	$2.217 \cdot 10^{-7}$	$2.217 \cdot 10^{-7}$	0	$5.688 \cdot 10^{-7}$	$5.688 \cdot 10^{-7}$	0

$\nu_e \bar{\nu}_e \rightarrow \nu_\mu \bar{\nu}_\mu$	-0.00179	-0.00179	0	$5.425 \cdot 10^{-5}$	$5.425 \cdot 10^{-5}$	0
$b\bar{b} \rightarrow \nu_e \bar{\nu}_e$	$-1.82 \cdot 10^{-5}$	$-1.82 \cdot 10^{-5}$	0	$5.516 \cdot 10^{-7}$	$5.516 \cdot 10^{-7}$	0
$d\bar{d} \rightarrow e^+ e^-$	0.0002631	0.0002631	0	$9.875 \cdot 10^{-6}$	$9.875 \cdot 10^{-6}$	0
$e^+ \nu_\mu \rightarrow e^+ \nu_\mu$	0.009711	0.009711	0	0.0005527	0.0005527	0
$e^+ \nu_e \rightarrow e^+ \nu_e$	-0.0006229	-0.0006229	0	$2.155 \cdot 10^{-5}$	$2.155 \cdot 10^{-5}$	0
$e^+ \tau^- \rightarrow e^+ \tau^-$	-0.0007888	-0.0007888	0	$3.322 \cdot 10^{-5}$	$3.322 \cdot 10^{-5}$	0
$e^+ e^- \rightarrow \mu^+ \mu^-$	0.000148	0.000148	0	$8.749 \cdot 10^{-6}$	$8.749 \cdot 10^{-6}$	0
$e^+ e^- \rightarrow e^+ e^-$	-0.004347	-0.004347	0	0.000225	0.000225	0
$u\bar{u} \rightarrow \nu_e \bar{\nu}_e$	$-6.775 \cdot 10^{-5}$	$-6.775 \cdot 10^{-5}$	0	$2.054 \cdot 10^{-6}$	$2.054 \cdot 10^{-6}$	0

## 2.45 cpl2

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$H z \rightarrow \mu^+ \mu^-$	0.05004	0.05004	0	0.3425	0.3425	0
$\mu^+ \mu^- \rightarrow \tau^+ \tau^-$	-0.0002584	-0.0002584	0	$1.047 \cdot 10^{-5}$	$1.047 \cdot 10^{-5}$	0
$\nu_e \bar{\nu}_e \rightarrow \nu_\mu \bar{\nu}_\mu$	$-1.216 \cdot 10^{-5}$	$-1.216 \cdot 10^{-5}$	0	$3.687 \cdot 10^{-7}$	$3.687 \cdot 10^{-7}$	0
$b\bar{b} \rightarrow \mu^+ \mu^-$	$2.992 \cdot 10^{-5}$	$2.992 \cdot 10^{-5}$	0	$1.741 \cdot 10^{-6}$	$1.741 \cdot 10^{-6}$	0
$c\bar{c} \rightarrow \mu^+ \mu^-$	0.0004282	0.0004282	0	$1.064 \cdot 10^{-5}$	$1.064 \cdot 10^{-5}$	0
$e^+ \nu_\mu \rightarrow e^+ \nu_\mu$	-0.1368	-0.1368	0	0.004147	0.004147	0
$e^+ e^- \rightarrow \mu^+ \mu^-$	0.0008746	0.0008746	0	$1.474 \cdot 10^{-5}$	$1.474 \cdot 10^{-5}$	0
$t\bar{t} \rightarrow \nu_\mu \bar{\nu}_\mu$	-0.0003263	-0.0003263	0	$9.892 \cdot 10^{-6}$	$9.892 \cdot 10^{-6}$	0

## 2.46 cpl3

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$H z \rightarrow \nu_\tau \bar{\nu}_\tau$	-0.06254	-0.06254	0	0.228	0.228	0
$\mu^+ \mu^- \rightarrow \tau^+ \tau^-$	-0.0002584	-0.0002584	0	$1.047 \cdot 10^{-5}$	$1.047 \cdot 10^{-5}$	0

$\nu_\tau \bar{\nu}_\tau \rightarrow \nu_\tau \bar{\nu}_\tau$	-0.09263	-0.09263	0	0.005616	0.005616	0
$e^+ \tau^- \rightarrow e^+ \tau^-$	-0.000607	-0.000607	0	$1.896 \cdot 10^{-5}$	$1.896 \cdot 10^{-5}$	0
$s\bar{s} \rightarrow \nu_\tau \bar{\nu}_\tau$	-0.0003597	-0.0003597	0	$1.09 \cdot 10^{-5}$	$1.09 \cdot 10^{-5}$	0
$t\bar{t} \rightarrow \tau^+ \tau^-$	0.0001488	0.0001488	0	$4.17 \cdot 10^{-6}$	$4.17 \cdot 10^{-6}$	0

## 2.47 cpmu

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$H z \rightarrow \mu^+ \mu^-$	-0.04392	-0.04392	0	0.3425	0.3425	0
$\mu^+ \mu^- \rightarrow \tau^+ \tau^-$	0.0003117	0.0003117	0	$1.313 \cdot 10^{-5}$	$1.313 \cdot 10^{-5}$	0
$b\bar{b} \rightarrow \mu^+ \mu^-$	$-5.437 \cdot 10^{-5}$	$-5.437 \cdot 10^{-5}$	0	$8.34 \cdot 10^{-6}$	$8.34 \cdot 10^{-6}$	0
$c\bar{c} \rightarrow \mu^+ \mu^-$	-0.0001428	-0.0001428	0	$2.184 \cdot 10^{-6}$	$2.184 \cdot 10^{-6}$	0
$e^+ e^- \rightarrow \mu^+ \mu^-$	-0.0007136	-0.0007136	0	$1.153 \cdot 10^{-5}$	$1.153 \cdot 10^{-5}$	0

## 2.48 cpq3i

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$HH \rightarrow W^- u \bar{d}$	$7.328 \cdot 10^{-7}$	$7.328 \cdot 10^{-7}$	0	$1.108 \cdot 10^{-6}$	$1.108 \cdot 10^{-6}$	0
$HH \rightarrow z d \bar{d}$	$3.645 \cdot 10^{-6}$	$3.645 \cdot 10^{-6}$	0	$9.136 \cdot 10^{-7}$	$9.136 \cdot 10^{-7}$	0
$HW^+ \rightarrow \gamma u \bar{d}$	$1.388 \cdot 10^{-7}$	$1.388 \cdot 10^{-7}$	0	$3.986 \cdot 10^{-8}$	$3.986 \cdot 10^{-8}$	0
$HW^+ \rightarrow u \bar{d}$	0.4059	0.4059	0	1.931	1.931	0
$H z \rightarrow s \bar{s}$	0.3907	0.3907	0	3.374	3.374	0
$W^+ W^- \rightarrow H c \bar{c}$	$2.239 \cdot 10^{-7}$	$2.239 \cdot 10^{-7}$	0	$1.814 \cdot 10^{-6}$	$1.814 \cdot 10^{-6}$	0
$W^+ W^- \rightarrow H d \bar{d}$	$-3.579 \cdot 10^{-7}$	$-3.579 \cdot 10^{-7}$	0	$1.085 \cdot 10^{-6}$	$1.085 \cdot 10^{-6}$	0
$\bar{b} t \rightarrow \bar{d} u$	0.001958	0.001958	0	$5.935 \cdot 10^{-5}$	$5.935 \cdot 10^{-5}$	0
$b\bar{b} \rightarrow d\bar{d}$	0.0006834	0.0006834	0	$4.543 \cdot 10^{-5}$	$4.543 \cdot 10^{-5}$	0
$c\bar{s} \rightarrow \tau^+ \nu_\tau$	0.00108	0.00108	0	$3.275 \cdot 10^{-5}$	$3.275 \cdot 10^{-5}$	0

$d\bar{d} \rightarrow c\bar{c}$	0.0004073	0.0004073	0	$3.008 \cdot 10^{-5}$	$3.008 \cdot 10^{-5}$	0
$d\bar{d} \rightarrow e^+e^-$	0.0001892	0.0001892	0	$1.209 \cdot 10^{-5}$	$1.209 \cdot 10^{-5}$	0
$d\bar{d} \rightarrow s\bar{s}$	0.0002331	0.0002331	0	$3.277 \cdot 10^{-5}$	$3.277 \cdot 10^{-5}$	0
$s\bar{s} \rightarrow \nu_\tau\bar{\nu}_\tau$	0.000119	0.000119	0	$8.544 \cdot 10^{-6}$	$8.544 \cdot 10^{-6}$	0
$s\bar{s} \rightarrow s\bar{s}$	-0.1139	-0.1139	0	0.005796	0.005796	0
$t\bar{t} \rightarrow d\bar{d}$	0.001701	0.001701	0	$9.537 \cdot 10^{-5}$	$9.537 \cdot 10^{-5}$	0
$t\bar{t} \rightarrow s\bar{s}$	0.000122	0.000122	0	$2.075 \cdot 10^{-5}$	$2.075 \cdot 10^{-5}$	0
$u\bar{d} \rightarrow \mu^+\nu_\mu$	0.0003078	0.0003078	0	$9.331 \cdot 10^{-6}$	$9.331 \cdot 10^{-6}$	0
$u\bar{d} \rightarrow c\bar{s}$	0.0003889	0.0003889	0	$2.358 \cdot 10^{-5}$	$2.358 \cdot 10^{-5}$	0
$u\bar{d} \rightarrow u\bar{d}$	-0.0009443	-0.0009443	0	$9.7 \cdot 10^{-5}$	$9.7 \cdot 10^{-5}$	0

## 2.49 cpqMi

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$HH \rightarrow zc\bar{c}$	$-7.705 \cdot 10^{-7}$	$-7.705 \cdot 10^{-7}$	0	$9.167 \cdot 10^{-7}$	$9.167 \cdot 10^{-7}$	0
$HH \rightarrow zd\bar{d}$	$1.822 \cdot 10^{-6}$	$1.822 \cdot 10^{-6}$	0	$2.284 \cdot 10^{-7}$	$2.284 \cdot 10^{-7}$	0
$H z \rightarrow s\bar{s}$	0.1953	0.1953	0	0.8436	0.8436	0
$H z \rightarrow u\bar{u}$	-0.09335	-0.09335	0	0.4943	0.4943	0
$W^+W^- \rightarrow Hc\bar{c}$	$-4.318 \cdot 10^{-9}$	$-4.318 \cdot 10^{-9}$	0	$1.733 \cdot 10^{-7}$	$1.733 \cdot 10^{-7}$	0
$W^+W^- \rightarrow Hd\bar{d}$	$7.218 \cdot 10^{-7}$	$7.218 \cdot 10^{-7}$	0	$2.824 \cdot 10^{-7}$	$2.824 \cdot 10^{-7}$	0
$b\bar{b} \rightarrow d\bar{d}$	0.0003417	0.0003417	0	$1.136 \cdot 10^{-5}$	$1.136 \cdot 10^{-5}$	0
$b\bar{b} \rightarrow u\bar{u}$	-0.0005043	-0.0005043	0	$1.785 \cdot 10^{-5}$	$1.785 \cdot 10^{-5}$	0
$c\bar{c} \rightarrow \mu^+\mu^-$	$4.363 \cdot 10^{-5}$	$4.363 \cdot 10^{-5}$	0	$4.344 \cdot 10^{-6}$	$4.344 \cdot 10^{-6}$	0
$d\bar{d} \rightarrow c\bar{c}$	$-3.903 \cdot 10^{-6}$	$-3.903 \cdot 10^{-6}$	0	$3.481 \cdot 10^{-6}$	$3.481 \cdot 10^{-6}$	0
$d\bar{d} \rightarrow e^+e^-$	$9.461 \cdot 10^{-5}$	$9.461 \cdot 10^{-5}$	0	$3.023 \cdot 10^{-6}$	$3.023 \cdot 10^{-6}$	0
$d\bar{d} \rightarrow s\bar{s}$	0.0001166	0.0001166	0	$8.193 \cdot 10^{-6}$	$8.193 \cdot 10^{-6}$	0
$s\bar{s} \rightarrow \nu_\tau\bar{\nu}_\tau$	$5.949 \cdot 10^{-5}$	$5.949 \cdot 10^{-5}$	0	$2.136 \cdot 10^{-6}$	$2.136 \cdot 10^{-6}$	0
$s\bar{s} \rightarrow s\bar{s}$	-0.05697	-0.05697	0	0.001449	0.001449	0

$t\bar{t} \rightarrow c\bar{c}$	-0.0005008	-0.0005008	0	$1.396 \cdot 10^{-5}$	$1.396 \cdot 10^{-5}$	0
$t\bar{t} \rightarrow d\bar{d}$	0.0008503	0.0008503	0	$2.384 \cdot 10^{-5}$	$2.384 \cdot 10^{-5}$	0
$t\bar{t} \rightarrow s\bar{s}$	$6.1 \cdot 10^{-5}$	$6.1 \cdot 10^{-5}$	0	$5.189 \cdot 10^{-6}$	$5.189 \cdot 10^{-6}$	0
$u\bar{d} \rightarrow u\bar{d}$	0.0001158	0.0001158	0	$1.362 \cdot 10^{-5}$	$1.362 \cdot 10^{-5}$	0
$u\bar{u} \rightarrow \nu_e \bar{\nu}_e$	$-1.57 \cdot 10^{-6}$	$-1.57 \cdot 10^{-6}$	0	$6.914 \cdot 10^{-8}$	$6.914 \cdot 10^{-8}$	0
$u\bar{u} \rightarrow c\bar{c}$	-0.001504	-0.001504	0	$8.06 \cdot 10^{-5}$	$8.06 \cdot 10^{-5}$	0
$u\bar{u} \rightarrow u\bar{u}$	0.002928	0.002928	0	$4.967 \cdot 10^{-5}$	$4.967 \cdot 10^{-5}$	0

## 2.50 cpt

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$HH \rightarrow zt\bar{t}$	$-1.435 \cdot 10^{-5}$	$-1.435 \cdot 10^{-5}$	0	$1.471 \cdot 10^{-5}$	$1.471 \cdot 10^{-5}$	0
$H\bar{z} \rightarrow t\bar{t}$	-2.22	-2.22	0	1.488	1.488	0
$W^+W^- \rightarrow Ht\bar{t}$	$1.955 \cdot 10^{-5}$	$1.955 \cdot 10^{-5}$	0	$1.462 \cdot 10^{-6}$	$1.462 \cdot 10^{-6}$	0
$b\bar{b} \rightarrow t\bar{t}$	-0.0006223	-0.0006223	0	$2.242 \cdot 10^{-6}$	$2.242 \cdot 10^{-6}$	0
$t\bar{t} \rightarrow \nu_\mu \bar{\nu}_\mu$	0.0001584	0.0001584	0	$1.694 \cdot 10^{-5}$	$1.694 \cdot 10^{-5}$	0
$t\bar{t} \rightarrow \tau^+ \tau^-$	$1.309 \cdot 10^{-5}$	$1.309 \cdot 10^{-5}$	0	$3.138 \cdot 10^{-6}$	$3.138 \cdot 10^{-6}$	0
$t\bar{t} \rightarrow c\bar{c}$	$-8.694 \cdot 10^{-5}$	$-8.694 \cdot 10^{-5}$	0	$1.758 \cdot 10^{-5}$	$1.758 \cdot 10^{-5}$	0
$t\bar{t} \rightarrow d\bar{d}$	$1.622 \cdot 10^{-5}$	$1.622 \cdot 10^{-5}$	0	$3.827 \cdot 10^{-6}$	$3.827 \cdot 10^{-6}$	0
$t\bar{t} \rightarrow s\bar{s}$	$2.755 \cdot 10^{-5}$	$2.755 \cdot 10^{-5}$	0	$1.199 \cdot 10^{-5}$	$1.199 \cdot 10^{-5}$	0
$t\bar{t} \rightarrow t\bar{t}$	-0.03476	-0.03476	0	0.008753	0.008753	0

## 2.51 cpta

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$\mu^+ \mu^- \rightarrow \tau^+ \tau^-$	$-7.216 \cdot 10^{-5}$	$-7.216 \cdot 10^{-5}$	0	$8.954 \cdot 10^{-6}$	$8.954 \cdot 10^{-6}$	0
$e^+ \tau^- \rightarrow e^+ \tau^-$	0.0009666	0.0009666	0	$4.134 \cdot 10^{-5}$	$4.134 \cdot 10^{-5}$	0

$$t\bar{t} \rightarrow \tau^+ \tau^- \quad -6.805 \cdot 10^{-6} \quad -6.805 \cdot 10^{-6} \quad 0 \quad 3.352 \cdot 10^{-6} \quad 3.352 \cdot 10^{-6} \quad 0$$

## 2.52 cpu

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$HH \rightarrow z c \bar{c}$	$3.488 \cdot 10^{-7}$	$3.488 \cdot 10^{-7}$	0	$9.168 \cdot 10^{-7}$	$9.168 \cdot 10^{-7}$	0
$H z \rightarrow u \bar{u}$	0.04225	0.04225	0	0.4943	0.4943	0
$W^+ W^- \rightarrow H c \bar{c}$	$3.292 \cdot 10^{-8}$	$3.292 \cdot 10^{-8}$	0	$1.733 \cdot 10^{-7}$	$1.733 \cdot 10^{-7}$	0
$b \bar{b} \rightarrow u \bar{u}$	$6.042 \cdot 10^{-5}$	$6.042 \cdot 10^{-5}$	0	$8.934 \cdot 10^{-6}$	$8.934 \cdot 10^{-6}$	0
$c \bar{c} \rightarrow \mu^+ \mu^-$	-0.0001048	-0.0001048	0	$5.616 \cdot 10^{-6}$	$5.616 \cdot 10^{-6}$	0
$d \bar{d} \rightarrow c \bar{c}$	$8.896 \cdot 10^{-5}$	$8.896 \cdot 10^{-5}$	0	$1.921 \cdot 10^{-5}$	$1.921 \cdot 10^{-5}$	0
$t \bar{t} \rightarrow c \bar{c}$	$8.265 \cdot 10^{-5}$	$8.265 \cdot 10^{-5}$	0	$6.883 \cdot 10^{-6}$	$6.883 \cdot 10^{-6}$	0
$u \bar{d} \rightarrow u \bar{d}$	0.000322	0.000322	0	$7.933 \cdot 10^{-5}$	$7.933 \cdot 10^{-5}$	0
$u \bar{u} \rightarrow \nu_e \bar{\nu}_e$	0.0002154	0.0002154	0	$2.096 \cdot 10^{-5}$	$2.096 \cdot 10^{-5}$	0
$u \bar{u} \rightarrow c \bar{c}$	0.0003413	0.0003413	0	$1.976 \cdot 10^{-5}$	$1.976 \cdot 10^{-5}$	0
$u \bar{u} \rightarrow u \bar{u}$	-0.002025	-0.002025	0	0.0001586	0.0001586	0

## 2.53 ctG

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$b \bar{b} \rightarrow t \bar{t}$	-0.06081	-0.06081	$2.631 \cdot 10^{-7}$	0.03879	0.03879	$4.898 \cdot 10^{-7}$
$g g \rightarrow t \bar{t}$	0.2349	0.2349	$2.129 \cdot 10^{-7}$	0.1388	0.1388	$5.043 \cdot 10^{-7}$
$t \bar{t} \rightarrow c \bar{c}$	0.2406	0.2406	$2.493 \cdot 10^{-7}$	0.06571	0.06571	$5.022 \cdot 10^{-7}$
$t \bar{t} \rightarrow d \bar{d}$	0.2406	0.2406	$2.493 \cdot 10^{-7}$	0.04181	0.04181	$5.023 \cdot 10^{-7}$
$t \bar{t} \rightarrow s \bar{s}$	0.2406	0.2406	$2.493 \cdot 10^{-7}$	0.03498	0.03498	$4.859 \cdot 10^{-7}$
$t \bar{t} \rightarrow t \bar{t}$	0.3419	0.3419	$2.632 \cdot 10^{-7}$	1.573	1.573	$5.085 \cdot 10^{-7}$



## 2.54 ctW

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$HH \rightarrow W^+ \bar{t}b$	0.0001123	0.0001123	0	$2.36 \cdot 10^{-5}$	$2.36 \cdot 10^{-5}$	0
$HH \rightarrow z t \bar{t}$	$2.477 \cdot 10^{-12}$	0	1	$6.842 \cdot 10^{-17}$	0	1
$HW^+ \rightarrow \gamma t \bar{b}$	$8.25 \cdot 10^{-7}$	$8.25 \cdot 10^{-7}$	$-3.018 \cdot 10^{-6}$	$9.802 \cdot 10^{-6}$	$9.802 \cdot 10^{-6}$	$-1.489 \cdot 10^{-6}$
$HW^- \rightarrow \gamma t \bar{b}$	-0.1953	-0.1953	0	1.697	1.697	0
$H\gamma \rightarrow t \bar{t}$	-0.6101	-0.6101	$-1.065 \cdot 10^{-6}$	15.46	15.46	$-2.135 \cdot 10^{-6}$
$H z \rightarrow t \bar{t}$	$-4.395 \cdot 10^{-8}$	0	1	$5.561 \cdot 10^{-12}$	0	1
$W^+ W^- \rightarrow H b \bar{b}$	$-2.452 \cdot 10^{-7}$	$-2.452 \cdot 10^{-7}$	0	$2.976 \cdot 10^{-6}$	$2.976 \cdot 10^{-6}$	0
$W^+ W^- \rightarrow H t \bar{t}$	$2.406 \cdot 10^{-7}$	$2.406 \cdot 10^{-7}$	$-2.494 \cdot 10^{-7}$	$2.309 \cdot 10^{-5}$	$2.309 \cdot 10^{-5}$	$8.662 \cdot 10^{-8}$
$\bar{b} t \rightarrow \bar{d} u$	0.008875	0.008875	0	0.01328	0.01328	0
$b \bar{b} \rightarrow t \bar{t}$	-0.1135	-0.1135	$-8.808 \cdot 10^{-8}$	0.199	0.199	$-5.025 \cdot 10^{-8}$
$b \bar{t} \rightarrow e^- \bar{\nu}_e$	0.002546	0.002546	0	0.004386	0.004386	0
$t \bar{t} \rightarrow \nu_\mu \bar{\nu}_\mu$	$3.171 \cdot 10^{-9}$	0	1	$1.625 \cdot 10^{-15}$	0	1
$t \bar{t} \rightarrow \tau^+ \tau^-$	0.007716	0.007716	$-9.721 \cdot 10^{-7}$	0.01948	0.01948	$-2.054 \cdot 10^{-6}$
$t \bar{t} \rightarrow c \bar{c}$	0.006297	0.006297	$-7.623 \cdot 10^{-7}$	0.01941	0.01941	$-1.752 \cdot 10^{-6}$
$t \bar{t} \rightarrow d \bar{d}$	0.0007994	0.0007994	$-7.631 \cdot 10^{-7}$	0.003947	0.003947	$-6.841 \cdot 10^{-7}$
$t \bar{t} \rightarrow s \bar{s}$	0.002567	0.002567	0	0.006447	0.006447	$-6.825 \cdot 10^{-7}$
$t \bar{t} \rightarrow t \bar{t}$	-0.053	-0.053	$-8.49 \cdot 10^{-7}$	0.1076	0.1076	$-1.766 \cdot 10^{-6}$

## 2.55 ctZ

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$HH \rightarrow z t \bar{t}$	$1.935 \cdot 10^{-6}$	$1.935 \cdot 10^{-6}$	$-1.085 \cdot 10^{-6}$	$4.223 \cdot 10^{-5}$	$4.223 \cdot 10^{-5}$	$-2.179 \cdot 10^{-6}$
$HW^+ \rightarrow \gamma t \bar{b}$	$6.273 \cdot 10^{-7}$	$6.273 \cdot 10^{-7}$	$-1.084 \cdot 10^{-6}$	$5.144 \cdot 10^{-6}$	$5.144 \cdot 10^{-6}$	$-2.197 \cdot 10^{-6}$
$H\gamma \rightarrow t \bar{t}$	0.756	0.756	$-1.085 \cdot 10^{-6}$	8.851	8.851	$-2.192 \cdot 10^{-6}$

$H z \rightarrow t\bar{t}$	-0.03677	-0.03677	$-1.088 \cdot 10^{-6}$	3.792	3.792	$-2.189 \cdot 10^{-6}$
$W^+ W^- \rightarrow H t\bar{t}$	$-6.635 \cdot 10^{-7}$	$-6.635 \cdot 10^{-7}$	$-1.1 \cdot 10^{-6}$	$1.04 \cdot 10^{-7}$	$1.04 \cdot 10^{-7}$	$-2.211 \cdot 10^{-6}$
$b\bar{b} \rightarrow t\bar{t}$	0.02263	0.02263	$-1.105 \cdot 10^{-6}$	0.002802	0.002802	$-2.177 \cdot 10^{-6}$
$t\bar{t} \rightarrow \nu_\mu \bar{\nu}_\mu$	-0.0005832	-0.0005832	$-1.097 \cdot 10^{-6}$	0.002053	0.002053	$-2.192 \cdot 10^{-6}$
$t\bar{t} \rightarrow \tau^+ \tau^-$	-0.005593	-0.005593	$-1.109 \cdot 10^{-6}$	0.01635	0.01635	$-2.141 \cdot 10^{-6}$
$t\bar{t} \rightarrow c\bar{c}$	-0.004629	-0.004629	$-1.102 \cdot 10^{-6}$	0.01609	0.01609	$-2.175 \cdot 10^{-6}$
$t\bar{t} \rightarrow d\bar{d}$	0.0009097	0.0009097	$-1.099 \cdot 10^{-6}$	0.004035	0.004035	$-2.181 \cdot 10^{-6}$
$t\bar{t} \rightarrow s\bar{s}$	0.0003599	0.0003599	$-1.084 \cdot 10^{-6}$	0.005483	0.005483	$-2.189 \cdot 10^{-6}$
$t\bar{t} \rightarrow t\bar{t}$	0.03661	0.03661	$-1.12 \cdot 10^{-6}$	0.04344	0.04344	$-2.21 \cdot 10^{-6}$

## 2.56 ctd1

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$b\bar{b} \rightarrow t\bar{t}$	-0.02697	-0.02697	0	0.4651	0.4651	0
$t\bar{t} \rightarrow d\bar{d}$	-0.002022	-0.002022	0	0.02816	0.02816	0
$t\bar{t} \rightarrow s\bar{s}$	-0.01023	-0.01023	0	0.1719	0.1719	0

## 2.57 ctd8

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$b\bar{b} \rightarrow t\bar{t}$	0.3257	0.3257	0	0.1034	0.1034	0
$t\bar{t} \rightarrow d\bar{d}$	0.03803	0.03803	0	0.006259	0.006259	0
$t\bar{t} \rightarrow s\bar{s}$	0.1327	0.1327	0	0.03821	0.03821	0

## 2.58 cte3

interference	square
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	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$t\bar{t} \rightarrow \tau^+\tau^-$	-0.01489	-0.01489	0	0.08453	0.08453	0

## 2.59 ctl2

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$t\bar{t} \rightarrow \nu_\mu\bar{\nu}_\mu$	-0.01889	-0.01889	0	0.2409	0.2409	0

## 2.60 ctl3

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$t\bar{t} \rightarrow \tau^+\tau^-$	-0.007421	-0.007421	0	0.06027	0.06027	0

## 2.61 ctIS3

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$t\bar{t} \rightarrow \tau^+\tau^-$	0	0	0	0.1668	0	1

## 2.62 ctIT3

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$t\bar{t} \rightarrow \tau^+\tau^-$	0	0	0	0.5951	0.5951	0

## 2.63 ctp

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$HH \rightarrow Ht\bar{t}$	$1.359 \cdot 10^{-5}$	$1.359 \cdot 10^{-5}$	0	$1.06 \cdot 10^{-5}$	$1.06 \cdot 10^{-5}$	0
$HH \rightarrow W^+t\bar{b}$	$3.545 \cdot 10^{-6}$	$3.545 \cdot 10^{-6}$	0	$2.051 \cdot 10^{-6}$	$2.051 \cdot 10^{-6}$	0
$HH \rightarrow zt\bar{t}$	$-3.856 \cdot 10^{-6}$	$-3.856 \cdot 10^{-6}$	0	$1.865 \cdot 10^{-6}$	$1.865 \cdot 10^{-6}$	0
$HW^+ \rightarrow \gamma t\bar{b}$	$6.17 \cdot 10^{-8}$	$6.17 \cdot 10^{-8}$	0	$1.255 \cdot 10^{-7}$	$1.255 \cdot 10^{-7}$	0
$HW^- \rightarrow \bar{t}b$	0.0502	0.0502	0	0.05048	0.05048	0
$H\gamma \rightarrow t\bar{t}$	-0.0559	-0.0559	0	0.001715	0.001715	0
$H z \rightarrow t\bar{t}$	-0.006668	-0.006668	0	0.06763	0.06763	0
$W^+W^- \rightarrow Hb\bar{b}$	$4.712 \cdot 10^{-7}$	$4.712 \cdot 10^{-7}$	0	$3.501 \cdot 10^{-8}$	$3.501 \cdot 10^{-8}$	0
$W^+W^- \rightarrow Ht\bar{t}$	$-9.427 \cdot 10^{-7}$	$-9.427 \cdot 10^{-7}$	0	$7.024 \cdot 10^{-7}$	$7.024 \cdot 10^{-7}$	0
$t\bar{t} \rightarrow t\bar{t}$	0.1303	0.1303	0	0.008999	0.008999	0

## 2.64 ctq1

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$t\bar{t} \rightarrow c\bar{c}$	0.02431	0.02431	0	0.6374	0.6374	0
$t\bar{t} \rightarrow d\bar{d}$	0.01556	0.01556	0	0.7426	0.7426	0
$t\bar{t} \rightarrow s\bar{s}$	0.004955	0.004955	0	0.3781	0.3781	0

## 2.65 ctq8

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$t\bar{t} \rightarrow c\bar{c}$	0.3532	0.3532	0	0.1126	0.1126	0
$t\bar{t} \rightarrow d\bar{d}$	0.05559	0.05559	0	0.01219	0.01219	0

$t\bar{t} \rightarrow s\bar{s}$	0.1703	0.1703	0	0.0509	0.0509	0
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## 2.66 ctt1

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$t\bar{t} \rightarrow t\bar{t}$	0.01101	0.01101	0	0.1328	0.1328	0

## 2.67 ctu1

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$t\bar{t} \rightarrow c\bar{c}$	0.04827	0.04827	0	0.4154	0.4154	0

## 2.68 ctu8

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$t\bar{t} \rightarrow c\bar{c}$	0.05469	0.05469	0	0.01188	0.01188	0

## 2.69 sm

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$HH \rightarrow HH$	0	0	0	0.09647	0.09647	0
$HH \rightarrow HHH$	0	0	0	$2.609 \cdot 10^{-8}$	$2.609 \cdot 10^{-8}$	0
$HH \rightarrow Ht\bar{t}$	0	0	0	$1.928 \cdot 10^{-5}$	$1.928 \cdot 10^{-5}$	0
$HH \rightarrow Hzz$	0	0	0	$1.097 \cdot 10^{-5}$	$1.097 \cdot 10^{-5}$	0

$HH \rightarrow W^+W^-$	0	0	0	84.33	84.33	0
$HH \rightarrow W^+W^-\gamma$	0	0	0	$2.804 \cdot 10^{-7}$	$2.804 \cdot 10^{-7}$	0
$HH \rightarrow W^+\bar{t}b$	0	0	0	$7.826 \cdot 10^{-5}$	$7.826 \cdot 10^{-5}$	0
$HH \rightarrow W^+e^-\bar{\nu}_e$	0	0	0	$1.427 \cdot 10^{-7}$	$1.427 \cdot 10^{-7}$	0
$HH \rightarrow W^-u\bar{d}$	0	0	0	$1.212 \cdot 10^{-7}$	$1.212 \cdot 10^{-7}$	0
$HH \rightarrow z\bar{b}b$	0	0	0	$6.546 \cdot 10^{-7}$	$6.546 \cdot 10^{-7}$	0
$HH \rightarrow z\nu_e\bar{\nu}_e$	0	0	0	$6.102 \cdot 10^{-7}$	$6.102 \cdot 10^{-7}$	0
$HH \rightarrow zc\bar{c}$	0	0	0	$1.951 \cdot 10^{-7}$	$1.951 \cdot 10^{-7}$	0
$HH \rightarrow zd\bar{d}$	0	0	0	$3.76 \cdot 10^{-6}$	$3.76 \cdot 10^{-6}$	0
$HH \rightarrow ze^+e^-$	0	0	0	$9.314 \cdot 10^{-8}$	$9.314 \cdot 10^{-8}$	0
$HH \rightarrow zt\bar{t}$	0	0	0	$1.293 \cdot 10^{-5}$	$1.293 \cdot 10^{-5}$	0
$HH \rightarrow zz$	0	0	0	0.07703	0.07703	0
$HW^+ \rightarrow \gamma t\bar{b}$	0	0	0	$2.505 \cdot 10^{-6}$	$2.505 \cdot 10^{-6}$	0
$HW^+ \rightarrow \gamma u\bar{d}$	0	0	0	$1.253 \cdot 10^{-7}$	$1.253 \cdot 10^{-7}$	0
$HW^+ \rightarrow u\bar{d}$	0	0	0	0.02133	0.02133	0
$HW^- \rightarrow \bar{t}b$	0	0	0	1.503	1.503	0
$HW^- \rightarrow \gamma e^-\bar{\nu}_e$	0	0	0	$3.289 \cdot 10^{-9}$	$3.289 \cdot 10^{-9}$	0
$HW^- \rightarrow \mu^-\bar{\nu}_\mu$	0	0	0	0.004948	0.004948	0
$H\gamma \rightarrow t\bar{t}$	0	0	0	0.4555	0.4555	0
$H z \rightarrow \mu^+\mu^-$	0	0	0	0.00315	0.00315	0
$H z \rightarrow \nu_\tau\bar{\nu}_\tau$	0	0	0	0.002159	0.002159	0
$H z \rightarrow b\bar{b}$	0	0	0	0.01049	0.01049	0
$H z \rightarrow s\bar{s}$	0	0	0	0.01169	0.01169	0
$H z \rightarrow t\bar{t}$	0	0	0	2.41	2.41	0
$H z \rightarrow u\bar{u}$	0	0	0	0.00531	0.00531	0
$W^+W^- \rightarrow Hb\bar{b}$	0	0	0	$2.429 \cdot 10^{-6}$	$2.429 \cdot 10^{-6}$	0
$W^+W^- \rightarrow Hc\bar{c}$	0	0	0	$2.712 \cdot 10^{-7}$	$2.712 \cdot 10^{-7}$	0
$W^+W^- \rightarrow Hd\bar{d}$	0	0	0	$1.585 \cdot 10^{-6}$	$1.585 \cdot 10^{-6}$	0
$W^+W^- \rightarrow Ht\bar{t}$	0	0	0	$3.093 \cdot 10^{-5}$	$3.093 \cdot 10^{-5}$	0

$W^+W^- \rightarrow W^+W^-$	0	0	0	34.74	34.74	0
$W^+W^- \rightarrow \gamma\gamma$	0	0	0	0.1403	0.1403	0
$W^+W^- \rightarrow \gamma\gamma\gamma$	0	0	0	$1.511 \cdot 10^{-5}$	$1.511 \cdot 10^{-5}$	0
$\bar{b}t \rightarrow \bar{d}u$	0	0	0	0.01615	0.01615	0
$\gamma W^+ \rightarrow zW^+$	0	0	0	0.2959	0.2959	0
$\mu^+\mu^- \rightarrow \tau^+\tau^-$	0	0	0	0.0248	0.0248	0
$\nu_\tau\bar{\nu}_\tau \rightarrow \nu_\tau\bar{\nu}_\tau$	0	0	0	$4.77 \cdot 10^{-7}$	$4.77 \cdot 10^{-7}$	0
$\nu_e\bar{\nu}_e \rightarrow \nu_\mu\bar{\nu}_\mu$	0	0	0	0.00448	0.00448	0
$b\bar{b} \rightarrow \gamma\gamma$	0	0	0	$8.417 \cdot 10^{-5}$	$8.417 \cdot 10^{-5}$	0
$b\bar{b} \rightarrow \mu^+\mu^-$	0	0	0	0.000287	0.000287	0
$b\bar{b} \rightarrow \nu_e\bar{\nu}_e$	0	0	0	0.00233	0.00233	0
$b\bar{b} \rightarrow b\bar{b}$	0	0	0	1.951	1.951	0
$b\bar{b} \rightarrow d\bar{d}$	0	0	0	0.4928	0.4928	0
$b\bar{b} \rightarrow t\bar{t}$	0	0	0	1.432	1.432	0
$b\bar{b} \rightarrow u\bar{u}$	0	0	0	0.5083	0.5083	0
$b\bar{t} \rightarrow e^-\bar{\nu}_e$	0	0	0	0.0009856	0.0009856	0
$c\bar{c} \rightarrow \mu^+\mu^-$	0	0	0	0.0006787	0.0006787	0
$c\bar{s} \rightarrow \tau^+\nu_\tau$	0	0	0	0.008911	0.008911	0
$d\bar{d} \rightarrow c\bar{c}$	0	0	0	0.5154	0.5154	0
$d\bar{d} \rightarrow e^+e^-$	0	0	0	0.001122	0.001122	0
$d\bar{d} \rightarrow s\bar{s}$	0	0	0	0.6997	0.6997	0
$e^+\nu_\mu \rightarrow e^+\nu_\mu$	0	0	0	0.1991	0.1991	0
$e^+\nu_e \rightarrow \mu^+\nu_\mu$	0	0	0	0.03709	0.03709	0
$e^+\nu_e \rightarrow e^+\nu_e$	0	0	0	0.02697	0.02697	0
$e^+\tau^- \rightarrow e^+\tau^-$	0	0	0	0.04288	0.04288	0
$e^+e^- \rightarrow \mu^+\mu^-$	0	0	0	0.03263	0.03263	0
$e^+e^- \rightarrow e^+e^-$	0	0	0	0.3507	0.3507	0
$gg \rightarrow gg$	0	0	0	100.7	100.7	0
$gg \rightarrow ggg$	0	0	0	0.136	0.136	0

$gg \rightarrow t\bar{t}$	0	0	0	0.6814	0.6814	0
$gg \rightarrow u\bar{u}$	0	0	0	1.337	1.337	0
$s\bar{s} \rightarrow \nu_\tau \bar{\nu}_\tau$	0	0	0	0.0004896	0.0004896	0
$s\bar{s} \rightarrow s\bar{s}$	0	0	0	24.61	24.61	0
$t\bar{t} \rightarrow \nu_\mu \bar{\nu}_\mu$	0	0	0	0.0004911	0.0004911	0
$t\bar{t} \rightarrow \tau^+ \tau^-$	0	0	0	0.00378	0.00378	0
$t\bar{t} \rightarrow c\bar{c}$	0	0	0	0.6142	0.6142	0
$t\bar{t} \rightarrow d\bar{d}$	0	0	0	0.813	0.813	0
$t\bar{t} \rightarrow s\bar{s}$	0	0	0	0.8614	0.8614	0
$t\bar{t} \rightarrow t\bar{t}$	0	0	0	9.011	9.011	0
$u\bar{d} \rightarrow \mu^+ \nu_\mu$	0	0	0	0.002539	0.002539	0
$u\bar{d} \rightarrow c\bar{s}$	0	0	0	0.001604	0.001604	0
$u\bar{d} \rightarrow u\bar{d}$	0	0	0	1.666	1.666	0
$u\bar{u} \rightarrow \nu_e \bar{\nu}_e$	0	0	0	0.0005626	0.0005626	0
$u\bar{u} \rightarrow c\bar{c}$	0	0	0	0.6437	0.6437	0
$u\bar{u} \rightarrow u\bar{u}$	0	0	0	2.56	2.56	0
$zz \rightarrow W^+ W^-$	0	0	0	52.47	52.47	0
$zz \rightarrow zz$	0	0	0	0.08147	0.08147	0