

# 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	-0.02558	-0.02558	0	0.0007754	0.0007754	0
c3p12	-0.02558	-0.02558	0	0.0007754	0.0007754	0
cdp	0.4442	0.4442	0	0.2338	0.2338	0
c111221	0.02558	0.02558	0	0.0007754	0.0007754	0
cp	-1.342	-1.342	0	2.135	2.135	0
cpDC	-0.1111	-0.1111	0	0.01461	0.01461	0
sm	0	0	0	0.211	0.211	0

## 1.2 $HH \rightarrow HHH$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
c3p11	$-2.099 \cdot 10^{-8}$	$-2.099 \cdot 10^{-8}$	0	$9.546 \cdot 10^{-10}$	$9.546 \cdot 10^{-10}$	0
c3p12	$-2.099 \cdot 10^{-8}$	$-2.099 \cdot 10^{-8}$	0	$9.546 \cdot 10^{-10}$	$9.546 \cdot 10^{-10}$	0
cdp	$-1.847 \cdot 10^{-6}$	$-1.847 \cdot 10^{-6}$	0	$7.385 \cdot 10^{-6}$	$7.385 \cdot 10^{-6}$	0
c111221	$2.099 \cdot 10^{-8}$	$2.099 \cdot 10^{-8}$	0	$9.546 \cdot 10^{-10}$	$9.546 \cdot 10^{-10}$	0
cp	$5.36 \cdot 10^{-6}$	$5.36 \cdot 10^{-6}$	0	$6.223 \cdot 10^{-5}$	$6.223 \cdot 10^{-5}$	0
cpDC	$4.617 \cdot 10^{-7}$	$4.617 \cdot 10^{-7}$	0	$4.616 \cdot 10^{-7}$	$4.616 \cdot 10^{-7}$	0
sm	0	0	0	$1.154 \cdot 10^{-7}$	$1.154 \cdot 10^{-7}$	0

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

interference

square

	mod1	mod2	1 - mod2/mod1		mod1	mod2	1 - mod2/mod1
c3pl1	$-5.915 \cdot 10^{-6}$	$-5.915 \cdot 10^{-6}$	0		$2.69 \cdot 10^{-7}$	$2.69 \cdot 10^{-7}$	0
c3pl2	$-5.915 \cdot 10^{-6}$	$-5.915 \cdot 10^{-6}$	0		$2.69 \cdot 10^{-7}$	$2.69 \cdot 10^{-7}$	0
cdp	$1.038 \cdot 10^{-5}$	$1.038 \cdot 10^{-5}$	0		$1.128 \cdot 10^{-5}$	$1.128 \cdot 10^{-5}$	0
c111221	$5.915 \cdot 10^{-6}$	$5.915 \cdot 10^{-6}$	0		$2.69 \cdot 10^{-7}$	$2.69 \cdot 10^{-7}$	0
cp	$6.017 \cdot 10^{-6}$	$6.017 \cdot 10^{-6}$	0		$2.018 \cdot 10^{-5}$	$2.018 \cdot 10^{-5}$	0
cpDC	$-2.595 \cdot 10^{-6}$	$-2.595 \cdot 10^{-6}$	0		$7.051 \cdot 10^{-7}$	$7.051 \cdot 10^{-7}$	0
ctp	$-1.254 \cdot 10^{-5}$	$-1.254 \cdot 10^{-5}$	0		$1.185 \cdot 10^{-5}$	$1.185 \cdot 10^{-5}$	0
sm	0	0	0		$3.252 \cdot 10^{-5}$	$3.252 \cdot 10^{-5}$	0

#### 1.4 $HH \rightarrow Hzz$

	interference				square		
	mod1	mod2	1 - mod2/mod1		mod1	mod2	1 - mod2/mod1
c3pl1	$-1.53 \cdot 10^{-6}$	$-1.53 \cdot 10^{-6}$	0		$6.955 \cdot 10^{-8}$	$6.955 \cdot 10^{-8}$	0
c3pl2	$-1.53 \cdot 10^{-6}$	$-1.53 \cdot 10^{-6}$	0		$6.955 \cdot 10^{-8}$	$6.955 \cdot 10^{-8}$	0
cdp	$-1.192 \cdot 10^{-6}$	$-1.192 \cdot 10^{-6}$	0		$4.001 \cdot 10^{-6}$	$4.001 \cdot 10^{-6}$	0
c111221	$1.53 \cdot 10^{-6}$	$1.53 \cdot 10^{-6}$	0		$6.955 \cdot 10^{-8}$	$6.955 \cdot 10^{-8}$	0
cp	$9.651 \cdot 10^{-6}$	$9.651 \cdot 10^{-6}$	0		$1.441 \cdot 10^{-5}$	$1.441 \cdot 10^{-5}$	0
cpBB	$-7.969 \cdot 10^{-7}$	$-7.969 \cdot 10^{-7}$	0		$5.021 \cdot 10^{-7}$	$5.021 \cdot 10^{-7}$	0
cpDC	$1.891 \cdot 10^{-6}$	$1.891 \cdot 10^{-6}$	0		$1.053 \cdot 10^{-6}$	$1.053 \cdot 10^{-6}$	0
cpW	$-2.613 \cdot 10^{-6}$	$-2.613 \cdot 10^{-6}$	0		$5.399 \cdot 10^{-6}$	$5.399 \cdot 10^{-6}$	0
cpWB	$-1.443 \cdot 10^{-6}$	$-1.443 \cdot 10^{-6}$	0		$1.646 \cdot 10^{-6}$	$1.646 \cdot 10^{-6}$	0
sm	0	0	0		$8.41 \cdot 10^{-6}$	$8.41 \cdot 10^{-6}$	0

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

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

c3p11	-0.8621	-0.8621	0	0.02613	0.02613	0
c3p12	-0.8621	-0.8621	0	0.02613	0.02613	0
cdp	-8.895	-8.895	0	2.84	2.84	0
c111221	0.8621	0.8621	0	0.02613	0.02613	0
cp	1.931	1.931	0	0.1331	0.1331	0
cpDC	2.224	2.224	0	0.1775	0.1775	0
cpW	0.25	0.25	0	10.25	10.25	0
sm	0	0	0	7.11	7.11	0

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

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
c3p11	$-5.859 \cdot 10^{-6}$	$-5.859 \cdot 10^{-6}$	0	$2.664 \cdot 10^{-7}$	$2.664 \cdot 10^{-7}$	0
c3p12	$-5.859 \cdot 10^{-6}$	$-5.859 \cdot 10^{-6}$	0	$2.664 \cdot 10^{-7}$	$2.664 \cdot 10^{-7}$	0
cWW	$1.114 \cdot 10^{-5}$	$1.114 \cdot 10^{-5}$	0	$9.1 \cdot 10^{-6}$	$9.1 \cdot 10^{-6}$	0
cdp	$1.3 \cdot 10^{-5}$	$1.3 \cdot 10^{-5}$	0	$1.288 \cdot 10^{-5}$	$1.288 \cdot 10^{-5}$	0
c111221	$5.859 \cdot 10^{-6}$	$5.859 \cdot 10^{-6}$	0	$2.664 \cdot 10^{-7}$	$2.664 \cdot 10^{-7}$	0
cp	$-9.433 \cdot 10^{-7}$	$-9.433 \cdot 10^{-7}$	0	$3.894 \cdot 10^{-7}$	$3.894 \cdot 10^{-7}$	0
cpBB	$2.185 \cdot 10^{-7}$	$2.185 \cdot 10^{-7}$	0	$5.746 \cdot 10^{-7}$	$5.746 \cdot 10^{-7}$	0
cpDC	$-6.451 \cdot 10^{-6}$	$-6.451 \cdot 10^{-6}$	0	$1.046 \cdot 10^{-6}$	$1.046 \cdot 10^{-6}$	0
cpW	$4.914 \cdot 10^{-7}$	$4.914 \cdot 10^{-7}$	0	$8.319 \cdot 10^{-5}$	$8.319 \cdot 10^{-5}$	0
cpWB	$-1.126 \cdot 10^{-5}$	$-1.126 \cdot 10^{-5}$	0	$3.89 \cdot 10^{-5}$	$3.89 \cdot 10^{-5}$	0
sm	0	0	0	$3.221 \cdot 10^{-5}$	$3.221 \cdot 10^{-5}$	0

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

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

c3pQ3	$4.364 \cdot 10^{-6}$	$4.364 \cdot 10^{-6}$	0	$1.182 \cdot 10^{-5}$	$1.182 \cdot 10^{-5}$	0
c3pl1	$-5.863 \cdot 10^{-7}$	$-5.863 \cdot 10^{-7}$	0	$2.666 \cdot 10^{-8}$	$2.666 \cdot 10^{-8}$	0
c3pl2	$-5.863 \cdot 10^{-7}$	$-5.863 \cdot 10^{-7}$	0	$2.666 \cdot 10^{-8}$	$2.666 \cdot 10^{-8}$	0
cdp	$-5.11 \cdot 10^{-6}$	$-5.11 \cdot 10^{-6}$	0	$3.879 \cdot 10^{-5}$	$3.879 \cdot 10^{-5}$	0
c111221	$5.863 \cdot 10^{-7}$	$5.863 \cdot 10^{-7}$	0	$2.666 \cdot 10^{-8}$	$2.666 \cdot 10^{-8}$	0
cp	$1.04 \cdot 10^{-6}$	$1.04 \cdot 10^{-6}$	0	$1.23 \cdot 10^{-6}$	$1.23 \cdot 10^{-6}$	0
cpDC	$1.278 \cdot 10^{-6}$	$1.278 \cdot 10^{-6}$	0	$2.425 \cdot 10^{-6}$	$2.425 \cdot 10^{-6}$	0
cpW	$-2.393 \cdot 10^{-6}$	$-2.393 \cdot 10^{-6}$	0	$7.204 \cdot 10^{-6}$	$7.204 \cdot 10^{-6}$	0
ctW	$5.282 \cdot 10^{-6}$	$5.282 \cdot 10^{-6}$	0	$1.646 \cdot 10^{-5}$	$1.646 \cdot 10^{-5}$	0
ctp	$2.342 \cdot 10^{-6}$	$2.342 \cdot 10^{-6}$	0	$1.051 \cdot 10^{-6}$	$1.051 \cdot 10^{-6}$	0
sm	0	0	0	$3.224 \cdot 10^{-6}$	$3.224 \cdot 10^{-6}$	0

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

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
c3pl1	$7.664 \cdot 10^{-7}$	$7.664 \cdot 10^{-7}$	0	$4.457 \cdot 10^{-7}$	$4.457 \cdot 10^{-7}$	0
c3pl2	$-5.992 \cdot 10^{-8}$	$-5.992 \cdot 10^{-8}$	0	$2.725 \cdot 10^{-9}$	$2.725 \cdot 10^{-9}$	0
cdp	$-2.817 \cdot 10^{-7}$	$-2.817 \cdot 10^{-7}$	0	$2.215 \cdot 10^{-7}$	$2.215 \cdot 10^{-7}$	0
c111221	$5.992 \cdot 10^{-8}$	$5.992 \cdot 10^{-8}$	0	$2.725 \cdot 10^{-9}$	$2.725 \cdot 10^{-9}$	0
cp	$6.577 \cdot 10^{-8}$	$6.577 \cdot 10^{-8}$	0	$8.617 \cdot 10^{-9}$	$8.617 \cdot 10^{-9}$	0
cpDC	$7.044 \cdot 10^{-8}$	$7.044 \cdot 10^{-8}$	0	$1.384 \cdot 10^{-8}$	$1.384 \cdot 10^{-8}$	0
cpW	$1.503 \cdot 10^{-6}$	$1.503 \cdot 10^{-6}$	0	$6.417 \cdot 10^{-6}$	$6.417 \cdot 10^{-6}$	0
sm	0	0	0	$3.295 \cdot 10^{-7}$	$3.295 \cdot 10^{-7}$	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	$-1.378 \cdot 10^{-7}$	$-1.378 \cdot 10^{-7}$	0	$6.263 \cdot 10^{-9}$	$6.263 \cdot 10^{-9}$	0
c3pl2	$-1.378 \cdot 10^{-7}$	$-1.378 \cdot 10^{-7}$	0	$6.263 \cdot 10^{-9}$	$6.263 \cdot 10^{-9}$	0
c3pqi	$1.326 \cdot 10^{-6}$	$1.326 \cdot 10^{-6}$	0	$5.803 \cdot 10^{-7}$	$5.803 \cdot 10^{-7}$	0
cdp	$-1.114 \cdot 10^{-7}$	$-1.114 \cdot 10^{-7}$	0	$5.037 \cdot 10^{-7}$	$5.037 \cdot 10^{-7}$	0
cll1221	$1.378 \cdot 10^{-7}$	$1.378 \cdot 10^{-7}$	0	$6.263 \cdot 10^{-9}$	$6.263 \cdot 10^{-9}$	0
cp	$5.367 \cdot 10^{-8}$	$5.367 \cdot 10^{-8}$	0	$1.748 \cdot 10^{-8}$	$1.748 \cdot 10^{-8}$	0
cpDC	$2.786 \cdot 10^{-8}$	$2.786 \cdot 10^{-8}$	0	$3.148 \cdot 10^{-8}$	$3.148 \cdot 10^{-8}$	0
cpW	$1.989 \cdot 10^{-6}$	$1.989 \cdot 10^{-6}$	0	$4.78 \cdot 10^{-5}$	$4.78 \cdot 10^{-5}$	0
sm	0	0	0	$7.574 \cdot 10^{-7}$	$7.574 \cdot 10^{-7}$	0

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

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
c3pQ3	$5.022 \cdot 10^{-6}$	$5.022 \cdot 10^{-6}$	0	$4.452 \cdot 10^{-7}$	$4.452 \cdot 10^{-7}$	0
c3pl1	$-2.665 \cdot 10^{-6}$	$-2.665 \cdot 10^{-6}$	0	$1.212 \cdot 10^{-7}$	$1.212 \cdot 10^{-7}$	0
c3pl2	$-2.665 \cdot 10^{-6}$	$-2.665 \cdot 10^{-6}$	0	$1.212 \cdot 10^{-7}$	$1.212 \cdot 10^{-7}$	0
cdp	$-3.472 \cdot 10^{-5}$	$-3.472 \cdot 10^{-5}$	0	$2.925 \cdot 10^{-5}$	$2.925 \cdot 10^{-5}$	0
cll1221	$2.665 \cdot 10^{-6}$	$2.665 \cdot 10^{-6}$	0	$1.212 \cdot 10^{-7}$	$1.212 \cdot 10^{-7}$	0
cp	$6.961 \cdot 10^{-6}$	$6.961 \cdot 10^{-6}$	0	$1.114 \cdot 10^{-6}$	$1.114 \cdot 10^{-6}$	0
cpBB	$2.472 \cdot 10^{-6}$	$2.472 \cdot 10^{-6}$	0	$1.063 \cdot 10^{-5}$	$1.063 \cdot 10^{-5}$	0
cpDC	$-1.737 \cdot 10^{-5}$	$-1.737 \cdot 10^{-5}$	0	$7.127 \cdot 10^{-6}$	$7.127 \cdot 10^{-6}$	0
cpQ3	$5.022 \cdot 10^{-6}$	$5.022 \cdot 10^{-6}$	0	$4.452 \cdot 10^{-7}$	$4.452 \cdot 10^{-7}$	0
cpW	$1.074 \cdot 10^{-5}$	$1.074 \cdot 10^{-5}$	0	0.0001964	0.0001964	0
cpWB	$5.671 \cdot 10^{-6}$	$5.671 \cdot 10^{-6}$	0	$4.25 \cdot 10^{-5}$	$4.25 \cdot 10^{-5}$	0
cpd	$-9.328 \cdot 10^{-7}$	$-9.328 \cdot 10^{-7}$	0	$4.48 \cdot 10^{-7}$	$4.48 \cdot 10^{-7}$	0
sm	0	0	0	$1.465 \cdot 10^{-5}$	$1.465 \cdot 10^{-5}$	0

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

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
c3pl1	$1.492 \cdot 10^{-7}$	$1.492 \cdot 10^{-7}$	0	$1.058 \cdot 10^{-7}$	$1.058 \cdot 10^{-7}$	0
c3pl2	$-9.57 \cdot 10^{-9}$	$-9.57 \cdot 10^{-9}$	0	$4.351 \cdot 10^{-10}$	$4.351 \cdot 10^{-10}$	0
cdp	$2.634 \cdot 10^{-9}$	$2.634 \cdot 10^{-9}$	0	$6.996 \cdot 10^{-8}$	$6.996 \cdot 10^{-8}$	0
c111221	$9.57 \cdot 10^{-9}$	$9.57 \cdot 10^{-9}$	0	$4.351 \cdot 10^{-10}$	$4.351 \cdot 10^{-10}$	0
cp	$1.842 \cdot 10^{-9}$	$1.842 \cdot 10^{-9}$	0	$2.329 \cdot 10^{-9}$	$2.329 \cdot 10^{-9}$	0
cpBB	$-1.339 \cdot 10^{-7}$	$-1.339 \cdot 10^{-7}$	0	$1.144 \cdot 10^{-7}$	$1.144 \cdot 10^{-7}$	0
cpDC	$-3.23 \cdot 10^{-9}$	$-3.23 \cdot 10^{-9}$	0	$1.593 \cdot 10^{-8}$	$1.593 \cdot 10^{-8}$	0
cpW	$-4.389 \cdot 10^{-7}$	$-4.389 \cdot 10^{-7}$	0	$1.23 \cdot 10^{-6}$	$1.23 \cdot 10^{-6}$	0
cpWB	$-2.424 \cdot 10^{-7}$	$-2.424 \cdot 10^{-7}$	0	$3.75 \cdot 10^{-7}$	$3.75 \cdot 10^{-7}$	0
cp11	$-1.588 \cdot 10^{-7}$	$-1.588 \cdot 10^{-7}$	0	$1.198 \cdot 10^{-7}$	$1.198 \cdot 10^{-7}$	0
sm	0	0	0	$5.262 \cdot 10^{-8}$	$5.262 \cdot 10^{-8}$	0

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

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
c3pl1	$-4.029 \cdot 10^{-8}$	$-4.029 \cdot 10^{-8}$	0	$1.832 \cdot 10^{-9}$	$1.832 \cdot 10^{-9}$	0
c3pl2	$-4.029 \cdot 10^{-8}$	$-4.029 \cdot 10^{-8}$	0	$1.832 \cdot 10^{-9}$	$1.832 \cdot 10^{-9}$	0
c3pqi	$1.507 \cdot 10^{-6}$	$1.507 \cdot 10^{-6}$	0	$3.087 \cdot 10^{-6}$	$3.087 \cdot 10^{-6}$	0
cdp	$4.738 \cdot 10^{-8}$	$4.738 \cdot 10^{-8}$	0	$7.039 \cdot 10^{-9}$	$7.039 \cdot 10^{-9}$	0
c111221	$4.029 \cdot 10^{-8}$	$4.029 \cdot 10^{-8}$	0	$1.832 \cdot 10^{-9}$	$1.832 \cdot 10^{-9}$	0
cp	$1.154 \cdot 10^{-9}$	$1.154 \cdot 10^{-9}$	0	$1.506 \cdot 10^{-10}$	$1.506 \cdot 10^{-10}$	0
cpBB	$2.698 \cdot 10^{-8}$	$2.698 \cdot 10^{-8}$	0	$3.542 \cdot 10^{-7}$	$3.542 \cdot 10^{-7}$	0
cpDC	$1.275 \cdot 10^{-8}$	$1.275 \cdot 10^{-8}$	0	$1.858 \cdot 10^{-9}$	$1.858 \cdot 10^{-9}$	0
cpW	$3.398 \cdot 10^{-7}$	$3.398 \cdot 10^{-7}$	0	$1.964 \cdot 10^{-6}$	$1.964 \cdot 10^{-6}$	0

cpWB	$1.283 \cdot 10^{-7}$	$1.283 \cdot 10^{-7}$	0	$3.291 \cdot 10^{-7}$	$3.291 \cdot 10^{-7}$	0
cpqi	$-1.507 \cdot 10^{-6}$	$-1.507 \cdot 10^{-6}$	0	$3.087 \cdot 10^{-6}$	$3.087 \cdot 10^{-6}$	0
cpu	$6.82 \cdot 10^{-7}$	$6.82 \cdot 10^{-7}$	0	$3.087 \cdot 10^{-6}$	$3.087 \cdot 10^{-6}$	0
sm	0	0	0	$2.215 \cdot 10^{-7}$	$2.215 \cdot 10^{-7}$	0

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

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
c3pl1	$-1.582 \cdot 10^{-6}$	$-1.582 \cdot 10^{-6}$	0	$7.193 \cdot 10^{-8}$	$7.193 \cdot 10^{-8}$	0
c3pl2	$-1.582 \cdot 10^{-6}$	$-1.582 \cdot 10^{-6}$	0	$7.193 \cdot 10^{-8}$	$7.193 \cdot 10^{-8}$	0
c3pqi	$6.795 \cdot 10^{-6}$	$6.795 \cdot 10^{-6}$	0	$1.373 \cdot 10^{-6}$	$1.373 \cdot 10^{-6}$	0
cdp	$-9.028 \cdot 10^{-6}$	$-9.028 \cdot 10^{-6}$	0	$2.783 \cdot 10^{-6}$	$2.783 \cdot 10^{-6}$	0
c111221	$1.582 \cdot 10^{-6}$	$1.582 \cdot 10^{-6}$	0	$7.193 \cdot 10^{-8}$	$7.193 \cdot 10^{-8}$	0
cp	$2.026 \cdot 10^{-6}$	$2.026 \cdot 10^{-6}$	0	$1.325 \cdot 10^{-7}$	$1.325 \cdot 10^{-7}$	0
cpBB	$1.176 \cdot 10^{-6}$	$1.176 \cdot 10^{-6}$	0	$2.386 \cdot 10^{-6}$	$2.386 \cdot 10^{-6}$	0
cpDC	$-4.793 \cdot 10^{-6}$	$-4.793 \cdot 10^{-6}$	0	$7.64 \cdot 10^{-7}$	$7.64 \cdot 10^{-7}$	0
cpW	$7.15 \cdot 10^{-6}$	$7.15 \cdot 10^{-6}$	0	$4.683 \cdot 10^{-5}$	$4.683 \cdot 10^{-5}$	0
cpWB	$3.316 \cdot 10^{-6}$	$3.316 \cdot 10^{-6}$	0	$8.945 \cdot 10^{-6}$	$8.945 \cdot 10^{-6}$	0
cpd	$-1.262 \cdot 10^{-6}$	$-1.262 \cdot 10^{-6}$	0	$1.382 \cdot 10^{-6}$	$1.382 \cdot 10^{-6}$	0
cpqi	$6.795 \cdot 10^{-6}$	$6.795 \cdot 10^{-6}$	0	$1.373 \cdot 10^{-6}$	$1.373 \cdot 10^{-6}$	0
sm	0	0	0	$8.698 \cdot 10^{-6}$	$8.698 \cdot 10^{-6}$	0

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

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
c3pl1	$3.044 \cdot 10^{-7}$	$3.044 \cdot 10^{-7}$	0	$6.527 \cdot 10^{-7}$	$6.527 \cdot 10^{-7}$	0
c3pl2	$-1.182 \cdot 10^{-8}$	$-1.182 \cdot 10^{-8}$	0	$5.373 \cdot 10^{-10}$	$5.373 \cdot 10^{-10}$	0

cdp	$6.146 \cdot 10^{-9}$	$6.146 \cdot 10^{-9}$	0	$1.149 \cdot 10^{-8}$	$1.149 \cdot 10^{-8}$	0
c111221	$1.182 \cdot 10^{-8}$	$1.182 \cdot 10^{-8}$	0	$5.373 \cdot 10^{-10}$	$5.373 \cdot 10^{-10}$	0
cp	$1.748 \cdot 10^{-9}$	$1.748 \cdot 10^{-9}$	0	$3.869 \cdot 10^{-10}$	$3.869 \cdot 10^{-10}$	0
cpBB	$5.559 \cdot 10^{-8}$	$5.559 \cdot 10^{-8}$	0	$2.881 \cdot 10^{-7}$	$2.881 \cdot 10^{-7}$	0
cpDC	$-1.827 \cdot 10^{-9}$	$-1.827 \cdot 10^{-9}$	0	$3.147 \cdot 10^{-9}$	$3.147 \cdot 10^{-9}$	0
cpW	$2.432 \cdot 10^{-7}$	$2.432 \cdot 10^{-7}$	0	$6.137 \cdot 10^{-7}$	$6.137 \cdot 10^{-7}$	0
cpWB	$1.183 \cdot 10^{-7}$	$1.183 \cdot 10^{-7}$	0	$1.749 \cdot 10^{-7}$	$1.749 \cdot 10^{-7}$	0
cpe	$-2.775 \cdot 10^{-7}$	$-2.775 \cdot 10^{-7}$	0	$6.81 \cdot 10^{-7}$	$6.81 \cdot 10^{-7}$	0
cp11	$3.162 \cdot 10^{-7}$	$3.162 \cdot 10^{-7}$	0	$6.809 \cdot 10^{-7}$	$6.809 \cdot 10^{-7}$	0
sm	0	0	0	$6.498 \cdot 10^{-8}$	$6.498 \cdot 10^{-8}$	0

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

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
c3pQ3	$-3.798 \cdot 10^{-6}$	$-3.798 \cdot 10^{-6}$	0	$5.633 \cdot 10^{-6}$	$5.633 \cdot 10^{-6}$	0
c3p11	$-1.027 \cdot 10^{-6}$	$-1.027 \cdot 10^{-6}$	0	$4.672 \cdot 10^{-8}$	$4.672 \cdot 10^{-8}$	0
c3p12	$-1.027 \cdot 10^{-6}$	$-1.027 \cdot 10^{-6}$	0	$4.672 \cdot 10^{-8}$	$4.672 \cdot 10^{-8}$	0
cdp	$1.925 \cdot 10^{-5}$	$1.925 \cdot 10^{-5}$	0	0.0001506	0.0001506	0
c111221	$1.027 \cdot 10^{-6}$	$1.027 \cdot 10^{-6}$	0	$4.672 \cdot 10^{-8}$	$4.672 \cdot 10^{-8}$	0
cp	$-1.723 \cdot 10^{-6}$	$-1.723 \cdot 10^{-6}$	0	$1.377 \cdot 10^{-6}$	$1.377 \cdot 10^{-6}$	0
cpBB	$-4.314 \cdot 10^{-7}$	$-4.314 \cdot 10^{-7}$	0	$2.087 \cdot 10^{-6}$	$2.087 \cdot 10^{-6}$	0
cpDC	$9.168 \cdot 10^{-6}$	$9.168 \cdot 10^{-6}$	0	$3.731 \cdot 10^{-5}$	$3.731 \cdot 10^{-5}$	0
cpQ3	$3.798 \cdot 10^{-6}$	$3.798 \cdot 10^{-6}$	0	$5.633 \cdot 10^{-6}$	$5.633 \cdot 10^{-6}$	0
cpW	$-3.789 \cdot 10^{-6}$	$-3.789 \cdot 10^{-6}$	0	$1.192 \cdot 10^{-5}$	$1.192 \cdot 10^{-5}$	0
cpWB	$-1.282 \cdot 10^{-6}$	$-1.282 \cdot 10^{-6}$	0	$1.945 \cdot 10^{-6}$	$1.945 \cdot 10^{-6}$	0
cpt	$-1.325 \cdot 10^{-6}$	$-1.325 \cdot 10^{-6}$	0	$5.633 \cdot 10^{-6}$	$5.633 \cdot 10^{-6}$	0
ctB	$-3.232 \cdot 10^{-7}$	$-3.232 \cdot 10^{-7}$	0	$8.138 \cdot 10^{-6}$	$8.138 \cdot 10^{-6}$	0
ctW	$5.852 \cdot 10^{-7}$	$5.852 \cdot 10^{-7}$	0	$2.669 \cdot 10^{-5}$	$2.669 \cdot 10^{-5}$	0



ctp	$2.844 \cdot 10^{-7}$	$2.844 \cdot 10^{-7}$	0	$6.326 \cdot 10^{-7}$	$6.326 \cdot 10^{-7}$	0
sm	0	0	0	$5.649 \cdot 10^{-6}$	$5.649 \cdot 10^{-6}$	0

### 1.16 $HH \rightarrow zz$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
c3p11	-5.165	-5.165	0	0.1566	0.1566	0
c3p12	-5.165	-5.165	0	0.1566	0.1566	0
cdp	-8.093	-8.093	0	0.3895	0.3895	0
c111221	5.165	5.165	0	0.1566	0.1566	0
cp	3.351	3.351	0	0.06606	0.06606	0
cpBB	0.1417	0.1417	0	0.3795	0.3795	0
cpDC	-6.197	-6.197	0	0.2266	0.2266	0
cpW	0.4646	0.4646	0	4.081	4.081	0
cpWB	0.2566	0.2566	0	1.245	1.245	0
sm	0	0	0	42.6	42.6	0

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

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
c3pQ3	$-3.763 \cdot 10^{-7}$	$-3.763 \cdot 10^{-7}$	0	$1.334 \cdot 10^{-7}$	$1.334 \cdot 10^{-7}$	0
c3p11	$-3.523 \cdot 10^{-7}$	$-3.523 \cdot 10^{-7}$	0	$1.602 \cdot 10^{-8}$	$1.602 \cdot 10^{-8}$	0
c3p12	$-3.523 \cdot 10^{-7}$	$-3.523 \cdot 10^{-7}$	0	$1.602 \cdot 10^{-8}$	$1.602 \cdot 10^{-8}$	0
cWWW	$-9.667 \cdot 10^{-7}$	$-9.667 \cdot 10^{-7}$	0	$4.626 \cdot 10^{-6}$	$4.626 \cdot 10^{-6}$	0
cdp	$2.349 \cdot 10^{-7}$	$2.349 \cdot 10^{-7}$	0	$7.12 \cdot 10^{-9}$	$7.12 \cdot 10^{-9}$	0
c111221	$3.523 \cdot 10^{-7}$	$3.523 \cdot 10^{-7}$	0	$1.602 \cdot 10^{-8}$	$1.602 \cdot 10^{-8}$	0
cpBB	$2.213 \cdot 10^{-6}$	$2.213 \cdot 10^{-6}$	0	$1.604 \cdot 10^{-6}$	$1.604 \cdot 10^{-6}$	0

cpDC	$-2.513 \cdot 10^{-7}$	$-2.513 \cdot 10^{-7}$	0	$8.148 \cdot 10^{-9}$	$8.148 \cdot 10^{-9}$	0
cpW	$-2.077 \cdot 10^{-6}$	$-2.077 \cdot 10^{-6}$	0	$1.875 \cdot 10^{-6}$	$1.875 \cdot 10^{-6}$	0
cpWB	$1.922 \cdot 10^{-6}$	$1.922 \cdot 10^{-6}$	0	$7.106 \cdot 10^{-6}$	$7.106 \cdot 10^{-6}$	0
ctB	$1.821 \cdot 10^{-6}$	$1.821 \cdot 10^{-6}$	0	$8.147 \cdot 10^{-6}$	$8.147 \cdot 10^{-6}$	0
ctW	$3.016 \cdot 10^{-6}$	$3.016 \cdot 10^{-6}$	0	$1.967 \cdot 10^{-6}$	$1.967 \cdot 10^{-6}$	0
ctp	$-5.028 \cdot 10^{-8}$	$-5.028 \cdot 10^{-8}$	0	$8.963 \cdot 10^{-9}$	$8.963 \cdot 10^{-9}$	0
sm	0	0	0	$1.937 \cdot 10^{-6}$	$1.937 \cdot 10^{-6}$	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	$-7.677 \cdot 10^{-10}$	$-7.677 \cdot 10^{-10}$	0	$3.491 \cdot 10^{-11}$	$3.491 \cdot 10^{-11}$	0
c3pl2	$-7.677 \cdot 10^{-10}$	$-7.677 \cdot 10^{-10}$	0	$3.491 \cdot 10^{-11}$	$3.491 \cdot 10^{-11}$	0
c3pqi	$5.536 \cdot 10^{-8}$	$5.536 \cdot 10^{-8}$	0	$1.819 \cdot 10^{-7}$	$1.819 \cdot 10^{-7}$	0
cWW	$-1.451 \cdot 10^{-9}$	$-1.451 \cdot 10^{-9}$	0	$4.881 \cdot 10^{-9}$	$4.881 \cdot 10^{-9}$	0
cdp	$5.118 \cdot 10^{-10}$	$5.118 \cdot 10^{-10}$	0	$1.551 \cdot 10^{-11}$	$1.551 \cdot 10^{-11}$	0
cll1221	$7.677 \cdot 10^{-10}$	$7.677 \cdot 10^{-10}$	0	$3.491 \cdot 10^{-11}$	$3.491 \cdot 10^{-11}$	0
cpBB	$6.639 \cdot 10^{-9}$	$6.639 \cdot 10^{-9}$	0	$5.457 \cdot 10^{-8}$	$5.457 \cdot 10^{-8}$	0
cpDC	$-5.475 \cdot 10^{-10}$	$-5.475 \cdot 10^{-10}$	0	$1.775 \cdot 10^{-11}$	$1.775 \cdot 10^{-11}$	0
cpW	$1.275 \cdot 10^{-8}$	$1.275 \cdot 10^{-8}$	0	$6.655 \cdot 10^{-7}$	$6.655 \cdot 10^{-7}$	0
cpWB	$1.486 \cdot 10^{-8}$	$1.486 \cdot 10^{-8}$	0	$4.723 \cdot 10^{-7}$	$4.723 \cdot 10^{-7}$	0
sm	0	0	0	$4.221 \cdot 10^{-9}$	$4.221 \cdot 10^{-9}$	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	-0.00156	-0.00156	0	$4.729 \cdot 10^{-5}$	$4.729 \cdot 10^{-5}$	0

c3pl2	-0.00156	-0.00156	0	$4.729 \cdot 10^{-5}$	$4.729 \cdot 10^{-5}$	0
c3pqi	0.2448	0.2448	0	1.165	1.165	0
cdp	0.00156	0.00156	0	$4.729 \cdot 10^{-5}$	$4.729 \cdot 10^{-5}$	0
cll1221	0.00156	0.00156	0	$4.729 \cdot 10^{-5}$	$4.729 \cdot 10^{-5}$	0
cpDC	-0.00039	-0.00039	0	$2.956 \cdot 10^{-6}$	$2.956 \cdot 10^{-6}$	0
cpW	0.01587	0.01587	0	0.0755	0.0755	0
sm	0	0	0	0.01287	0.01287	0

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

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
c3pQ3	-1.867	-1.867	0	1.84	1.84	0
c3pl1	-0.1027	-0.1027	0	0.003113	0.003113	0
c3pl2	-0.1027	-0.1027	0	0.003113	0.003113	0
cdp	0.1027	0.1027	0	0.003113	0.003113	0
cll1221	0.1027	0.1027	0	0.003113	0.003113	0
cpDC	-0.02567	-0.02567	0	0.0001946	0.0001946	0
cpW	-0.043	-0.043	0	0.05341	0.05341	0
ctW	-0.2339	-0.2339	0	2.053	2.053	0
ctp	0.07617	0.07617	0	0.05118	0.05118	0
sm	0	0	0	0.847	0.847	0

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

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
c3pl1	$8.268 \cdot 10^{-9}$	$8.268 \cdot 10^{-9}$	0	$3.793 \cdot 10^{-8}$	$3.793 \cdot 10^{-8}$	0
c3pl2	$-8.344 \cdot 10^{-11}$	$-8.344 \cdot 10^{-11}$	0	$3.794 \cdot 10^{-12}$	$3.794 \cdot 10^{-12}$	0

cWW	$-1.64 \cdot 10^{-9}$	$-1.64 \cdot 10^{-9}$	0	$3.702 \cdot 10^{-9}$	$3.702 \cdot 10^{-9}$	0
cdp	$5.563 \cdot 10^{-11}$	$5.563 \cdot 10^{-11}$	0	$1.686 \cdot 10^{-12}$	$1.686 \cdot 10^{-12}$	0
cll1221	$8.344 \cdot 10^{-11}$	$8.344 \cdot 10^{-11}$	0	$3.794 \cdot 10^{-12}$	$3.794 \cdot 10^{-12}$	0
cpBB	$-4.013 \cdot 10^{-10}$	$-4.013 \cdot 10^{-10}$	0	$4.25 \cdot 10^{-9}$	$4.25 \cdot 10^{-9}$	0
cpDC	$-5.951 \cdot 10^{-11}$	$-5.951 \cdot 10^{-11}$	0	$1.93 \cdot 10^{-12}$	$1.93 \cdot 10^{-12}$	0
cpW	$8.822 \cdot 10^{-10}$	$8.822 \cdot 10^{-10}$	0	$8.857 \cdot 10^{-9}$	$8.857 \cdot 10^{-9}$	0
cpWB	$3.23 \cdot 10^{-9}$	$3.23 \cdot 10^{-9}$	0	$1.316 \cdot 10^{-8}$	$1.316 \cdot 10^{-8}$	0
sm	0	0	0	$4.588 \cdot 10^{-10}$	$4.588 \cdot 10^{-10}$	0

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

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
c3pl1	-0.0009133	-0.0009133	0	$2.768 \cdot 10^{-5}$	$2.768 \cdot 10^{-5}$	0
c3pl2	0.1424	0.1424	0	0.6732	0.6732	0
cdp	0.0009133	0.0009133	0	$2.768 \cdot 10^{-5}$	$2.768 \cdot 10^{-5}$	0
cll1221	0.0009133	0.0009133	0	$2.768 \cdot 10^{-5}$	$2.768 \cdot 10^{-5}$	0
cpDC	-0.0002283	-0.0002283	0	$1.73 \cdot 10^{-6}$	$1.73 \cdot 10^{-6}$	0
cpW	0.003676	0.003676	0	0.01749	0.01749	0
sm	0	0	0	0.007532	0.007532	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	0.00599	0.00599	0
cpDC	0	0	0	0	$1.278 \cdot 10^{-38}$	$\infty$
cpW	0	0	0	0.01081	0.01081	0
cpWB	0	0	0	0.007485	0.007485	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	0.02727	0.02727	0
cpDC	0	0	0	0	$1.34 \cdot 10^{-38}$	$\infty$
cpW	0	0	0	0.01458	0.01458	0
cpWB	0	0	0	0.01638	0.01638	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	0.005349	0.005349	0
cpDC	0	0	0	0	$1.142 \cdot 10^{-38}$	$\infty$
cpW	0	0	0	0.009652	0.009652	0
cpWB	0	0	0	0.006685	0.006685	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	0.02484	0.02484	0
cpDC	0	0	0	0	$4.056 \cdot 10^{-39}$	$\infty$
cpW	0	0	0	0.005006	0.005006	0
cpWB	0	0	0	0.008459	0.008459	0

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

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
c3p11	-0.06863	-0.06863	0	0.00208	0.00208	0
c3p12	-0.06863	-0.06863	0	0.00208	0.00208	0
cdp	0.06863	0.06863	0	0.00208	0.00208	0
c111221	0.06863	0.06863	0	0.00208	0.00208	0
cpBB	-0.04207	-0.04207	0	0.02248	0.02248	0
cpDC	-0.07342	-0.07342	0	0.002381	0.002381	0
cpW	-0.02537	-0.02537	0	0.01152	0.01152	0
cpWB	-0.08969	-0.08969	0	0.01675	0.01675	0
ctB	-0.3547	-0.3547	0	2.12	2.12	0
ctW	-0.1959	-0.1959	0	0.6465	0.6465	0
ctp	-0.06947	-0.06947	0	0.002132	0.002132	0
sm	0	0	0	0.5661	0.5661	0

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

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
c3p11	$-3.235 \cdot 10^{-5}$	$-3.235 \cdot 10^{-5}$	0	$9.807 \cdot 10^{-7}$	$9.807 \cdot 10^{-7}$	0
c3p12	0.004095	0.004095	0	0.028	0.028	0
cdp	$3.235 \cdot 10^{-5}$	$3.235 \cdot 10^{-5}$	0	$9.807 \cdot 10^{-7}$	$9.807 \cdot 10^{-7}$	0
c111221	$3.235 \cdot 10^{-5}$	$3.235 \cdot 10^{-5}$	0	$9.807 \cdot 10^{-7}$	$9.807 \cdot 10^{-7}$	0
cpBB	0.0005775	0.0005775	0	0.006011	0.006011	0
cpDC	$3.22 \cdot 10^{-6}$	$3.22 \cdot 10^{-6}$	0	$2.294 \cdot 10^{-6}$	$2.294 \cdot 10^{-6}$	0
cpW	0.002501	0.002501	0	0.01302	0.01302	0
cpWB	0.001217	0.001217	0	0.003838	0.003838	0
cp12	0.004127	0.004127	0	0.02825	0.02825	0
cpmu	-0.003622	-0.003622	0	0.02825	0.02825	0

sm	0	0	0	0.0002668	0.0002668	0
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### 1.29 $H z \rightarrow \nu_\tau \bar{\nu}_\tau$

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
c3p11	-0.0007156	-0.0007156	0	$2.169 \cdot 10^{-5}$	$2.169 \cdot 10^{-5}$	0
c3p12	-0.0007156	-0.0007156	0	$2.169 \cdot 10^{-5}$	$2.169 \cdot 10^{-5}$	0
c3p13	0.08606	0.08606	0	0.3137	0.3137	0
cdp	0.0007156	0.0007156	0	$2.169 \cdot 10^{-5}$	$2.169 \cdot 10^{-5}$	0
c111221	0.0007156	0.0007156	0	$2.169 \cdot 10^{-5}$	$2.169 \cdot 10^{-5}$	0
cpBB	0.0008032	0.0008032	0	0.0006843	0.0006843	0
cpDC	$9.031 \cdot 10^{-19}$	$2.749 \cdot 10^{-18}$	-2.044	$2.079 \cdot 10^{-34}$	$3.356 \cdot 10^{-34}$	-0.6141
cpW	0.002634	0.002634	0	0.007357	0.007357	0
cpWB	0.001454	0.001454	0	0.002244	0.002244	0
cp13	-0.08606	-0.08606	0	0.3137	0.3137	0
sm	0	0	0	0.005902	0.005902	0

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

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
c3pQ3	0.2214	0.2214	0	0.9603	0.9603	0
c3p11	-0.0016	-0.0016	0	$4.85 \cdot 10^{-5}$	$4.85 \cdot 10^{-5}$	0
c3p12	-0.0016	-0.0016	0	$4.85 \cdot 10^{-5}$	$4.85 \cdot 10^{-5}$	0
cdp	0.0016	0.0016	0	$4.85 \cdot 10^{-5}$	$4.85 \cdot 10^{-5}$	0
c111221	0.0016	0.0016	0	$4.85 \cdot 10^{-5}$	$4.85 \cdot 10^{-5}$	0
cpBB	0.0009189	0.0009189	0	0.001115	0.001115	0
cpDC	0.0003818	0.0003818	0	$8.588 \cdot 10^{-6}$	$8.588 \cdot 10^{-6}$	0

cpQ3	0.2214	0.2214	0	0.9603	0.9603	0
cpW	0.006546	0.006546	0	0.02163	0.02163	0
cpWB	0.003061	0.003061	0	0.003715	0.003715	0
cpd	-0.04086	-0.04086	0	0.9603	0.9603	0
sm	0	0	0	0.0132	0.0132	0

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

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
c3pl1	-0.0002403	-0.0002403	0	$7.285 \cdot 10^{-6}$	$7.285 \cdot 10^{-6}$	0
c3pl2	-0.0002403	-0.0002403	0	$7.285 \cdot 10^{-6}$	$7.285 \cdot 10^{-6}$	0
c3pqi	0.03311	0.03311	0	0.143	0.143	0
cdp	0.0002403	0.0002403	0	$7.285 \cdot 10^{-6}$	$7.285 \cdot 10^{-6}$	0
cl11221	0.0002403	0.0002403	0	$7.285 \cdot 10^{-6}$	$7.285 \cdot 10^{-6}$	0
cpBB	0.001619	0.001619	0	0.001964	0.001964	0
cpDC	$5.734 \cdot 10^{-5}$	$5.734 \cdot 10^{-5}$	0	$1.29 \cdot 10^{-6}$	$1.29 \cdot 10^{-6}$	0
cpW	0.01153	0.01153	0	0.0381	0.0381	0
cpWB	0.004713	0.004713	0	0.006528	0.006528	0
cpd	-0.00611	-0.00611	0	0.143	0.143	0
cpqi	0.03311	0.03311	0	0.143	0.143	0
sm	0	0	0	0.001982	0.001982	0

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

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
c3pQ3	-2.071	-2.071	0	1.388	1.388	0
c3pl1	-0.2322	-0.2322	0	0.007037	0.007037	0



c3p12	-0.2322	-0.2322	0	0.007037	0.007037	0
cdp	0.2322	0.2322	0	0.007037	0.007037	0
cll1221	0.2322	0.2322	0	0.007037	0.007037	0
cpBB	-0.01293	-0.01293	0	0.004816	0.004816	0
cpDC	0.01288	0.01288	0	0.01743	0.01743	0
cpQ3	2.071	2.071	0	1.388	1.388	0
cpW	-0.04717	-0.04717	0	0.02654	0.02654	0
cpWB	-0.01198	-0.01198	0	0.005402	0.005402	0
cpt	-2.211	-2.211	0	1.388	1.388	0
ctB	0.02008	0.02008	0	0.8373	0.8373	0
ctW	-0.03636	-0.03636	0	2.746	2.746	0
ctp	0.002696	0.002696	0	0.06893	0.06893	0
sm	0	0	0	1.915	1.915	0

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

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
c3p11	-0.001348	-0.001348	0	$4.087 \cdot 10^{-5}$	$4.087 \cdot 10^{-5}$	0
c3p12	-0.001348	-0.001348	0	$4.087 \cdot 10^{-5}$	$4.087 \cdot 10^{-5}$	0
c3pqi	0.1955	0.1955	0	1.035	1.035	0
cdp	0.001348	0.001348	0	$4.087 \cdot 10^{-5}$	$4.087 \cdot 10^{-5}$	0
cll1221	0.001348	0.001348	0	$4.087 \cdot 10^{-5}$	$4.087 \cdot 10^{-5}$	0
cpBB	0.0004166	0.0004166	0	0.003491	0.003491	0
cpDC	0.0004546	0.0004546	0	$3.736 \cdot 10^{-5}$	$3.736 \cdot 10^{-5}$	0
cpW	0.004964	0.004964	0	0.02007	0.02007	0
cpWB	0.00225	0.00225	0	0.003406	0.003406	0
cpqi	-0.1955	-0.1955	0	1.035	1.035	0
cpu	0.08849	0.08849	0	1.035	1.035	0

sm	0	0	0	0.01112	0.01112	0
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### 1.34 $W^+W^- \rightarrow Hb\bar{b}$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
c3pQ3	0.008876	0.008876	0	0.0002827	0.0002827	0
c3pl1	-0.01311	-0.01311	0	0.0005961	0.0005961	0
c3pl2	-0.01311	-0.01311	0	0.0005961	0.0005961	0
cWW	0.00764	0.00764	0	0.003136	0.003136	0
cdp	0.00874	0.00874	0	0.0002649	0.0002649	0
cll1221	0.01311	0.01311	0	0.0005961	0.0005961	0
cpBB	-0.0001238	-0.0001238	0	$1.022 \cdot 10^{-7}$	$1.022 \cdot 10^{-7}$	0
cpDC	-0.005359	-0.005359	0	0.0001334	0.0001334	0
cpQ3	0.009934	0.009934	0	0.0003522	0.0003522	0
cpW	-0.0009772	-0.0009772	0	0.001507	0.001507	0
cpWB	0.005018	0.005018	0	0.0002506	0.0002506	0
cpd	-0.001692	-0.001692	0	0.0003524	0.0003524	0
ctW	-0.0002082	-0.0002082	0	$9.959 \cdot 10^{-6}$	$9.959 \cdot 10^{-6}$	0
ctp	$-1.792 \cdot 10^{-5}$	$-1.792 \cdot 10^{-5}$	0	$1.133 \cdot 10^{-8}$	$1.133 \cdot 10^{-8}$	0
sm	0	0	0	0.07209	0.07209	0

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

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
c3pl1	$-1.286 \cdot 10^{-7}$	$-1.286 \cdot 10^{-7}$	0	$5.846 \cdot 10^{-9}$	$5.846 \cdot 10^{-9}$	0
c3pl2	$-1.286 \cdot 10^{-7}$	$-1.286 \cdot 10^{-7}$	0	$5.846 \cdot 10^{-9}$	$5.846 \cdot 10^{-9}$	0
c3pqi	$1.18 \cdot 10^{-6}$	$1.18 \cdot 10^{-6}$	0	$2.245 \cdot 10^{-6}$	$2.245 \cdot 10^{-6}$	0

cWWW	$5.17 \cdot 10^{-7}$	$5.17 \cdot 10^{-7}$	0	$1.247 \cdot 10^{-6}$	$1.247 \cdot 10^{-6}$	0
cdp	$8.571 \cdot 10^{-8}$	$8.571 \cdot 10^{-8}$	0	$2.598 \cdot 10^{-9}$	$2.598 \cdot 10^{-9}$	0
c111221	$1.286 \cdot 10^{-7}$	$1.286 \cdot 10^{-7}$	0	$5.846 \cdot 10^{-9}$	$5.846 \cdot 10^{-9}$	0
cpBB	$7.467 \cdot 10^{-9}$	$7.467 \cdot 10^{-9}$	0	$5.808 \cdot 10^{-10}$	$5.808 \cdot 10^{-10}$	0
cpDC	$-5.835 \cdot 10^{-8}$	$-5.835 \cdot 10^{-8}$	0	$1.351 \cdot 10^{-9}$	$1.351 \cdot 10^{-9}$	0
cpW	$-9.995 \cdot 10^{-8}$	$-9.995 \cdot 10^{-8}$	0	$4.376 \cdot 10^{-8}$	$4.376 \cdot 10^{-8}$	0
cpWB	$5.002 \cdot 10^{-8}$	$5.002 \cdot 10^{-8}$	0	$1.365 \cdot 10^{-7}$	$1.365 \cdot 10^{-7}$	0
cpqi	$1.656 \cdot 10^{-8}$	$1.656 \cdot 10^{-8}$	0	$5.055 \cdot 10^{-8}$	$5.055 \cdot 10^{-8}$	0
cpu	$2.593 \cdot 10^{-8}$	$2.593 \cdot 10^{-8}$	0	$5.059 \cdot 10^{-8}$	$5.059 \cdot 10^{-8}$	0
sm	0	0	0	$7.069 \cdot 10^{-7}$	$7.069 \cdot 10^{-7}$	0

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

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
c3pl1	$-1.346 \cdot 10^{-7}$	$-1.346 \cdot 10^{-7}$	0	$6.118 \cdot 10^{-9}$	$6.118 \cdot 10^{-9}$	0
c3pl2	$-1.346 \cdot 10^{-7}$	$-1.346 \cdot 10^{-7}$	0	$6.118 \cdot 10^{-9}$	$6.118 \cdot 10^{-9}$	0
c3pqi	$1.409 \cdot 10^{-7}$	$1.409 \cdot 10^{-7}$	0	$1.132 \cdot 10^{-6}$	$1.132 \cdot 10^{-6}$	0
cWWW	$3.189 \cdot 10^{-7}$	$3.189 \cdot 10^{-7}$	0	$7.875 \cdot 10^{-7}$	$7.875 \cdot 10^{-7}$	0
cdp	$8.971 \cdot 10^{-8}$	$8.971 \cdot 10^{-8}$	0	$2.719 \cdot 10^{-9}$	$2.719 \cdot 10^{-9}$	0
c111221	$1.346 \cdot 10^{-7}$	$1.346 \cdot 10^{-7}$	0	$6.118 \cdot 10^{-9}$	$6.118 \cdot 10^{-9}$	0
cpBB	$-1.129 \cdot 10^{-8}$	$-1.129 \cdot 10^{-8}$	0	$1.979 \cdot 10^{-10}$	$1.979 \cdot 10^{-10}$	0
cpDC	$-6.81 \cdot 10^{-8}$	$-6.81 \cdot 10^{-8}$	0	$1.638 \cdot 10^{-9}$	$1.638 \cdot 10^{-9}$	0
cpW	$-1.127 \cdot 10^{-7}$	$-1.127 \cdot 10^{-7}$	0	$2.561 \cdot 10^{-8}$	$2.561 \cdot 10^{-8}$	0
cpWB	$-7.363 \cdot 10^{-8}$	$-7.363 \cdot 10^{-8}$	0	$1.873 \cdot 10^{-8}$	$1.873 \cdot 10^{-8}$	0
cpd	$-2.432 \cdot 10^{-8}$	$-2.432 \cdot 10^{-8}$	0	$1.976 \cdot 10^{-7}$	$1.976 \cdot 10^{-7}$	0
cpqi	$2.173 \cdot 10^{-7}$	$2.173 \cdot 10^{-7}$	0	$1.977 \cdot 10^{-7}$	$1.977 \cdot 10^{-7}$	0
sm	0	0	0	$7.399 \cdot 10^{-7}$	$7.399 \cdot 10^{-7}$	0

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

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
c3pQ3	$1.965 \cdot 10^{-5}$	$1.965 \cdot 10^{-5}$	0	$1.978 \cdot 10^{-5}$	$1.978 \cdot 10^{-5}$	0
c3pl1	$-4.969 \cdot 10^{-6}$	$-4.969 \cdot 10^{-6}$	0	$2.259 \cdot 10^{-7}$	$2.259 \cdot 10^{-7}$	0
c3pl2	$-4.969 \cdot 10^{-6}$	$-4.969 \cdot 10^{-6}$	0	$2.259 \cdot 10^{-7}$	$2.259 \cdot 10^{-7}$	0
cWWW	$1.286 \cdot 10^{-6}$	$1.286 \cdot 10^{-6}$	0	$4.061 \cdot 10^{-6}$	$4.061 \cdot 10^{-6}$	0
cdp	$3.704 \cdot 10^{-6}$	$3.704 \cdot 10^{-6}$	0	$3.971 \cdot 10^{-6}$	$3.971 \cdot 10^{-6}$	0
cll1221	$4.969 \cdot 10^{-6}$	$4.969 \cdot 10^{-6}$	0	$2.259 \cdot 10^{-7}$	$2.259 \cdot 10^{-7}$	0
cp	$-4.87 \cdot 10^{-8}$	$-4.87 \cdot 10^{-8}$	0	$5.574 \cdot 10^{-8}$	$5.574 \cdot 10^{-8}$	0
cpBB	$3.621 \cdot 10^{-8}$	$3.621 \cdot 10^{-8}$	0	$5.563 \cdot 10^{-10}$	$5.563 \cdot 10^{-10}$	0
cpDC	$-3.115 \cdot 10^{-6}$	$-3.115 \cdot 10^{-6}$	0	$3.466 \cdot 10^{-7}$	$3.466 \cdot 10^{-7}$	0
cpQ3	$-5.422 \cdot 10^{-8}$	$-5.422 \cdot 10^{-8}$	0	$7.732 \cdot 10^{-7}$	$7.732 \cdot 10^{-7}$	0
cpW	$7.411 \cdot 10^{-6}$	$7.411 \cdot 10^{-6}$	0	$1.102 \cdot 10^{-5}$	$1.102 \cdot 10^{-5}$	0
cpWB	$1.078 \cdot 10^{-6}$	$1.078 \cdot 10^{-6}$	0	$1.463 \cdot 10^{-7}$	$1.463 \cdot 10^{-7}$	0
cpt	$-1.337 \cdot 10^{-6}$	$-1.337 \cdot 10^{-6}$	0	$7.736 \cdot 10^{-7}$	$7.736 \cdot 10^{-7}$	0
ctB	$1.763 \cdot 10^{-7}$	$1.763 \cdot 10^{-7}$	0	$2.317 \cdot 10^{-8}$	$2.317 \cdot 10^{-8}$	0
ctW	$-8.791 \cdot 10^{-6}$	$-8.791 \cdot 10^{-6}$	0	$4.369 \cdot 10^{-5}$	$4.369 \cdot 10^{-5}$	0
ctp	$6.951 \cdot 10^{-7}$	$6.951 \cdot 10^{-7}$	0	$4.454 \cdot 10^{-7}$	$4.454 \cdot 10^{-7}$	0
sm	0	0	0	$2.732 \cdot 10^{-5}$	$2.732 \cdot 10^{-5}$	0

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

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
c3pl1	-9.292	-9.292	0	0.2817	0.2817	0
c3pl2	-9.292	-9.292	0	0.2817	0.2817	0
cWWW	0.0007587	0.0007587	0	17.16	17.16	0

cdp	9.447	9.447	0	0.3183	0.3183	0
c111221	9.292	9.292	0	0.2817	0.2817	0
cpDC	4.39	4.39	0	0.07025	0.07025	0
cpW	0.2058	0.2058	0	1.892	1.892	0
cpWB	0.2968	0.2968	0	0.03328	0.03328	0
sm	0	0	0	76.64	76.64	0

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

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
c3p11	-0.009435	-0.009435	0	0.000286	0.000286	0
c3p12	-0.009435	-0.009435	0	0.000286	0.000286	0
cWWW	-0.0005652	-0.0005652	0	0.721	0.721	0
c111221	0.009435	0.009435	0	0.000286	0.000286	0
cpBB	-0.04694	-0.04694	0	0.2694	0.2694	0
cpDC	-0.01547	-0.01547	0	0.0007688	0.0007688	0
cpW	-0.01432	-0.01432	0	0.02506	0.02506	0
cpWB	-0.04955	-0.04955	0	0.08299	0.08299	0
sm	0	0	0	0.07781	0.07781	0

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

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
c3p11	$-7.648 \cdot 10^{-8}$	$-7.648 \cdot 10^{-8}$	0	$3.478 \cdot 10^{-9}$	$3.478 \cdot 10^{-9}$	0
c3p12	$-7.648 \cdot 10^{-8}$	$-7.648 \cdot 10^{-8}$	0	$3.478 \cdot 10^{-9}$	$3.478 \cdot 10^{-9}$	0
cWWW	$2.873 \cdot 10^{-8}$	$2.873 \cdot 10^{-8}$	0	$1.502 \cdot 10^{-6}$	$1.502 \cdot 10^{-6}$	0
c111221	$7.648 \cdot 10^{-8}$	$7.648 \cdot 10^{-8}$	0	$3.478 \cdot 10^{-9}$	$3.478 \cdot 10^{-9}$	0

cpBB	$5.821 \cdot 10^{-9}$	$5.821 \cdot 10^{-9}$	0	$7.393 \cdot 10^{-8}$	$7.393 \cdot 10^{-8}$	0
cpDC	$-1.254 \cdot 10^{-7}$	$-1.254 \cdot 10^{-7}$	0	$9.348 \cdot 10^{-9}$	$9.348 \cdot 10^{-9}$	0
cpW	$1.775 \cdot 10^{-9}$	$1.775 \cdot 10^{-9}$	0	$6.876 \cdot 10^{-9}$	$6.876 \cdot 10^{-9}$	0
cpWB	$-2.405 \cdot 10^{-7}$	$-2.405 \cdot 10^{-7}$	0	$1.355 \cdot 10^{-7}$	$1.355 \cdot 10^{-7}$	0
sm	0	0	0	$4.205 \cdot 10^{-7}$	$4.205 \cdot 10^{-7}$	0

#### 1.41 $\bar{b}t \rightarrow \bar{d}u$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
c3pQ3	0.002701	0.002701	0	$8.188 \cdot 10^{-5}$	$8.188 \cdot 10^{-5}$	0
c3p11	-0.002701	-0.002701	0	$8.188 \cdot 10^{-5}$	$8.188 \cdot 10^{-5}$	0
c3p12	-0.002701	-0.002701	0	$8.188 \cdot 10^{-5}$	$8.188 \cdot 10^{-5}$	0
c3pqi	0.002701	0.002701	0	$8.188 \cdot 10^{-5}$	$8.188 \cdot 10^{-5}$	0
cQq13	0.8424	0.8424	0	7.964	7.964	0
cQq83	$1.085 \cdot 10^{-18}$	$1.085 \cdot 10^{-18}$	0	1.77	1.77	0
c111221	0.002701	0.002701	0	$8.188 \cdot 10^{-5}$	$8.188 \cdot 10^{-5}$	0
ctW	0.01159	0.01159	0	0.01157	0.01157	0
sm	0	0	0	0.02228	0.02228	0

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

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
c3p11	-0.03755	-0.03755	0	0.001138	0.001138	0
c3p12	-0.03755	-0.03755	0	0.001138	0.001138	0
cWW	-0.007403	-0.007403	0	1.237	1.237	0
c111221	0.03755	0.03755	0	0.001138	0.001138	0
cpBB	-0.0388	-0.0388	0	0.04138	0.04138	0

cpDC	-0.02139	-0.02139	0	0.0003695	0.0003695	0
cpW	0.0388	0.0388	0	0.04138	0.04138	0
cpWB	0.07006	0.07006	0	0.5501	0.5501	0
sm	0	0	0	0.3097	0.3097	0

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

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
c3pl1	-0.0008885	-0.0008885	0	$2.693 \cdot 10^{-5}$	$2.693 \cdot 10^{-5}$	0
c3pl2	-0.001326	-0.001326	0	$6.712 \cdot 10^{-5}$	$6.712 \cdot 10^{-5}$	0
c3pl3	-0.0004378	-0.0004378	0	$1.365 \cdot 10^{-5}$	$1.365 \cdot 10^{-5}$	0
cl11221	0.0008885	0.0008885	0	$2.693 \cdot 10^{-5}$	$2.693 \cdot 10^{-5}$	0
cl12233	0.001963	0.001963	0	0.01428	0.01428	0
cl12332	0.001963	0.001963	0	0.01428	0.01428	0
cpDC	-0.001893	-0.001893	0	0.0001229	0.0001229	0
cpWB	-0.004803	-0.004803	0	0.0007914	0.0007914	0
cp12	-0.0004378	-0.0004378	0	$1.365 \cdot 10^{-5}$	$1.365 \cdot 10^{-5}$	0
cp13	-0.0004378	-0.0004378	0	$1.365 \cdot 10^{-5}$	$1.365 \cdot 10^{-5}$	0
cpmu	0.0005003	0.0005003	0	$1.769 \cdot 10^{-5}$	$1.769 \cdot 10^{-5}$	0
cpta	0.0005003	0.0005003	0	$1.769 \cdot 10^{-5}$	$1.769 \cdot 10^{-5}$	0
sm	0	0	0	0.007328	0.007328	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
c3pl1	$-3.222 \cdot 10^{-7}$	$-3.222 \cdot 10^{-7}$	0	$9.765 \cdot 10^{-9}$	$9.765 \cdot 10^{-9}$	0
c3pl2	$-3.222 \cdot 10^{-7}$	$-3.222 \cdot 10^{-7}$	0	$9.765 \cdot 10^{-9}$	$9.765 \cdot 10^{-9}$	0

c3pl3	$6.443 \cdot 10^{-7}$	$6.443 \cdot 10^{-7}$	0	$3.906 \cdot 10^{-8}$	$3.906 \cdot 10^{-8}$	0
c1l1221	$3.222 \cdot 10^{-7}$	$3.222 \cdot 10^{-7}$	0	$9.765 \cdot 10^{-9}$	$9.765 \cdot 10^{-9}$	0
c1l3333	-0.001453	-0.001453	0	0.1988	0.1988	0
cpDC	$-1.611 \cdot 10^{-7}$	$-1.611 \cdot 10^{-7}$	0	$2.441 \cdot 10^{-9}$	$2.441 \cdot 10^{-9}$	0
cpWB	$-8.218 \cdot 10^{-22}$	0	1	$1.058 \cdot 10^{-37}$	0	1
cp13	$-6.443 \cdot 10^{-7}$	$-6.443 \cdot 10^{-7}$	0	$3.906 \cdot 10^{-8}$	$3.906 \cdot 10^{-8}$	0
sm	0	0	0	$2.657 \cdot 10^{-6}$	$2.657 \cdot 10^{-6}$	0

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

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
c3pl1	$4.29 \cdot 10^{-20}$	0	1	$1.91 \cdot 10^{-37}$	0	1
c3pl2	$5.275 \cdot 10^{-21}$	0	1	$2.939 \cdot 10^{-39}$	0	1
c1l1122	0.06967	0.06967	0	0.5037	0.5037	0
c1l1221	0.06996	0.06996	0	0.5079	0.5079	0
cpDC	-0.000146	-0.000146	0	$2.213 \cdot 10^{-6}$	$2.213 \cdot 10^{-6}$	0
cpWB	$4.29 \cdot 10^{-20}$	0	1	$1.91 \cdot 10^{-37}$	0	1
cp11	-0.0002921	-0.0002921	0	$8.853 \cdot 10^{-6}$	$8.853 \cdot 10^{-6}$	0
cp12	-0.0002921	-0.0002921	0	$8.853 \cdot 10^{-6}$	$8.853 \cdot 10^{-6}$	0
sm	0	0	0	0.002409	0.002409	0

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

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
c3pl1	$-3.464 \cdot 10^{-5}$	$-3.464 \cdot 10^{-5}$	0	$1.05 \cdot 10^{-6}$	$1.05 \cdot 10^{-6}$	0
c3pl2	$-3.464 \cdot 10^{-5}$	$-3.464 \cdot 10^{-5}$	0	$1.05 \cdot 10^{-6}$	$1.05 \cdot 10^{-6}$	0
c1l1221	$3.464 \cdot 10^{-5}$	$3.464 \cdot 10^{-5}$	0	$1.05 \cdot 10^{-6}$	$1.05 \cdot 10^{-6}$	0



cpDC	$-5.679 \cdot 10^{-5}$	$-5.679 \cdot 10^{-5}$	0	$2.822 \cdot 10^{-6}$	$2.822 \cdot 10^{-6}$	0
cpWB	-0.0001254	-0.0001254	0	$1.377 \cdot 10^{-5}$	$1.377 \cdot 10^{-5}$	0
sm	0	0	0	0.0002857	0.0002857	0

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

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
c3pQ3	$4.745 \cdot 10^{-5}$	$4.745 \cdot 10^{-5}$	0	$3.764 \cdot 10^{-6}$	$3.764 \cdot 10^{-6}$	0
c3pl1	$-3.793 \cdot 10^{-5}$	$-3.793 \cdot 10^{-5}$	0	$1.15 \cdot 10^{-6}$	$1.15 \cdot 10^{-6}$	0
c3pl2	$-3.904 \cdot 10^{-5}$	$-3.904 \cdot 10^{-5}$	0	$2.058 \cdot 10^{-6}$	$2.058 \cdot 10^{-6}$	0
cQl32	0.003356	0.003356	0	0.03535	0.03535	0
cQlM2	0.001678	0.001678	0	0.008839	0.008839	0
cQmu	-0.0102	-0.0102	0	0.2336	0.2336	0
cll1221	$3.793 \cdot 10^{-5}$	$3.793 \cdot 10^{-5}$	0	$1.15 \cdot 10^{-6}$	$1.15 \cdot 10^{-6}$	0
cpDC	$-5.811 \cdot 10^{-5}$	$-5.811 \cdot 10^{-5}$	0	$3.942 \cdot 10^{-6}$	$3.942 \cdot 10^{-6}$	0
cpQ3	$4.745 \cdot 10^{-5}$	$4.745 \cdot 10^{-5}$	0	$3.764 \cdot 10^{-6}$	$3.764 \cdot 10^{-6}$	0
cpWB	$-5.345 \cdot 10^{-5}$	$-5.345 \cdot 10^{-5}$	0	$1.359 \cdot 10^{-5}$	$1.359 \cdot 10^{-5}$	0
cpd	$4.142 \cdot 10^{-5}$	$4.142 \cdot 10^{-5}$	0	$4.795 \cdot 10^{-6}$	$4.795 \cdot 10^{-6}$	0
cp12	$-1.105 \cdot 10^{-6}$	$-1.105 \cdot 10^{-6}$	0	$8.415 \cdot 10^{-7}$	$8.415 \cdot 10^{-7}$	0
cpmu	$-7.316 \cdot 10^{-5}$	$-7.316 \cdot 10^{-5}$	0	$1.172 \cdot 10^{-5}$	$1.172 \cdot 10^{-5}$	0
sm	0	0	0	0.0003129	0.0003129	0

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

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
c3pQ3	$6.775 \cdot 10^{-5}$	$6.775 \cdot 10^{-5}$	0	$2.433 \cdot 10^{-6}$	$2.433 \cdot 10^{-6}$	0
c3pl1	$5.966 \cdot 10^{-21}$	$-5.278 \cdot 10^{-22}$	1.088	$1.665 \cdot 10^{-38}$	$9.796 \cdot 10^{-40}$	0.9412

c3p12	$-6.582 \cdot 10^{-5}$	$-6.582 \cdot 10^{-5}$	0	$1.995 \cdot 10^{-6}$	$1.995 \cdot 10^{-6}$	0
cQ1M1	-0.00808	-0.00808	0	0.0346	0.0346	0
c111221	$6.582 \cdot 10^{-5}$	$6.582 \cdot 10^{-5}$	0	$1.995 \cdot 10^{-6}$	$1.995 \cdot 10^{-6}$	0
cpDC	$-2.974 \cdot 10^{-5}$	$-2.974 \cdot 10^{-5}$	0	$1.264 \cdot 10^{-6}$	$1.264 \cdot 10^{-6}$	0
cpQ3	$6.775 \cdot 10^{-5}$	$6.775 \cdot 10^{-5}$	0	$2.433 \cdot 10^{-6}$	$2.433 \cdot 10^{-6}$	0
cpWB	$3.501 \cdot 10^{-6}$	$3.501 \cdot 10^{-6}$	0	$1.051 \cdot 10^{-6}$	$1.051 \cdot 10^{-6}$	0
cpd	$-5.534 \cdot 10^{-5}$	$-5.534 \cdot 10^{-5}$	0	$1.077 \cdot 10^{-5}$	$1.077 \cdot 10^{-5}$	0
cp11	$-6.582 \cdot 10^{-5}$	$-6.582 \cdot 10^{-5}$	0	$1.995 \cdot 10^{-6}$	$1.995 \cdot 10^{-6}$	0
sm	0	0	0	0.0005428	0.0005428	0

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

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
c3pQ3	-0.007076	-0.007076	0	$7.681 \cdot 10^{-5}$	$7.681 \cdot 10^{-5}$	0
c3p11	0.003834	0.003834	0	$1.611 \cdot 10^{-5}$	$1.611 \cdot 10^{-5}$	0
c3p12	0.003834	0.003834	0	$1.611 \cdot 10^{-5}$	$1.611 \cdot 10^{-5}$	0
cQQ1	-0.1327	-0.1327	0	0.3722	0.3722	0
cQQ8	-0.04424	-0.04424	0	0.04136	0.04136	0
cQd1	0.03256	0.03256	0	2.784	2.784	0
cQd8	-1.586	-1.586	0	0.6188	0.6188	0
c111221	-0.003834	-0.003834	0	$1.611 \cdot 10^{-5}$	$1.611 \cdot 10^{-5}$	0
cpDC	0.001229	0.001229	0	$6.052 \cdot 10^{-6}$	$6.052 \cdot 10^{-6}$	0
cpQ3	-0.007076	-0.007076	0	$7.681 \cdot 10^{-5}$	$7.681 \cdot 10^{-5}$	0
cpWB	0.001071	0.001071	0	$7.941 \cdot 10^{-6}$	$7.941 \cdot 10^{-6}$	0
cpd	0.0009247	0.0009247	0	0.0002862	0.0002862	0
sm	0	0	0	3.43	3.43	0

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

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
c3pQ3	0.0004914	0.0004914	0	$1.61 \cdot 10^{-5}$	$1.61 \cdot 10^{-5}$	0
c3pl1	-0.0004676	-0.0004676	0	$1.417 \cdot 10^{-5}$	$1.417 \cdot 10^{-5}$	0
c3pl2	-0.0004676	-0.0004676	0	$1.417 \cdot 10^{-5}$	$1.417 \cdot 10^{-5}$	0
c3pqi	0.0004914	0.0004914	0	$1.61 \cdot 10^{-5}$	$1.61 \cdot 10^{-5}$	0
cQd1	-0.002805	-0.002805	0	0.1928	0.1928	0
cQd8	0.1269	0.1269	0	0.04284	0.04284	0
cQq11	0.1378	0.1378	0	1.259	1.259	0
cQq13	0.1378	0.1378	0	1.259	1.259	0
cQq81	0.4144	0.4144	0	0.2797	0.2797	0
cQq83	0.4144	0.4144	0	0.2797	0.2797	0
cl11221	0.0004676	0.0004676	0	$1.417 \cdot 10^{-5}$	$1.417 \cdot 10^{-5}$	0
cpDC	$-5.34 \cdot 10^{-5}$	$-5.34 \cdot 10^{-5}$	0	$1.489 \cdot 10^{-6}$	$1.489 \cdot 10^{-6}$	0
cpQ3	0.0004914	0.0004914	0	$1.61 \cdot 10^{-5}$	$1.61 \cdot 10^{-5}$	0
cpWB	$8.62 \cdot 10^{-5}$	$8.62 \cdot 10^{-5}$	0	$4.121 \cdot 10^{-6}$	$4.121 \cdot 10^{-6}$	0
cpd	$-6.317 \cdot 10^{-5}$	$-6.317 \cdot 10^{-5}$	0	$2.147 \cdot 10^{-5}$	$2.147 \cdot 10^{-5}$	0
cpqi	0.0004914	0.0004914	0	$1.61 \cdot 10^{-5}$	$1.61 \cdot 10^{-5}$	0
sm	0	0	0	0.4989	0.4989	0

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

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
c3pQ3	0.004058	0.004058	0	0.004164	0.004164	0
c3pl1	-0.00213	-0.00213	0	0.001046	0.001046	0
c3pl2	-0.00213	-0.00213	0	0.001046	0.001046	0

cQQ1	-0.06136	-0.06136	0	0.1116	0.1116	0
cQQ8	0.0404	0.0404	0	0.02479	0.02479	0
cQd1	-0.007893	-0.007893	0	0.4432	0.4432	0
cQd8	0.3113	0.3113	0	0.09848	0.09848	0
cQt1	-0.2241	-0.2241	0	0.4432	0.4432	0
cQt8	0.003336	0.003336	0	0.09848	0.09848	0
cl11221	0.00213	0.00213	0	0.001046	0.001046	0
cpDC	0.000419	0.000419	0	$3.753 \cdot 10^{-6}$	$3.753 \cdot 10^{-6}$	0
cpQ3	-0.0006554	-0.0006554	0	$4.174 \cdot 10^{-6}$	$4.174 \cdot 10^{-6}$	0
cpWB	-0.0003669	-0.0003669	0	$1.363 \cdot 10^{-5}$	$1.363 \cdot 10^{-5}$	0
cpd	$2.784 \cdot 10^{-5}$	$2.784 \cdot 10^{-5}$	0	$1.463 \cdot 10^{-5}$	$1.463 \cdot 10^{-5}$	0
cpt	-0.001578	-0.001578	0	$2.24 \cdot 10^{-5}$	$2.24 \cdot 10^{-5}$	0
ctB	-0.002951	-0.002951	0	0.001101	0.001101	0
ctG	0.1364	0.1364	$2.933 \cdot 10^{-7}$	0.0596	0.0596	$5.033 \cdot 10^{-7}$
ctW	0.02292	0.02292	0	0.0416	0.0416	0
ctd1	-0.006784	-0.006784	0	0.1116	0.1116	0
ctd8	0.09295	0.09295	0	0.02479	0.02479	0
sm	0	0	0	0.3494	0.3494	0

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

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
c3pQ3	0.0008564	0.0008564	0	$2.429 \cdot 10^{-5}$	$2.429 \cdot 10^{-5}$	0
c3pl1	-0.0009899	-0.0009899	0	$3 \cdot 10^{-5}$	$3 \cdot 10^{-5}$	0
c3pl2	-0.0009899	-0.0009899	0	$3 \cdot 10^{-5}$	$3 \cdot 10^{-5}$	0
c3pqi	0.001048	0.001048	0	$3.633 \cdot 10^{-5}$	$3.633 \cdot 10^{-5}$	0
cQq11	-0.2962	-0.2962	0	2.897	2.897	0
cQq13	0.2962	0.2962	0	2.897	2.897	0

cQq81	0.954	0.954	0	0.6439	0.6439	0
cQq83	-0.954	-0.954	0	0.6439	0.6439	0
cQu1	0.0006451	0.0006451	0	0.02217	0.02217	0
cQu8	0.0146	0.0146	0	0.004927	0.004927	0
c111221	0.0009899	0.0009899	0	$3 \cdot 10^{-5}$	$3 \cdot 10^{-5}$	0
cpDC	$-8.32 \cdot 10^{-5}$	$-8.32 \cdot 10^{-5}$	0	$1.023 \cdot 10^{-5}$	$1.023 \cdot 10^{-5}$	0
cpQ3	0.0008564	0.0008564	0	$2.429 \cdot 10^{-5}$	$2.429 \cdot 10^{-5}$	0
cpWB	-0.0001367	-0.0001367	0	$2.935 \cdot 10^{-5}$	$2.935 \cdot 10^{-5}$	0
cpd	-0.0001063	-0.0001063	0	$5.683 \cdot 10^{-6}$	$5.683 \cdot 10^{-6}$	0
cpqi	-0.001048	-0.001048	0	$3.633 \cdot 10^{-5}$	$3.633 \cdot 10^{-5}$	0
cpu	$5.86 \cdot 10^{-5}$	$5.86 \cdot 10^{-5}$	0	$2.347 \cdot 10^{-6}$	$2.347 \cdot 10^{-6}$	0
sm	0	0	0	0.7365	0.7365	0

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

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
c3pQ3	0.0009683	0.0009683	0	$2.935 \cdot 10^{-5}$	$2.935 \cdot 10^{-5}$	0
c3pl1	$9.671 \cdot 10^{-20}$	$7.512 \cdot 10^{-20}$	0.2233	$1.34 \cdot 10^{-35}$	$6.624 \cdot 10^{-36}$	0.5057
c3pl2	-0.0009683	-0.0009683	0	$2.935 \cdot 10^{-5}$	$2.935 \cdot 10^{-5}$	0
cQ131	0.151	0.151	0	0.7137	0.7137	0
c111221	0.0009683	0.0009683	0	$2.935 \cdot 10^{-5}$	$2.935 \cdot 10^{-5}$	0
ctW	0.004011	0.004011	0	0.00368	0.00368	0
sm	0	0	0	0.007986	0.007986	0

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

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

c3pl1	-0.0004139	-0.0004139	0	$1.255 \cdot 10^{-5}$	$1.255 \cdot 10^{-5}$	0
c3pl2	-0.0002056	-0.0002056	0	$5.478 \cdot 10^{-6}$	$5.478 \cdot 10^{-6}$	0
c3pqi	0.0001614	0.0001614	0	$3.68 \cdot 10^{-6}$	$3.68 \cdot 10^{-6}$	0
c111221	0.0004139	0.0004139	0	$1.255 \cdot 10^{-5}$	$1.255 \cdot 10^{-5}$	0
cpDC	-0.0003741	-0.0003741	0	$2.134 \cdot 10^{-5}$	$2.134 \cdot 10^{-5}$	0
cpWB	-0.0008297	-0.0008297	0	$7.501 \cdot 10^{-5}$	$7.501 \cdot 10^{-5}$	0
cpl2	0.0002083	0.0002083	0	$5.559 \cdot 10^{-6}$	$5.559 \cdot 10^{-6}$	0
cpmu	$-6.422 \cdot 10^{-5}$	$-6.422 \cdot 10^{-5}$	0	$2.137 \cdot 10^{-6}$	$2.137 \cdot 10^{-6}$	0
cpqi	-0.0001614	-0.0001614	0	$3.68 \cdot 10^{-6}$	$3.68 \cdot 10^{-6}$	0
cpu	$9.582 \cdot 10^{-5}$	$9.582 \cdot 10^{-5}$	0	$3.088 \cdot 10^{-6}$	$3.088 \cdot 10^{-6}$	0
sm	0	0	0	0.003414	0.003414	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	-0.0001264	-0.0001264	0	$3.831 \cdot 10^{-6}$	$3.831 \cdot 10^{-6}$	0
c3pl2	-0.0001264	-0.0001264	0	$3.831 \cdot 10^{-6}$	$3.831 \cdot 10^{-6}$	0
c3pl3	0.0001264	0.0001264	0	$3.831 \cdot 10^{-6}$	$3.831 \cdot 10^{-6}$	0
c3pqi	0.0001264	0.0001264	0	$3.831 \cdot 10^{-6}$	$3.831 \cdot 10^{-6}$	0
c111221	0.0001264	0.0001264	0	$3.831 \cdot 10^{-6}$	$3.831 \cdot 10^{-6}$	0
sm	0	0	0	0.001042	0.001042	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	-0.0001975	-0.0001975	0	$5.986 \cdot 10^{-6}$	$5.986 \cdot 10^{-6}$	0
c3pl2	-0.0001975	-0.0001975	0	$5.986 \cdot 10^{-6}$	$5.986 \cdot 10^{-6}$	0

c3pqi	0.0003787	0.0003787	0	$2.576 \cdot 10^{-5}$	$2.576 \cdot 10^{-5}$	0
c111221	0.0001975	0.0001975	0	$5.986 \cdot 10^{-6}$	$5.986 \cdot 10^{-6}$	0
cpDC	$-4.225 \cdot 10^{-5}$	$-4.225 \cdot 10^{-5}$	0	$3.641 \cdot 10^{-6}$	$3.641 \cdot 10^{-6}$	0
cpWB	$-2.947 \cdot 10^{-5}$	$-2.947 \cdot 10^{-5}$	0	$1.244 \cdot 10^{-5}$	$1.244 \cdot 10^{-5}$	0
cpd	$1.209 \cdot 10^{-5}$	$1.209 \cdot 10^{-5}$	0	$1.424 \cdot 10^{-5}$	$1.424 \cdot 10^{-5}$	0
cpqi	$1.532 \cdot 10^{-6}$	$1.532 \cdot 10^{-6}$	0	$3.64 \cdot 10^{-6}$	$3.64 \cdot 10^{-6}$	0
cpu	$9.239 \cdot 10^{-5}$	$9.239 \cdot 10^{-5}$	0	$2.025 \cdot 10^{-5}$	$2.025 \cdot 10^{-5}$	0
sm	0	0	0	0.5235	0.5235	0

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

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
c3pl1	$-3.713 \cdot 10^{-5}$	$-3.713 \cdot 10^{-5}$	0	$1.985 \cdot 10^{-6}$	$1.985 \cdot 10^{-6}$	0
c3pl2	$-3.971 \cdot 10^{-5}$	$-3.971 \cdot 10^{-5}$	0	$1.204 \cdot 10^{-6}$	$1.204 \cdot 10^{-6}$	0
c3pqi	$4.752 \cdot 10^{-5}$	$4.752 \cdot 10^{-5}$	0	$3.642 \cdot 10^{-6}$	$3.642 \cdot 10^{-6}$	0
c111221	$3.971 \cdot 10^{-5}$	$3.971 \cdot 10^{-5}$	0	$1.204 \cdot 10^{-6}$	$1.204 \cdot 10^{-6}$	0
cpDC	$-5.594 \cdot 10^{-5}$	$-5.594 \cdot 10^{-5}$	0	$3.846 \cdot 10^{-6}$	$3.846 \cdot 10^{-6}$	0
cpWB	$-5.309 \cdot 10^{-5}$	$-5.309 \cdot 10^{-5}$	0	$1.319 \cdot 10^{-5}$	$1.319 \cdot 10^{-5}$	0
cpd	$3.857 \cdot 10^{-5}$	$3.857 \cdot 10^{-5}$	0	$4.612 \cdot 10^{-6}$	$4.612 \cdot 10^{-6}$	0
cpe	$-7.004 \cdot 10^{-5}$	$-7.004 \cdot 10^{-5}$	0	$1.118 \cdot 10^{-5}$	$1.118 \cdot 10^{-5}$	0
cpl1	$2.579 \cdot 10^{-6}$	$2.579 \cdot 10^{-6}$	0	$9.375 \cdot 10^{-7}$	$9.375 \cdot 10^{-7}$	0
cpqi	$4.752 \cdot 10^{-5}$	$4.752 \cdot 10^{-5}$	0	$3.642 \cdot 10^{-6}$	$3.642 \cdot 10^{-6}$	0
sm	0	0	0	0.0003275	0.0003275	0

### 1.58 $e^+\nu_\mu \rightarrow e^+\nu_\mu$

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

c3pl1	-0.001504	-0.001504	0	$8.732 \cdot 10^{-5}$	$8.732 \cdot 10^{-5}$	0
c3pl2	$7.985 \cdot 10^{-19}$	$7.201 \cdot 10^{-20}$	0.9098	$1.279 \cdot 10^{-35}$	$1.881 \cdot 10^{-37}$	0.9853
cll1122	0.1781	0.1781	0	1.151	1.151	0
cll1221	0.003073	0.003073	0	$9.314 \cdot 10^{-5}$	$9.314 \cdot 10^{-5}$	0
cpDC	-0.004002	-0.004002	0	0.0003327	0.0003327	0
cpWB	-0.002723	-0.002723	0	0.0002863	0.0002863	0
cpe	-0.004786	-0.004786	0	0.0003104	0.0003104	0
cp11	0.001569	0.001569	0	$8.93 \cdot 10^{-5}$	$8.93 \cdot 10^{-5}$	0
cp12	-0.003073	-0.003073	0	$9.314 \cdot 10^{-5}$	$9.314 \cdot 10^{-5}$	0
sm	0	0	0	0.02534	0.02534	0

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

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
c3pl1	$6.794 \cdot 10^{-20}$	$-6.512 \cdot 10^{-21}$	1.096	$2.351 \cdot 10^{-37}$	$1.175 \cdot 10^{-38}$	0.95
c3pl2	$1.084 \cdot 10^{-19}$	$6.512 \cdot 10^{-21}$	0.9399	$6.113 \cdot 10^{-37}$	$1.175 \cdot 10^{-38}$	0.9808
cll1221	0.09344	0.09344	0	0.4445	0.4445	0
sm	0	0	0	0.00491	0.00491	0

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

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
c3pl1	0.0193	0.0193	0	0.0008624	0.0008624	0
c3pl2	-0.01886	-0.01886	0	0.0005717	0.0005717	0
cll1111	0.939	0.939	0	2.041	2.041	0
cll1221	0.01886	0.01886	0	0.0005717	0.0005717	0
cpDC	-0.005696	-0.005696	0	0.0009021	0.0009021	0



cpWB	0.0007988	0.0007988	0	0.0008655	0.0008655	0
cpe	-0.01234	-0.01234	0	0.0008001	0.0008001	0
cp11	0.0004412	0.0004412	0	0.000264	0.000264	0
sm	0	0	0	0.1556	0.1556	0

### 1.61 $e^+\tau^- \rightarrow e^+\tau^-$

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
c3p11	-0.03483	-0.03483	0	0.001294	0.001294	0
c3p12	-0.03587	-0.03587	0	0.001087	0.001087	0
c3p13	0.001047	0.001047	0	0.0002703	0.0002703	0
c111133	-0.9175	-0.9175	0	1.988	1.988	0
c111221	0.03587	0.03587	0	0.001087	0.001087	0
c111331	-0.9175	-0.9175	0	1.988	1.988	0
cpDC	-0.05563	-0.05563	0	0.003256	0.003256	0
cpWB	-0.1261	-0.1261	0	0.0159	0.0159	0
cpe	0.0009377	0.0009377	0	0.0002949	0.0002949	0
cp11	0.001047	0.001047	0	0.0002703	0.0002703	0
cp13	0.001047	0.001047	0	0.0002703	0.0002703	0
cpta	0.0009377	0.0009377	0	0.0002949	0.0002949	0
sm	0	0	0	0.2959	0.2959	0

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

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
c3p11	-0.001837	-0.001837	0	$4.766 \cdot 10^{-5}$	$4.766 \cdot 10^{-5}$	0
c3p12	-0.001837	-0.001837	0	$4.766 \cdot 10^{-5}$	$4.766 \cdot 10^{-5}$	0

c111122	0.3136	0.3136	0	2.281	2.281	0
c111221	0.3161	0.3161	0	2.3	2.3	0
cpDC	-0.003217	-0.003217	0	0.0001767	0.0001767	0
cpWB	-0.006653	-0.006653	0	0.0006191	0.0006191	0
cpe	-0.00054	-0.00054	0	$9.954 \cdot 10^{-6}$	$9.954 \cdot 10^{-6}$	0
cp11	0.0006703	0.0006703	0	$1.229 \cdot 10^{-5}$	$1.229 \cdot 10^{-5}$	0
cp12	0.0006703	0.0006703	0	$1.229 \cdot 10^{-5}$	$1.229 \cdot 10^{-5}$	0
cpmu	-0.00054	-0.00054	0	$9.954 \cdot 10^{-6}$	$9.954 \cdot 10^{-6}$	0
sm	0	0	0	0.02068	0.02068	0

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

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
c3p11	-0.1617	-0.1617	0	0.007882	0.007882	0
c3p12	-0.1753	-0.1753	0	0.005314	0.005314	0
c111111	-4.998	-4.998	0	11.89	11.89	0
c111221	0.1753	0.1753	0	0.005314	0.005314	0
cpDC	-0.2704	-0.2704	0	0.01559	0.01559	0
cpWB	-0.6103	-0.6103	0	0.07542	0.07542	0
cpe	0.004909	0.004909	0	0.003359	0.003359	0
cp11	0.0136	0.0136	0	0.003393	0.003393	0
sm	0	0	0	1.446	1.446	0

### 1.64 $gg \rightarrow gg$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
cG	$-7.279 \cdot 10^{-10}$	$-7.279 \cdot 10^{-10}$	$8.435 \cdot 10^{-6}$	137.8	137.8	$5.081 \cdot 10^{-7}$

sm	0	0	0	45.35	45.35	0
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### 1.65 $gg \rightarrow ggg$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
cG	-0.0003703	-0.0003703	$2.7 \cdot 10^{-7}$	0.2344	0.2343	$5.121 \cdot 10^{-7}$
sm	0	0	0	0.08681	0.08681	0

### 1.66 $gg \rightarrow t\bar{t}$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
cG	0.1291	0.1291	$2.324 \cdot 10^{-7}$	2.576	2.576	$5.047 \cdot 10^{-7}$
cpG	-0.05642	-0.05642	0	0.04035	0.04035	0
ctG	0.3067	0.3067	$2.609 \cdot 10^{-7}$	0.1467	0.1467	$4.771 \cdot 10^{-7}$
sm	0	0	0	0.9601	0.9601	0

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

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
cG	$3.375 \cdot 10^{-11}$	$3.375 \cdot 10^{-11}$	$2.667 \cdot 10^{-7}$	3.679	3.679	$5.165 \cdot 10^{-7}$
sm	0	0	0	0.3274	0.3274	0

### 1.68 $s\bar{s} \rightarrow \nu_\tau \bar{\nu}_\tau$

interference	square
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	mod1	mod2	1 - mod2/mod1		mod1	mod2	1 - mod2/mod1
c3pl1	$-2.909 \cdot 10^{-5}$	$-2.909 \cdot 10^{-5}$	0		$8.818 \cdot 10^{-7}$	$8.818 \cdot 10^{-7}$	0
c3pl2	$-2.909 \cdot 10^{-5}$	$-2.909 \cdot 10^{-5}$	0		$8.818 \cdot 10^{-7}$	$8.818 \cdot 10^{-7}$	0
c3pl3	$2.909 \cdot 10^{-5}$	$2.909 \cdot 10^{-5}$	0		$8.818 \cdot 10^{-7}$	$8.818 \cdot 10^{-7}$	0
c3pqi	$1.92 \cdot 10^{-5}$	$1.92 \cdot 10^{-5}$	0		$6.894 \cdot 10^{-7}$	$6.894 \cdot 10^{-7}$	0
cll1221	$2.909 \cdot 10^{-5}$	$2.909 \cdot 10^{-5}$	0		$8.818 \cdot 10^{-7}$	$8.818 \cdot 10^{-7}$	0
cpDC	$-3.076 \cdot 10^{-5}$	$-3.076 \cdot 10^{-5}$	0		$1.806 \cdot 10^{-6}$	$1.806 \cdot 10^{-6}$	0
cpWB	$-1.791 \cdot 10^{-5}$	$-1.791 \cdot 10^{-5}$	0		$1.335 \cdot 10^{-6}$	$1.335 \cdot 10^{-6}$	0
cpd	$-8.268 \cdot 10^{-5}$	$-8.268 \cdot 10^{-5}$	0		$1.609 \cdot 10^{-5}$	$1.609 \cdot 10^{-5}$	0
cpl3	$-2.909 \cdot 10^{-5}$	$-2.909 \cdot 10^{-5}$	0		$8.818 \cdot 10^{-7}$	$8.818 \cdot 10^{-7}$	0
cpqi	$1.92 \cdot 10^{-5}$	$1.92 \cdot 10^{-5}$	0		$6.894 \cdot 10^{-7}$	$6.894 \cdot 10^{-7}$	0
sm	0	0	0		0.0002399	0.0002399	0

### 1.69 $s\bar{s} \rightarrow s\bar{s}$

	interference				square		
	mod1	mod2	1 - mod2/mod1		mod1	mod2	1 - mod2/mod1
c3pl1	0.0002627	0.0002627	0		$1.727 \cdot 10^{-6}$	$1.727 \cdot 10^{-6}$	0
c3pl2	0.0002627	0.0002627	0		$1.727 \cdot 10^{-6}$	$1.727 \cdot 10^{-6}$	0
c3pqi	-0.0004599	-0.0004599	0		$1.121 \cdot 10^{-5}$	$1.121 \cdot 10^{-5}$	0
cll1221	-0.0002627	-0.0002627	0		$1.727 \cdot 10^{-6}$	$1.727 \cdot 10^{-6}$	0
cpDC	$4.206 \cdot 10^{-5}$	$4.206 \cdot 10^{-5}$	0		$3.566 \cdot 10^{-6}$	$3.566 \cdot 10^{-6}$	0
cpWB	0.0001186	0.0001186	0		$2.823 \cdot 10^{-6}$	$2.823 \cdot 10^{-6}$	0
cpd	-0.0002997	-0.0002997	0		0.0002026	0.0002026	0
cpqi	-0.0004599	-0.0004599	0		$1.121 \cdot 10^{-5}$	$1.121 \cdot 10^{-5}$	0
sm	0	0	0		2.053	2.053	0

### 1.70 $t\bar{t} \rightarrow \nu_\mu \bar{\nu}_\mu$

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
c3pQ3	$1.76 \cdot 10^{-5}$	$1.76 \cdot 10^{-5}$	0	$1.089 \cdot 10^{-6}$	$1.089 \cdot 10^{-6}$	0
c3pl1	$-5.695 \cdot 10^{-5}$	$-5.695 \cdot 10^{-5}$	0	$1.726 \cdot 10^{-6}$	$1.726 \cdot 10^{-6}$	0
c3pl2	$-6.312 \cdot 10^{-21}$	$-2.249 \cdot 10^{-20}$	-2.564	$4.453 \cdot 10^{-36}$	$1.509 \cdot 10^{-35}$	-2.39
cQl32	0.004199	0.004199	0	0.06196	0.06196	0
cQlM2	0.0021	0.0021	0	0.01549	0.01549	0
cll1221	$5.695 \cdot 10^{-5}$	$5.695 \cdot 10^{-5}$	0	$1.726 \cdot 10^{-6}$	$1.726 \cdot 10^{-6}$	0
cpDC	$-9.299 \cdot 10^{-5}$	$-9.299 \cdot 10^{-5}$	0	$7.086 \cdot 10^{-6}$	$7.086 \cdot 10^{-6}$	0
cpQ3	$-1.76 \cdot 10^{-5}$	$-1.76 \cdot 10^{-5}$	0	$1.089 \cdot 10^{-6}$	$1.089 \cdot 10^{-6}$	0
cpWB	$-7.125 \cdot 10^{-5}$	$-7.125 \cdot 10^{-5}$	0	$5.732 \cdot 10^{-6}$	$5.732 \cdot 10^{-6}$	0
cpl2	$-5.695 \cdot 10^{-5}$	$-5.695 \cdot 10^{-5}$	0	$1.726 \cdot 10^{-6}$	$1.726 \cdot 10^{-6}$	0
cpt	0.0001439	0.0001439	0	$1.553 \cdot 10^{-5}$	$1.553 \cdot 10^{-5}$	0
ctB	0.0002099	0.0002099	0	0.0005403	0.0005403	0
ctW	-0.00038	-0.00038	0	0.001771	0.001771	0
ctl2	-0.01716	-0.01716	0	0.2209	0.2209	0
sm	0	0	0	0.0004697	0.0004697	0

### 1.71 $t\bar{t} \rightarrow \tau^+ \tau^-$

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
c3pQ3	$1.063 \cdot 10^{-5}$	$1.063 \cdot 10^{-5}$	0	$3.206 \cdot 10^{-6}$	$3.206 \cdot 10^{-6}$	0
c3pl1	-0.0001562	-0.0001562	0	$4.734 \cdot 10^{-6}$	$4.734 \cdot 10^{-6}$	0
c3pl2	-0.0001562	-0.0001562	0	$4.734 \cdot 10^{-6}$	$4.734 \cdot 10^{-6}$	0
c3pl3	$1.478 \cdot 10^{-5}$	$1.478 \cdot 10^{-5}$	0	$2.063 \cdot 10^{-6}$	$2.063 \cdot 10^{-6}$	0
cQlM3	-0.009727	-0.009727	0	0.03824	0.03824	0
cQta	-0.008371	-0.008371	0	0.1591	0.1591	0
cll1221	0.0001562	0.0001562	0	$4.734 \cdot 10^{-6}$	$4.734 \cdot 10^{-6}$	0
cpDC	-0.0002011	-0.0002011	0	$1.162 \cdot 10^{-5}$	$1.162 \cdot 10^{-5}$	0

cpQ3	$-1.063 \cdot 10^{-5}$	$-1.063 \cdot 10^{-5}$	0	$3.206 \cdot 10^{-6}$	$3.206 \cdot 10^{-6}$	0
cpWB	-0.0005196	-0.0005196	0	$7.498 \cdot 10^{-5}$	$7.498 \cdot 10^{-5}$	0
cpl3	$1.478 \cdot 10^{-5}$	$1.478 \cdot 10^{-5}$	0	$2.063 \cdot 10^{-6}$	$2.063 \cdot 10^{-6}$	0
cpt	$-4.341 \cdot 10^{-5}$	$-4.341 \cdot 10^{-5}$	0	$3.76 \cdot 10^{-6}$	$3.76 \cdot 10^{-6}$	0
cpta	$3.013 \cdot 10^{-5}$	$3.013 \cdot 10^{-5}$	0	$5.265 \cdot 10^{-6}$	$5.265 \cdot 10^{-6}$	0
ctB	0.002225	0.002225	0	0.003419	0.003419	0
ctW	0.001784	0.001784	0	0.002259	0.002259	0
ctl3	-0.01583	-0.01583	0	0.1591	0.1591	0
ctta	-0.006964	-0.006964	0	0.03824	0.03824	0
sm	0	0	0	0.001288	0.001288	0

## 1.72 $t\bar{t} \rightarrow c\bar{c}$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
c3pQ3	0.0004869	0.0004869	0	$1.436 \cdot 10^{-5}$	$1.436 \cdot 10^{-5}$	0
c3pl1	-0.0007582	-0.0007582	0	$2.298 \cdot 10^{-5}$	$2.298 \cdot 10^{-5}$	0
c3pl2	-0.0007582	-0.0007582	0	$2.298 \cdot 10^{-5}$	$2.298 \cdot 10^{-5}$	0
c3pqi	0.0004788	0.0004788	0	$1.347 \cdot 10^{-5}$	$1.347 \cdot 10^{-5}$	0
cQq11	0.1758	0.1758	0	1.594	1.594	0
cQq13	0.1758	0.1758	0	1.594	1.594	0
cQq81	0.5639	0.5639	0	0.3543	0.3543	0
cQq83	0.5639	0.5639	0	0.3543	0.3543	0
cQu1	0.007819	0.007819	0	0.1586	0.1586	0
cQu8	0.1239	0.1239	0	0.03524	0.03524	0
c111221	0.0007582	0.0007582	0	$2.298 \cdot 10^{-5}$	$2.298 \cdot 10^{-5}$	0
cpDC	-0.0004157	-0.0004157	0	$2.391 \cdot 10^{-5}$	$2.391 \cdot 10^{-5}$	0
cpQ3	-0.0004869	-0.0004869	0	$1.436 \cdot 10^{-5}$	$1.436 \cdot 10^{-5}$	0
cpWB	-0.0009972	-0.0009972	0	$9.293 \cdot 10^{-5}$	$9.293 \cdot 10^{-5}$	0

cpqi	-0.0004788	-0.0004788	0	$1.347 \cdot 10^{-5}$	$1.347 \cdot 10^{-5}$	0
cpt	$5.815 \cdot 10^{-5}$	$5.815 \cdot 10^{-5}$	0	$8.005 \cdot 10^{-6}$	$8.005 \cdot 10^{-6}$	0
cpu	$7.595 \cdot 10^{-5}$	$7.595 \cdot 10^{-5}$	0	$7.113 \cdot 10^{-6}$	$7.113 \cdot 10^{-6}$	0
ctB	0.003432	0.003432	0	0.004133	0.004133	0
ctG	0.2406	0.2406	$2.493 \cdot 10^{-7}$	0.06648	0.06648	$5.114 \cdot 10^{-7}$
ctW	0.005813	0.005813	0	0.007245	0.007245	0
ctq1	0.0109	0.0109	0	0.1586	0.1586	0
ctq8	0.1239	0.1239	0	0.03524	0.03524	0
ctu1	0.09269	0.09269	0	1.594	1.594	0
ctu8	0.5639	0.5639	0	0.3543	0.3543	0
sm	0	0	0	0.6076	0.6076	0

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

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
c3pQ3	0.0009817	0.0009817	0	$3.438 \cdot 10^{-5}$	$3.438 \cdot 10^{-5}$	0
c3p11	-0.000927	-0.000927	0	$2.81 \cdot 10^{-5}$	$2.81 \cdot 10^{-5}$	0
c3p12	-0.000927	-0.000927	0	$2.81 \cdot 10^{-5}$	$2.81 \cdot 10^{-5}$	0
c3pqi	0.0007903	0.0007903	0	$2.22 \cdot 10^{-5}$	$2.22 \cdot 10^{-5}$	0
cQd1	-0.002261	-0.002261	0	0.04085	0.04085	0
cQd8	0.04638	0.04638	0	0.009078	0.009078	0
cQq11	-0.2782	-0.2782	0	2.739	2.739	0
cQq13	0.2782	0.2782	0	2.739	2.739	0
cQq81	0.9407	0.9407	0	0.6086	0.6086	0
cQq83	-0.9407	-0.9407	0	0.6086	0.6086	0
c111221	0.000927	0.000927	0	$2.81 \cdot 10^{-5}$	$2.81 \cdot 10^{-5}$	0
cpDC	$-7.21 \cdot 10^{-5}$	$-7.21 \cdot 10^{-5}$	0	$1.001 \cdot 10^{-5}$	$1.001 \cdot 10^{-5}$	0
cpQ3	-0.0009817	-0.0009817	0	$3.438 \cdot 10^{-5}$	$3.438 \cdot 10^{-5}$	0

cpWB	-0.0001486	-0.0001486	0	$2.946 \cdot 10^{-5}$	$2.946 \cdot 10^{-5}$	0
cpd	$-9.017 \cdot 10^{-5}$	$-9.017 \cdot 10^{-5}$	0	$5.143 \cdot 10^{-6}$	$5.143 \cdot 10^{-6}$	0
cpqi	0.0007903	0.0007903	0	$2.22 \cdot 10^{-5}$	$2.22 \cdot 10^{-5}$	0
cpt	$1.722 \cdot 10^{-5}$	$1.722 \cdot 10^{-5}$	0	$3.215 \cdot 10^{-6}$	$3.215 \cdot 10^{-6}$	0
ctB	-0.0004746	-0.0004746	0	0.0008599	0.0008599	0
ctG	0.2406	0.2406	$2.493 \cdot 10^{-7}$	0.04657	0.04657	$4.939 \cdot 10^{-7}$
ctW	0.006383	0.006383	0	0.005088	0.005088	0
ctd1	-0.03951	-0.03951	0	0.6847	0.6847	0
ctd8	0.4703	0.4703	0	0.1522	0.1522	0
ctq1	-0.004859	-0.004859	0	0.04085	0.04085	0
ctq8	0.04638	0.04638	0	0.009078	0.009078	0
sm	0	0	0	0.7732	0.7732	0

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

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
c3pQ3	0.0005677	0.0005677	0	$2.031 \cdot 10^{-5}$	$2.031 \cdot 10^{-5}$	0
c3p11	-0.000542	-0.000542	0	$1.643 \cdot 10^{-5}$	$1.643 \cdot 10^{-5}$	0
c3p12	-0.000542	-0.000542	0	$1.643 \cdot 10^{-5}$	$1.643 \cdot 10^{-5}$	0
c3pqi	0.0004632	0.0004632	0	$1.351 \cdot 10^{-5}$	$1.351 \cdot 10^{-5}$	0
cQd1	-0.003897	-0.003897	0	0.1577	0.1577	0
cQd8	0.1233	0.1233	0	0.03504	0.03504	0
cQq11	-0.1618	-0.1618	0	1.6	1.6	0
cQq13	0.1618	0.1618	0	1.6	1.6	0
cQq81	0.5658	0.5658	0	0.3556	0.3556	0
cQq83	-0.5658	-0.5658	0	0.3556	0.3556	0
c111221	0.000542	0.000542	0	$1.643 \cdot 10^{-5}$	$1.643 \cdot 10^{-5}$	0
cpDC	$-4.789 \cdot 10^{-5}$	$-4.789 \cdot 10^{-5}$	0	$6.539 \cdot 10^{-6}$	$6.539 \cdot 10^{-6}$	0



cpQ3	-0.0005677	-0.0005677	0	$2.031 \cdot 10^{-5}$	$2.031 \cdot 10^{-5}$	0
cpWB	$-9.615 \cdot 10^{-5}$	$-9.615 \cdot 10^{-5}$	0	$2.014 \cdot 10^{-5}$	$2.014 \cdot 10^{-5}$	0
cpd	$-3.826 \cdot 10^{-5}$	$-3.826 \cdot 10^{-5}$	0	$7.093 \cdot 10^{-6}$	$7.093 \cdot 10^{-6}$	0
cpqi	0.0004632	0.0004632	0	$1.351 \cdot 10^{-5}$	$1.351 \cdot 10^{-5}$	0
cpt	$2.005 \cdot 10^{-5}$	$2.005 \cdot 10^{-5}$	0	$8.584 \cdot 10^{-6}$	$8.584 \cdot 10^{-6}$	0
ctB	-0.0002626	-0.0002626	0	0.001227	0.001227	0
ctG	0.2406	0.2406	$2.493 \cdot 10^{-7}$	0.06642	0.06642	$4.969 \cdot 10^{-7}$
ctW	0.004602	0.004602	0	0.007257	0.007257	0
ctd1	-0.02325	-0.02325	0	0.4	0.4	0
ctd8	0.2829	0.2829	0	0.08889	0.08889	0
ctq1	-0.001459	-0.001459	0	0.1577	0.1577	0
ctq8	0.1233	0.1233	0	0.03504	0.03504	0
sm	0	0	0	0.6063	0.6063	0

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

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
c3pQ3	-0.1778	-0.1778	0	0.009255	0.009255	0
c3p11	0.1758	0.1758	0	0.003925	0.003925	0
c3p12	0.1758	0.1758	0	0.003925	0.003925	0
cQQ1	-2.953	-2.953	0	4.298	4.298	0
cQQ8	-0.9842	-0.9842	0	0.4775	0.4775	0
cQt1	-0.4579	-0.4579	0	8.027	8.027	0
cQt8	-5.99	-5.99	0	1.739	1.739	0
cdp	-0.1405	-0.1405	0	0.008846	0.008846	0
c111221	-0.1758	-0.1758	0	0.003925	0.003925	0
cpDC	0.1002	0.1002	0	0.00115	0.00115	0
cpQ3	0.1778	0.1778	0	0.009255	0.009255	0

cpWB	0.06017	0.06017	0	0.001771	0.001771	0
cpt	-0.158	-0.158	0	0.009744	0.009744	0
ctB	-0.327	-0.327	0	0.155	0.155	0
ctG	0.3665	0.3665	$2.455 \cdot 10^{-7}$	1.721	1.721	$5.229 \cdot 10^{-7}$
ctW	-0.3664	-0.3664	0	0.2586	0.2586	0
ctp	0.1423	0.1423	0	0.009064	0.009064	0
ctt1	-5.407	-5.407	0	17.19	17.19	0
sm	0	0	0	10.65	10.65	0

### 1.76 $u\bar{d} \rightarrow \mu^+ \nu_\mu$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
c3pl1	-0.0006535	-0.0006535	0	$1.981 \cdot 10^{-5}$	$1.981 \cdot 10^{-5}$	0
c3pl2	$1.018 \cdot 10^{-19}$	$5.091 \cdot 10^{-20}$	0.5	$5.015 \cdot 10^{-37}$	$1.254 \cdot 10^{-37}$	0.75
c3pqi	0.0006535	0.0006535	0	$1.981 \cdot 10^{-5}$	$1.981 \cdot 10^{-5}$	0
c111221	0.0006535	0.0006535	0	$1.981 \cdot 10^{-5}$	$1.981 \cdot 10^{-5}$	0
sm	0	0	0	0.00539	0.00539	0

### 1.77 $u\bar{d} \rightarrow c\bar{s}$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
c3pl1	-0.002642	-0.002642	0	$8.008 \cdot 10^{-5}$	$8.008 \cdot 10^{-5}$	0
c3pl2	-0.002642	-0.002642	0	$8.008 \cdot 10^{-5}$	$8.008 \cdot 10^{-5}$	0
c3pqi	0.005283	0.005283	0	0.0003203	0.0003203	0
c111221	0.002642	0.002642	0	$8.008 \cdot 10^{-5}$	$8.008 \cdot 10^{-5}$	0
sm	0	0	0	0.02179	0.02179	0

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

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
c3pl1	$-2.544 \cdot 10^{-5}$	$-2.544 \cdot 10^{-5}$	0	$1.141 \cdot 10^{-6}$	$1.141 \cdot 10^{-6}$	0
c3pl2	$-2.544 \cdot 10^{-5}$	$-2.544 \cdot 10^{-5}$	0	$1.141 \cdot 10^{-6}$	$1.141 \cdot 10^{-6}$	0
c3pqi	$4.36 \cdot 10^{-5}$	$4.36 \cdot 10^{-5}$	0	$9.442 \cdot 10^{-6}$	$9.442 \cdot 10^{-6}$	0
cll1221	$2.544 \cdot 10^{-5}$	$2.544 \cdot 10^{-5}$	0	$1.141 \cdot 10^{-6}$	$1.141 \cdot 10^{-6}$	0
cpDC	$-6.77 \cdot 10^{-5}$	$-6.77 \cdot 10^{-5}$	0	$4.403 \cdot 10^{-6}$	$4.403 \cdot 10^{-6}$	0
cpWB	$-1.318 \cdot 10^{-5}$	$-1.318 \cdot 10^{-5}$	0	$1.889 \cdot 10^{-5}$	$1.889 \cdot 10^{-5}$	0
cpd	$8.67 \cdot 10^{-5}$	$8.67 \cdot 10^{-5}$	0	$3.4 \cdot 10^{-5}$	$3.4 \cdot 10^{-5}$	0
cpqi	$9.491 \cdot 10^{-5}$	$9.491 \cdot 10^{-5}$	0	$8.707 \cdot 10^{-6}$	$8.707 \cdot 10^{-6}$	0
cpu	0.0002048	0.0002048	0	$5.112 \cdot 10^{-5}$	$5.112 \cdot 10^{-5}$	0
sm	0	0	0	1.03	1.03	0

### 1.79 $u\bar{u} \rightarrow \nu_e \bar{\nu}_e$

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
c3pl1	$3.736 \cdot 10^{-21}$	$2.605 \cdot 10^{-21}$	0.3028	$1.73 \cdot 10^{-38}$	$4.898 \cdot 10^{-39}$	0.7169
c3pl2	$-6.4 \cdot 10^{-5}$	$-6.4 \cdot 10^{-5}$	0	$1.94 \cdot 10^{-6}$	$1.94 \cdot 10^{-6}$	0
c3pqi	$2.864 \cdot 10^{-5}$	$2.864 \cdot 10^{-5}$	0	$1.261 \cdot 10^{-6}$	$1.261 \cdot 10^{-6}$	0
cll1221	$6.4 \cdot 10^{-5}$	$6.4 \cdot 10^{-5}$	0	$1.94 \cdot 10^{-6}$	$1.94 \cdot 10^{-6}$	0
cpDC	$-8.996 \cdot 10^{-5}$	$-8.996 \cdot 10^{-5}$	0	$6.179 \cdot 10^{-6}$	$6.179 \cdot 10^{-6}$	0
cpWB	$-6.401 \cdot 10^{-5}$	$-6.401 \cdot 10^{-5}$	0	$4.802 \cdot 10^{-6}$	$4.802 \cdot 10^{-6}$	0
cpl1	$-6.4 \cdot 10^{-5}$	$-6.4 \cdot 10^{-5}$	0	$1.94 \cdot 10^{-6}$	$1.94 \cdot 10^{-6}$	0
cpqi	$-2.864 \cdot 10^{-5}$	$-2.864 \cdot 10^{-5}$	0	$1.261 \cdot 10^{-6}$	$1.261 \cdot 10^{-6}$	0
cpu	0.0001421	0.0001421	0	$1.382 \cdot 10^{-5}$	$1.382 \cdot 10^{-5}$	0
sm	0	0	0	0.0005278	0.0005278	0

### 1.80 $u\bar{u} \rightarrow u\bar{u}$

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
c3p11	0.0003081	0.0003081	0	$4.401 \cdot 10^{-6}$	$4.401 \cdot 10^{-6}$	0
c3p12	0.0003081	0.0003081	0	$4.401 \cdot 10^{-6}$	$4.401 \cdot 10^{-6}$	0
c3pqi	-0.0007655	-0.0007655	0	$3.065 \cdot 10^{-5}$	$3.065 \cdot 10^{-5}$	0
c111221	-0.0003081	-0.0003081	0	$4.401 \cdot 10^{-6}$	$4.401 \cdot 10^{-6}$	0
cpDC	0.0001128	0.0001128	0	$1.55 \cdot 10^{-5}$	$1.55 \cdot 10^{-5}$	0
cpWB	-0.0002704	-0.0002704	0	0.0002572	0.0002572	0
cpqi	0.0007655	0.0007655	0	$3.065 \cdot 10^{-5}$	$3.065 \cdot 10^{-5}$	0
cpu	-0.0008969	-0.0008969	0	0.0001355	0.0001355	0
sm	0	0	0	2.057	2.057	0

### 1.81 $zz \rightarrow W^+W^-$

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
c3p11	-3.916	-3.916	0	0.1187	0.1187	0
c3p12	-3.916	-3.916	0	0.1187	0.1187	0
cWWW	0.0441	0.0441	0	15.32	15.32	0
cdp	7.135	7.135	0	0.4473	0.4473	0
c111221	3.916	3.916	0	0.1187	0.1187	0
cpBB	-0.04126	-0.04126	0	0.04883	0.04883	0
cpDC	0.1742	0.1742	0	0.003561	0.003561	0
cpW	-0.3626	-0.3626	0	1.42	1.42	0
cpWB	0.2223	0.2223	0	0.1821	0.1821	0
sm	0	0	0	32.3	32.3	0

## 1.82 $zz \rightarrow zz$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
c3pl1	-0.009576	-0.009576	0	0.0002903	0.0002903	0
c3pl2	-0.009576	-0.009576	0	0.0002903	0.0002903	0
cdp	0.01915	0.01915	0	0.001161	0.001161	0
c111221	0.009576	0.009576	0	0.0002903	0.0002903	0
cpBB	0.001799	0.001799	0	0.08814	0.08814	0
cpDC	0.004788	0.004788	0	$7.257 \cdot 10^{-5}$	$7.257 \cdot 10^{-5}$	0
cpW	0.005898	0.005898	0	0.9476	0.9476	0
cpWB	0.003257	0.003257	0	0.289	0.289	0
sm	0	0	0	0.07898	0.07898	0

## 2 By parameter point

### 2.1 c3pQ3

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$HH \rightarrow W^+ \bar{t} b$	$4.364 \cdot 10^{-6}$	$4.364 \cdot 10^{-6}$	0	$1.182 \cdot 10^{-5}$	$1.182 \cdot 10^{-5}$	0
$HH \rightarrow z \bar{b} b$	$5.022 \cdot 10^{-6}$	$5.022 \cdot 10^{-6}$	0	$4.452 \cdot 10^{-7}$	$4.452 \cdot 10^{-7}$	0
$HH \rightarrow z t \bar{t}$	$-3.798 \cdot 10^{-6}$	$-3.798 \cdot 10^{-6}$	0	$5.633 \cdot 10^{-6}$	$5.633 \cdot 10^{-6}$	0
$HW^+ \rightarrow \gamma t \bar{b}$	$-3.763 \cdot 10^{-7}$	$-3.763 \cdot 10^{-7}$	0	$1.334 \cdot 10^{-7}$	$1.334 \cdot 10^{-7}$	0
$HW^- \rightarrow \bar{t} b$	-1.867	-1.867	0	1.84	1.84	0
$H z \rightarrow \bar{b} b$	0.2214	0.2214	0	0.9603	0.9603	0
$H z \rightarrow t \bar{t}$	-2.071	-2.071	0	1.388	1.388	0
$W^+ W^- \rightarrow H \bar{b} b$	0.008876	0.008876	0	0.0002827	0.0002827	0
$W^+ W^- \rightarrow H t \bar{t}$	$1.965 \cdot 10^{-5}$	$1.965 \cdot 10^{-5}$	0	$1.978 \cdot 10^{-5}$	$1.978 \cdot 10^{-5}$	0

$\bar{b}t \rightarrow \bar{d}u$	0.002701	0.002701	0	$8.188 \cdot 10^{-5}$	$8.188 \cdot 10^{-5}$	0
$\bar{b}\bar{b} \rightarrow \mu^+\mu^-$	$4.745 \cdot 10^{-5}$	$4.745 \cdot 10^{-5}$	0	$3.764 \cdot 10^{-6}$	$3.764 \cdot 10^{-6}$	0
$\bar{b}\bar{b} \rightarrow \nu_e\bar{\nu}_e$	$6.775 \cdot 10^{-5}$	$6.775 \cdot 10^{-5}$	0	$2.433 \cdot 10^{-6}$	$2.433 \cdot 10^{-6}$	0
$\bar{b}\bar{b} \rightarrow b\bar{b}$	-0.007076	-0.007076	0	$7.681 \cdot 10^{-5}$	$7.681 \cdot 10^{-5}$	0
$\bar{b}\bar{b} \rightarrow d\bar{d}$	0.0004914	0.0004914	0	$1.61 \cdot 10^{-5}$	$1.61 \cdot 10^{-5}$	0
$\bar{b}\bar{b} \rightarrow t\bar{t}$	0.004058	0.004058	0	0.004164	0.004164	0
$\bar{b}\bar{b} \rightarrow u\bar{u}$	0.0008564	0.0008564	0	$2.429 \cdot 10^{-5}$	$2.429 \cdot 10^{-5}$	0
$\bar{b}t \rightarrow e^-\bar{\nu}_e$	0.0009683	0.0009683	0	$2.935 \cdot 10^{-5}$	$2.935 \cdot 10^{-5}$	0
$t\bar{t} \rightarrow \nu_\mu\bar{\nu}_\mu$	$1.76 \cdot 10^{-5}$	$1.76 \cdot 10^{-5}$	0	$1.089 \cdot 10^{-6}$	$1.089 \cdot 10^{-6}$	0
$t\bar{t} \rightarrow \tau^+\tau^-$	$1.063 \cdot 10^{-5}$	$1.063 \cdot 10^{-5}$	0	$3.206 \cdot 10^{-6}$	$3.206 \cdot 10^{-6}$	0
$t\bar{t} \rightarrow c\bar{c}$	0.0004869	0.0004869	0	$1.436 \cdot 10^{-5}$	$1.436 \cdot 10^{-5}$	0
$t\bar{t} \rightarrow d\bar{d}$	0.0009817	0.0009817	0	$3.438 \cdot 10^{-5}$	$3.438 \cdot 10^{-5}$	0
$t\bar{t} \rightarrow s\bar{s}$	0.0005677	0.0005677	0	$2.031 \cdot 10^{-5}$	$2.031 \cdot 10^{-5}$	0
$t\bar{t} \rightarrow t\bar{t}$	-0.1778	-0.1778	0	0.009255	0.009255	0

## 2.2 c3pl1

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$HH \rightarrow HH$	-0.02558	-0.02558	0	0.0007754	0.0007754	0
$HH \rightarrow HHH$	$-2.099 \cdot 10^{-8}$	$-2.099 \cdot 10^{-8}$	0	$9.546 \cdot 10^{-10}$	$9.546 \cdot 10^{-10}$	0
$HH \rightarrow Ht\bar{t}$	$-5.915 \cdot 10^{-6}$	$-5.915 \cdot 10^{-6}$	0	$2.69 \cdot 10^{-7}$	$2.69 \cdot 10^{-7}$	0
$HH \rightarrow Hzz$	$-1.53 \cdot 10^{-6}$	$-1.53 \cdot 10^{-6}$	0	$6.955 \cdot 10^{-8}$	$6.955 \cdot 10^{-8}$	0
$HH \rightarrow W^+W^-$	-0.8621	-0.8621	0	0.02613	0.02613	0
$HH \rightarrow W^+W^-\gamma$	$-5.859 \cdot 10^{-6}$	$-5.859 \cdot 10^{-6}$	0	$2.664 \cdot 10^{-7}$	$2.664 \cdot 10^{-7}$	0
$HH \rightarrow W^+\bar{t}b$	$-5.863 \cdot 10^{-7}$	$-5.863 \cdot 10^{-7}$	0	$2.666 \cdot 10^{-8}$	$2.666 \cdot 10^{-8}$	0
$HH \rightarrow W^+e^-\bar{\nu}_e$	$7.664 \cdot 10^{-7}$	$7.664 \cdot 10^{-7}$	0	$4.457 \cdot 10^{-7}$	$4.457 \cdot 10^{-7}$	0
$HH \rightarrow W^-u\bar{d}$	$-1.378 \cdot 10^{-7}$	$-1.378 \cdot 10^{-7}$	0	$6.263 \cdot 10^{-9}$	$6.263 \cdot 10^{-9}$	0
$HH \rightarrow z\bar{b}b$	$-2.665 \cdot 10^{-6}$	$-2.665 \cdot 10^{-6}$	0	$1.212 \cdot 10^{-7}$	$1.212 \cdot 10^{-7}$	0

$HH \rightarrow z\nu_e\bar{\nu}_e$	$1.492 \cdot 10^{-7}$	$1.492 \cdot 10^{-7}$	0	$1.058 \cdot 10^{-7}$	$1.058 \cdot 10^{-7}$	0
$HH \rightarrow z c\bar{c}$	$-4.029 \cdot 10^{-8}$	$-4.029 \cdot 10^{-8}$	0	$1.832 \cdot 10^{-9}$	$1.832 \cdot 10^{-9}$	0
$HH \rightarrow z d\bar{d}$	$-1.582 \cdot 10^{-6}$	$-1.582 \cdot 10^{-6}$	0	$7.193 \cdot 10^{-8}$	$7.193 \cdot 10^{-8}$	0
$HH \rightarrow z e^+ e^-$	$3.044 \cdot 10^{-7}$	$3.044 \cdot 10^{-7}$	0	$6.527 \cdot 10^{-7}$	$6.527 \cdot 10^{-7}$	0
$HH \rightarrow z t\bar{t}$	$-1.027 \cdot 10^{-6}$	$-1.027 \cdot 10^{-6}$	0	$4.672 \cdot 10^{-8}$	$4.672 \cdot 10^{-8}$	0
$HH \rightarrow z z$	-5.165	-5.165	0	0.1566	0.1566	0
$HW^+ \rightarrow \gamma t\bar{b}$	$-3.523 \cdot 10^{-7}$	$-3.523 \cdot 10^{-7}$	0	$1.602 \cdot 10^{-8}$	$1.602 \cdot 10^{-8}$	0
$HW^+ \rightarrow \gamma u\bar{d}$	$-7.677 \cdot 10^{-10}$	$-7.677 \cdot 10^{-10}$	0	$3.491 \cdot 10^{-11}$	$3.491 \cdot 10^{-11}$	0
$HW^+ \rightarrow u\bar{d}$	-0.00156	-0.00156	0	$4.729 \cdot 10^{-5}$	$4.729 \cdot 10^{-5}$	0
$HW^- \rightarrow \bar{t}b$	-0.1027	-0.1027	0	0.003113	0.003113	0
$HW^- \rightarrow \gamma e^- \bar{\nu}_e$	$8.268 \cdot 10^{-9}$	$8.268 \cdot 10^{-9}$	0	$3.793 \cdot 10^{-8}$	$3.793 \cdot 10^{-8}$	0
$HW^- \rightarrow \mu^- \bar{\nu}_\mu$	-0.0009133	-0.0009133	0	$2.768 \cdot 10^{-5}$	$2.768 \cdot 10^{-5}$	0
$H\gamma \rightarrow t\bar{t}$	-0.06863	-0.06863	0	0.00208	0.00208	0
$H z \rightarrow \mu^+ \mu^-$	$-3.235 \cdot 10^{-5}$	$-3.235 \cdot 10^{-5}$	0	$9.807 \cdot 10^{-7}$	$9.807 \cdot 10^{-7}$	0
$H z \rightarrow \nu_\tau \bar{\nu}_\tau$	-0.0007156	-0.0007156	0	$2.169 \cdot 10^{-5}$	$2.169 \cdot 10^{-5}$	0
$H z \rightarrow b\bar{b}$	-0.0016	-0.0016	0	$4.85 \cdot 10^{-5}$	$4.85 \cdot 10^{-5}$	0
$H z \rightarrow s\bar{s}$	-0.0002403	-0.0002403	0	$7.285 \cdot 10^{-6}$	$7.285 \cdot 10^{-6}$	0
$H z \rightarrow t\bar{t}$	-0.2322	-0.2322	0	0.007037	0.007037	0
$H z \rightarrow u\bar{u}$	-0.001348	-0.001348	0	$4.087 \cdot 10^{-5}$	$4.087 \cdot 10^{-5}$	0
$W^+ W^- \rightarrow H b\bar{b}$	-0.01311	-0.01311	0	0.0005961	0.0005961	0
$W^+ W^- \rightarrow H c\bar{c}$	$-1.286 \cdot 10^{-7}$	$-1.286 \cdot 10^{-7}$	0	$5.846 \cdot 10^{-9}$	$5.846 \cdot 10^{-9}$	0
$W^+ W^- \rightarrow H d\bar{d}$	$-1.346 \cdot 10^{-7}$	$-1.346 \cdot 10^{-7}$	0	$6.118 \cdot 10^{-9}$	$6.118 \cdot 10^{-9}$	0
$W^+ W^- \rightarrow H t\bar{t}$	$-4.969 \cdot 10^{-6}$	$-4.969 \cdot 10^{-6}$	0	$2.259 \cdot 10^{-7}$	$2.259 \cdot 10^{-7}$	0
$W^+ W^- \rightarrow W^+ W^-$	-9.292	-9.292	0	0.2817	0.2817	0
$W^+ W^- \rightarrow \gamma\gamma$	-0.009435	-0.009435	0	0.000286	0.000286	0
$W^+ W^- \rightarrow \gamma\gamma\gamma$	$-7.648 \cdot 10^{-8}$	$-7.648 \cdot 10^{-8}$	0	$3.478 \cdot 10^{-9}$	$3.478 \cdot 10^{-9}$	0
$\bar{b}t \rightarrow \bar{d}u$	-0.002701	-0.002701	0	$8.188 \cdot 10^{-5}$	$8.188 \cdot 10^{-5}$	0
$\gamma W^+ \rightarrow z W^+$	-0.03755	-0.03755	0	0.001138	0.001138	0
$\mu^+ \mu^- \rightarrow \tau^+ \tau^-$	-0.0008885	-0.0008885	0	$2.693 \cdot 10^{-5}$	$2.693 \cdot 10^{-5}$	0

$\nu_\tau \bar{\nu}_\tau \rightarrow \nu_\tau \bar{\nu}_\tau$	$-3.222 \cdot 10^{-7}$	$-3.222 \cdot 10^{-7}$	0	$9.765 \cdot 10^{-9}$	$9.765 \cdot 10^{-9}$	0
$\nu_e \bar{\nu}_e \rightarrow \nu_\mu \bar{\nu}_\mu$	$4.29 \cdot 10^{-20}$	0	1	$1.91 \cdot 10^{-37}$	0	1
$b\bar{b} \rightarrow \gamma\gamma$	$-3.464 \cdot 10^{-5}$	$-3.464 \cdot 10^{-5}$	0	$1.05 \cdot 10^{-6}$	$1.05 \cdot 10^{-6}$	0
$b\bar{b} \rightarrow \mu^+ \mu^-$	$-3.793 \cdot 10^{-5}$	$-3.793 \cdot 10^{-5}$	0	$1.15 \cdot 10^{-6}$	$1.15 \cdot 10^{-6}$	0
$b\bar{b} \rightarrow \nu_e \bar{\nu}_e$	$5.966 \cdot 10^{-21}$	$-5.278 \cdot 10^{-22}$	1.088	$1.665 \cdot 10^{-38}$	$9.796 \cdot 10^{-40}$	0.9412
$b\bar{b} \rightarrow b\bar{b}$	0.003834	0.003834	0	$1.611 \cdot 10^{-5}$	$1.611 \cdot 10^{-5}$	0
$b\bar{b} \rightarrow d\bar{d}$	$-0.0004676$	$-0.0004676$	0	$1.417 \cdot 10^{-5}$	$1.417 \cdot 10^{-5}$	0
$b\bar{b} \rightarrow t\bar{t}$	$-0.00213$	$-0.00213$	0	0.001046	0.001046	0
$b\bar{b} \rightarrow u\bar{u}$	$-0.0009899$	$-0.0009899$	0	$3 \cdot 10^{-5}$	$3 \cdot 10^{-5}$	0
$b\bar{t} \rightarrow e^- \bar{\nu}_e$	$9.671 \cdot 10^{-20}$	$7.512 \cdot 10^{-20}$	0.2233	$1.34 \cdot 10^{-35}$	$6.624 \cdot 10^{-36}$	0.5057
$c\bar{c} \rightarrow \mu^+ \mu^-$	$-0.0004139$	$-0.0004139$	0	$1.255 \cdot 10^{-5}$	$1.255 \cdot 10^{-5}$	0
$c\bar{s} \rightarrow \tau^+ \nu_\tau$	$-0.0001264$	$-0.0001264$	0	$3.831 \cdot 10^{-6}$	$3.831 \cdot 10^{-6}$	0
$d\bar{d} \rightarrow c\bar{c}$	$-0.0001975$	$-0.0001975$	0	$5.986 \cdot 10^{-6}$	$5.986 \cdot 10^{-6}$	0
$d\bar{d} \rightarrow e^+ e^-$	$-3.713 \cdot 10^{-5}$	$-3.713 \cdot 10^{-5}$	0	$1.985 \cdot 10^{-6}$	$1.985 \cdot 10^{-6}$	0
$e^+ \nu_\mu \rightarrow e^+ \nu_\mu$	$-0.001504$	$-0.001504$	0	$8.732 \cdot 10^{-5}$	$8.732 \cdot 10^{-5}$	0
$e^+ \nu_e \rightarrow \mu^+ \nu_\mu$	$6.794 \cdot 10^{-20}$	$-6.512 \cdot 10^{-21}$	1.096	$2.351 \cdot 10^{-37}$	$1.175 \cdot 10^{-38}$	0.95
$e^+ \nu_e \rightarrow e^+ \nu_e$	0.0193	0.0193	0	0.0008624	0.0008624	0
$e^+ \tau^- \rightarrow e^+ \tau^-$	$-0.03483$	$-0.03483$	0	0.001294	0.001294	0
$e^+ e^- \rightarrow \mu^+ \mu^-$	$-0.001837$	$-0.001837$	0	$4.766 \cdot 10^{-5}$	$4.766 \cdot 10^{-5}$	0
$e^+ e^- \rightarrow e^+ e^-$	$-0.1617$	$-0.1617$	0	0.007882	0.007882	0
$s\bar{s} \rightarrow \nu_\tau \bar{\nu}_\tau$	$-2.909 \cdot 10^{-5}$	$-2.909 \cdot 10^{-5}$	0	$8.818 \cdot 10^{-7}$	$8.818 \cdot 10^{-7}$	0
$s\bar{s} \rightarrow s\bar{s}$	0.0002627	0.0002627	0	$1.727 \cdot 10^{-6}$	$1.727 \cdot 10^{-6}$	0
$t\bar{t} \rightarrow \nu_\mu \bar{\nu}_\mu$	$-5.695 \cdot 10^{-5}$	$-5.695 \cdot 10^{-5}$	0	$1.726 \cdot 10^{-6}$	$1.726 \cdot 10^{-6}$	0
$t\bar{t} \rightarrow \tau^+ \tau^-$	$-0.0001562$	$-0.0001562$	0	$4.734 \cdot 10^{-6}$	$4.734 \cdot 10^{-6}$	0
$t\bar{t} \rightarrow c\bar{c}$	$-0.0007582$	$-0.0007582$	0	$2.298 \cdot 10^{-5}$	$2.298 \cdot 10^{-5}$	0
$t\bar{t} \rightarrow d\bar{d}$	$-0.000927$	$-0.000927$	0	$2.81 \cdot 10^{-5}$	$2.81 \cdot 10^{-5}$	0
$t\bar{t} \rightarrow s\bar{s}$	$-0.000542$	$-0.000542$	0	$1.643 \cdot 10^{-5}$	$1.643 \cdot 10^{-5}$	0
$t\bar{t} \rightarrow t\bar{t}$	0.1758	0.1758	0	0.003925	0.003925	0
$u\bar{d} \rightarrow \mu^+ \nu_\mu$	$-0.0006535$	$-0.0006535$	0	$1.981 \cdot 10^{-5}$	$1.981 \cdot 10^{-5}$	0



$u\bar{d} \rightarrow c\bar{s}$	-0.002642	-0.002642	0	$8.008 \cdot 10^{-5}$	$8.008 \cdot 10^{-5}$	0
$u\bar{d} \rightarrow u\bar{d}$	$-2.544 \cdot 10^{-5}$	$-2.544 \cdot 10^{-5}$	0	$1.141 \cdot 10^{-6}$	$1.141 \cdot 10^{-6}$	0
$u\bar{u} \rightarrow \nu_e \bar{\nu}_e$	$3.736 \cdot 10^{-21}$	$2.605 \cdot 10^{-21}$	0.3028	$1.73 \cdot 10^{-38}$	$4.898 \cdot 10^{-39}$	0.7169
$u\bar{u} \rightarrow u\bar{u}$	0.0003081	0.0003081	0	$4.401 \cdot 10^{-6}$	$4.401 \cdot 10^{-6}$	0
$zz \rightarrow W^+W^-$	-3.916	-3.916	0	0.1187	0.1187	0
$zz \rightarrow zz$	-0.009576	-0.009576	0	0.0002903	0.0002903	0

## 2.3 c3pl2

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$HH \rightarrow HH$	-0.02558	-0.02558	0	0.0007754	0.0007754	0
$HH \rightarrow HHH$	$-2.099 \cdot 10^{-8}$	$-2.099 \cdot 10^{-8}$	0	$9.546 \cdot 10^{-10}$	$9.546 \cdot 10^{-10}$	0
$HH \rightarrow Ht\bar{t}$	$-5.915 \cdot 10^{-6}$	$-5.915 \cdot 10^{-6}$	0	$2.69 \cdot 10^{-7}$	$2.69 \cdot 10^{-7}$	0
$HH \rightarrow Hzz$	$-1.53 \cdot 10^{-6}$	$-1.53 \cdot 10^{-6}$	0	$6.955 \cdot 10^{-8}$	$6.955 \cdot 10^{-8}$	0
$HH \rightarrow W^+W^-$	-0.8621	-0.8621	0	0.02613	0.02613	0
$HH \rightarrow W^+W^-\gamma$	$-5.859 \cdot 10^{-6}$	$-5.859 \cdot 10^{-6}$	0	$2.664 \cdot 10^{-7}$	$2.664 \cdot 10^{-7}$	0
$HH \rightarrow W^+\bar{t}b$	$-5.863 \cdot 10^{-7}$	$-5.863 \cdot 10^{-7}$	0	$2.666 \cdot 10^{-8}$	$2.666 \cdot 10^{-8}$	0
$HH \rightarrow W^+e^-\bar{\nu}_e$	$-5.992 \cdot 10^{-8}$	$-5.992 \cdot 10^{-8}$	0	$2.725 \cdot 10^{-9}$	$2.725 \cdot 10^{-9}$	0
$HH \rightarrow W^-u\bar{d}$	$-1.378 \cdot 10^{-7}$	$-1.378 \cdot 10^{-7}$	0	$6.263 \cdot 10^{-9}$	$6.263 \cdot 10^{-9}$	0
$HH \rightarrow z\bar{b}b$	$-2.665 \cdot 10^{-6}$	$-2.665 \cdot 10^{-6}$	0	$1.212 \cdot 10^{-7}$	$1.212 \cdot 10^{-7}$	0
$HH \rightarrow z\nu_e\bar{\nu}_e$	$-9.57 \cdot 10^{-9}$	$-9.57 \cdot 10^{-9}$	0	$4.351 \cdot 10^{-10}$	$4.351 \cdot 10^{-10}$	0
$HH \rightarrow zc\bar{c}$	$-4.029 \cdot 10^{-8}$	$-4.029 \cdot 10^{-8}$	0	$1.832 \cdot 10^{-9}$	$1.832 \cdot 10^{-9}$	0
$HH \rightarrow zd\bar{d}$	$-1.582 \cdot 10^{-6}$	$-1.582 \cdot 10^{-6}$	0	$7.193 \cdot 10^{-8}$	$7.193 \cdot 10^{-8}$	0
$HH \rightarrow ze^+e^-$	$-1.182 \cdot 10^{-8}$	$-1.182 \cdot 10^{-8}$	0	$5.373 \cdot 10^{-10}$	$5.373 \cdot 10^{-10}$	0
$HH \rightarrow zt\bar{t}$	$-1.027 \cdot 10^{-6}$	$-1.027 \cdot 10^{-6}$	0	$4.672 \cdot 10^{-8}$	$4.672 \cdot 10^{-8}$	0
$HH \rightarrow zz$	-5.165	-5.165	0	0.1566	0.1566	0
$HW^+ \rightarrow \gamma t\bar{b}$	$-3.523 \cdot 10^{-7}$	$-3.523 \cdot 10^{-7}$	0	$1.602 \cdot 10^{-8}$	$1.602 \cdot 10^{-8}$	0
$HW^+ \rightarrow \gamma u\bar{d}$	$-7.677 \cdot 10^{-10}$	$-7.677 \cdot 10^{-10}$	0	$3.491 \cdot 10^{-11}$	$3.491 \cdot 10^{-11}$	0

$HW^+ \rightarrow u\bar{d}$	-0.00156	-0.00156	0	$4.729 \cdot 10^{-5}$	$4.729 \cdot 10^{-5}$	0
$HW^- \rightarrow t\bar{b}$	-0.1027	-0.1027	0	0.003113	0.003113	0
$HW^- \rightarrow \gamma e^- \bar{\nu}_e$	$-8.344 \cdot 10^{-11}$	$-8.344 \cdot 10^{-11}$	0	$3.794 \cdot 10^{-12}$	$3.794 \cdot 10^{-12}$	0
$HW^- \rightarrow \mu^- \bar{\nu}_\mu$	0.1424	0.1424	0	0.6732	0.6732	0
$H\gamma \rightarrow t\bar{t}$	-0.06863	-0.06863	0	0.00208	0.00208	0
$HZ \rightarrow \mu^+ \mu^-$	0.004095	0.004095	0	0.028	0.028	0
$HZ \rightarrow \nu_\tau \bar{\nu}_\tau$	-0.0007156	-0.0007156	0	$2.169 \cdot 10^{-5}$	$2.169 \cdot 10^{-5}$	0
$HZ \rightarrow b\bar{b}$	-0.0016	-0.0016	0	$4.85 \cdot 10^{-5}$	$4.85 \cdot 10^{-5}$	0
$HZ \rightarrow s\bar{s}$	-0.0002403	-0.0002403	0	$7.285 \cdot 10^{-6}$	$7.285 \cdot 10^{-6}$	0
$HZ \rightarrow t\bar{t}$	-0.2322	-0.2322	0	0.007037	0.007037	0
$HZ \rightarrow u\bar{u}$	-0.001348	-0.001348	0	$4.087 \cdot 10^{-5}$	$4.087 \cdot 10^{-5}$	0
$W^+W^- \rightarrow Hb\bar{b}$	-0.01311	-0.01311	0	0.0005961	0.0005961	0
$W^+W^- \rightarrow Hc\bar{c}$	$-1.286 \cdot 10^{-7}$	$-1.286 \cdot 10^{-7}$	0	$5.846 \cdot 10^{-9}$	$5.846 \cdot 10^{-9}$	0
$W^+W^- \rightarrow Hd\bar{d}$	$-1.346 \cdot 10^{-7}$	$-1.346 \cdot 10^{-7}$	0	$6.118 \cdot 10^{-9}$	$6.118 \cdot 10^{-9}$	0
$W^+W^- \rightarrow Ht\bar{t}$	$-4.969 \cdot 10^{-6}$	$-4.969 \cdot 10^{-6}$	0	$2.259 \cdot 10^{-7}$	$2.259 \cdot 10^{-7}$	0
$W^+W^- \rightarrow W^+W^-$	-9.292	-9.292	0	0.2817	0.2817	0
$W^+W^- \rightarrow \gamma\gamma$	-0.009435	-0.009435	0	0.000286	0.000286	0
$W^+W^- \rightarrow \gamma\gamma\gamma$	$-7.648 \cdot 10^{-8}$	$-7.648 \cdot 10^{-8}$	0	$3.478 \cdot 10^{-9}$	$3.478 \cdot 10^{-9}$	0
$\bar{b}t \rightarrow \bar{d}u$	-0.002701	-0.002701	0	$8.188 \cdot 10^{-5}$	$8.188 \cdot 10^{-5}$	0
$\gamma W^+ \rightarrow zW^+$	-0.03755	-0.03755	0	0.001138	0.001138	0
$\mu^+ \mu^- \rightarrow \tau^+ \tau^-$	-0.001326	-0.001326	0	$6.712 \cdot 10^{-5}$	$6.712 \cdot 10^{-5}$	0
$\nu_\tau \bar{\nu}_\tau \rightarrow \nu_\tau \bar{\nu}_\tau$	$-3.222 \cdot 10^{-7}$	$-3.222 \cdot 10^{-7}$	0	$9.765 \cdot 10^{-9}$	$9.765 \cdot 10^{-9}$	0
$\nu_e \bar{\nu}_e \rightarrow \nu_\mu \bar{\nu}_\mu$	$5.275 \cdot 10^{-21}$	0	1	$2.939 \cdot 10^{-39}$	0	1
$b\bar{b} \rightarrow \gamma\gamma$	$-3.464 \cdot 10^{-5}$	$-3.464 \cdot 10^{-5}$	0	$1.05 \cdot 10^{-6}$	$1.05 \cdot 10^{-6}$	0
$b\bar{b} \rightarrow \mu^+ \mu^-$	$-3.904 \cdot 10^{-5}$	$-3.904 \cdot 10^{-5}$	0	$2.058 \cdot 10^{-6}$	$2.058 \cdot 10^{-6}$	0
$b\bar{b} \rightarrow \nu_e \bar{\nu}_e$	$-6.582 \cdot 10^{-5}$	$-6.582 \cdot 10^{-5}$	0	$1.995 \cdot 10^{-6}$	$1.995 \cdot 10^{-6}$	0
$b\bar{b} \rightarrow b\bar{b}$	0.003834	0.003834	0	$1.611 \cdot 10^{-5}$	$1.611 \cdot 10^{-5}$	0
$b\bar{b} \rightarrow d\bar{d}$	-0.0004676	-0.0004676	0	$1.417 \cdot 10^{-5}$	$1.417 \cdot 10^{-5}$	0
$b\bar{b} \rightarrow t\bar{t}$	-0.00213	-0.00213	0	0.001046	0.001046	0

$b\bar{b} \rightarrow u\bar{u}$	-0.0009899	-0.0009899	0	$3 \cdot 10^{-5}$	$3 \cdot 10^{-5}$	0
$b\bar{t} \rightarrow e^-\bar{\nu}_e$	-0.0009683	-0.0009683	0	$2.935 \cdot 10^{-5}$	$2.935 \cdot 10^{-5}$	0
$c\bar{c} \rightarrow \mu^+\mu^-$	-0.0002056	-0.0002056	0	$5.478 \cdot 10^{-6}$	$5.478 \cdot 10^{-6}$	0
$c\bar{s} \rightarrow \tau^+\nu_\tau$	-0.0001264	-0.0001264	0	$3.831 \cdot 10^{-6}$	$3.831 \cdot 10^{-6}$	0
$d\bar{d} \rightarrow c\bar{c}$	-0.0001975	-0.0001975	0	$5.986 \cdot 10^{-6}$	$5.986 \cdot 10^{-6}$	0
$d\bar{d} \rightarrow e^+e^-$	$-3.971 \cdot 10^{-5}$	$-3.971 \cdot 10^{-5}$	0	$1.204 \cdot 10^{-6}$	$1.204 \cdot 10^{-6}$	0
$e^+\nu_\mu \rightarrow e^+\nu_\mu$	$7.985 \cdot 10^{-19}$	$7.201 \cdot 10^{-20}$	0.9098	$1.279 \cdot 10^{-35}$	$1.881 \cdot 10^{-37}$	0.9853
$e^+\nu_e \rightarrow \mu^+\nu_\mu$	$1.084 \cdot 10^{-19}$	$6.512 \cdot 10^{-21}$	0.9399	$6.113 \cdot 10^{-37}$	$1.175 \cdot 10^{-38}$	0.9808
$e^+\nu_e \rightarrow e^+\nu_e$	-0.01886	-0.01886	0	0.0005717	0.0005717	0
$e^+\tau^- \rightarrow e^+\tau^-$	-0.03587	-0.03587	0	0.001087	0.001087	0
$e^+e^- \rightarrow \mu^+\mu^-$	-0.001837	-0.001837	0	$4.766 \cdot 10^{-5}$	$4.766 \cdot 10^{-5}$	0
$e^+e^- \rightarrow e^+e^-$	-0.1753	-0.1753	0	0.005314	0.005314	0
$s\bar{s} \rightarrow \nu_\tau\bar{\nu}_\tau$	$-2.909 \cdot 10^{-5}$	$-2.909 \cdot 10^{-5}$	0	$8.818 \cdot 10^{-7}$	$8.818 \cdot 10^{-7}$	0
$s\bar{s} \rightarrow s\bar{s}$	0.0002627	0.0002627	0	$1.727 \cdot 10^{-6}$	$1.727 \cdot 10^{-6}$	0
$t\bar{t} \rightarrow \nu_\mu\bar{\nu}_\mu$	$-6.312 \cdot 10^{-21}$	$-2.249 \cdot 10^{-20}$	-2.564	$4.453 \cdot 10^{-36}$	$1.509 \cdot 10^{-35}$	-2.39
$t\bar{t} \rightarrow \tau^+\tau^-$	-0.0001562	-0.0001562	0	$4.734 \cdot 10^{-6}$	$4.734 \cdot 10^{-6}$	0
$t\bar{t} \rightarrow c\bar{c}$	-0.0007582	-0.0007582	0	$2.298 \cdot 10^{-5}$	$2.298 \cdot 10^{-5}$	0
$t\bar{t} \rightarrow d\bar{d}$	-0.000927	-0.000927	0	$2.81 \cdot 10^{-5}$	$2.81 \cdot 10^{-5}$	0
$t\bar{t} \rightarrow s\bar{s}$	-0.000542	-0.000542	0	$1.643 \cdot 10^{-5}$	$1.643 \cdot 10^{-5}$	0
$t\bar{t} \rightarrow t\bar{t}$	0.1758	0.1758	0	0.003925	0.003925	0
$u\bar{d} \rightarrow \mu^+\nu_\mu$	$1.018 \cdot 10^{-19}$	$5.091 \cdot 10^{-20}$	0.5	$5.015 \cdot 10^{-37}$	$1.254 \cdot 10^{-37}$	0.75
$u\bar{d} \rightarrow c\bar{s}$	-0.002642	-0.002642	0	$8.008 \cdot 10^{-5}$	$8.008 \cdot 10^{-5}$	0
$u\bar{d} \rightarrow u\bar{d}$	$-2.544 \cdot 10^{-5}$	$-2.544 \cdot 10^{-5}$	0	$1.141 \cdot 10^{-6}$	$1.141 \cdot 10^{-6}$	0
$u\bar{u} \rightarrow \nu_e\bar{\nu}_e$	$-6.4 \cdot 10^{-5}$	$-6.4 \cdot 10^{-5}$	0	$1.94 \cdot 10^{-6}$	$1.94 \cdot 10^{-6}$	0
$u\bar{u} \rightarrow u\bar{u}$	0.0003081	0.0003081	0	$4.401 \cdot 10^{-6}$	$4.401 \cdot 10^{-6}$	0
$zz \rightarrow W^+W^-$	-3.916	-3.916	0	0.1187	0.1187	0
$zz \rightarrow zz$	-0.009576	-0.009576	0	0.0002903	0.0002903	0

## 2.4 c3pl3

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$H z \rightarrow \nu_\tau \bar{\nu}_\tau$	0.08606	0.08606	0	0.3137	0.3137	0
$\mu^+ \mu^- \rightarrow \tau^+ \tau^-$	-0.0004378	-0.0004378	0	$1.365 \cdot 10^{-5}$	$1.365 \cdot 10^{-5}$	0
$\nu_\tau \bar{\nu}_\tau \rightarrow \nu_\tau \bar{\nu}_\tau$	$6.443 \cdot 10^{-7}$	$6.443 \cdot 10^{-7}$	0	$3.906 \cdot 10^{-8}$	$3.906 \cdot 10^{-8}$	0
$c \bar{s} \rightarrow \tau^+ \nu_\tau$	0.0001264	0.0001264	0	$3.831 \cdot 10^{-6}$	$3.831 \cdot 10^{-6}$	0
$e^+ \tau^- \rightarrow e^+ \tau^-$	0.001047	0.001047	0	0.0002703	0.0002703	0
$s \bar{s} \rightarrow \nu_\tau \bar{\nu}_\tau$	$2.909 \cdot 10^{-5}$	$2.909 \cdot 10^{-5}$	0	$8.818 \cdot 10^{-7}$	$8.818 \cdot 10^{-7}$	0
$t \bar{t} \rightarrow \tau^+ \tau^-$	$1.478 \cdot 10^{-5}$	$1.478 \cdot 10^{-5}$	0	$2.063 \cdot 10^{-6}$	$2.063 \cdot 10^{-6}$	0

## 2.5 c3pqi

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$HH \rightarrow W^- u \bar{d}$	$1.326 \cdot 10^{-6}$	$1.326 \cdot 10^{-6}$	0	$5.803 \cdot 10^{-7}$	$5.803 \cdot 10^{-7}$	0
$HH \rightarrow z c \bar{c}$	$1.507 \cdot 10^{-6}$	$1.507 \cdot 10^{-6}$	0	$3.087 \cdot 10^{-6}$	$3.087 \cdot 10^{-6}$	0
$HH \rightarrow z d \bar{d}$	$6.795 \cdot 10^{-6}$	$6.795 \cdot 10^{-6}$	0	$1.373 \cdot 10^{-6}$	$1.373 \cdot 10^{-6}$	0
$HW^+ \rightarrow \gamma u \bar{d}$	$5.536 \cdot 10^{-8}$	$5.536 \cdot 10^{-8}$	0	$1.819 \cdot 10^{-7}$	$1.819 \cdot 10^{-7}$	0
$HW^+ \rightarrow u \bar{d}$	0.2448	0.2448	0	1.165	1.165	0
$H z \rightarrow s \bar{s}$	0.03311	0.03311	0	0.143	0.143	0
$H z \rightarrow u \bar{u}$	0.1955	0.1955	0	1.035	1.035	0
$W^+ W^- \rightarrow H c \bar{c}$	$1.18 \cdot 10^{-6}$	$1.18 \cdot 10^{-6}$	0	$2.245 \cdot 10^{-6}$	$2.245 \cdot 10^{-6}$	0
$W^+ W^- \rightarrow H d \bar{d}$	$1.409 \cdot 10^{-7}$	$1.409 \cdot 10^{-7}$	0	$1.132 \cdot 10^{-6}$	$1.132 \cdot 10^{-6}$	0
$\bar{b} t \rightarrow \bar{d} u$	0.002701	0.002701	0	$8.188 \cdot 10^{-5}$	$8.188 \cdot 10^{-5}$	0
$b \bar{b} \rightarrow d \bar{d}$	0.0004914	0.0004914	0	$1.61 \cdot 10^{-5}$	$1.61 \cdot 10^{-5}$	0
$b \bar{b} \rightarrow u \bar{u}$	0.001048	0.001048	0	$3.633 \cdot 10^{-5}$	$3.633 \cdot 10^{-5}$	0
$c \bar{c} \rightarrow \mu^+ \mu^-$	0.0001614	0.0001614	0	$3.68 \cdot 10^{-6}$	$3.68 \cdot 10^{-6}$	0
$c \bar{s} \rightarrow \tau^+ \nu_\tau$	0.0001264	0.0001264	0	$3.831 \cdot 10^{-6}$	$3.831 \cdot 10^{-6}$	0
$d \bar{d} \rightarrow c \bar{c}$	0.0003787	0.0003787	0	$2.576 \cdot 10^{-5}$	$2.576 \cdot 10^{-5}$	0

$d\bar{d} \rightarrow e^+e^-$	$4.752 \cdot 10^{-5}$	$4.752 \cdot 10^{-5}$	0	$3.642 \cdot 10^{-6}$	$3.642 \cdot 10^{-6}$	0
$s\bar{s} \rightarrow \nu_\tau \bar{\nu}_\tau$	$1.92 \cdot 10^{-5}$	$1.92 \cdot 10^{-5}$	0	$6.894 \cdot 10^{-7}$	$6.894 \cdot 10^{-7}$	0
$s\bar{s} \rightarrow s\bar{s}$	-0.0004599	-0.0004599	0	$1.121 \cdot 10^{-5}$	$1.121 \cdot 10^{-5}$	0
$t\bar{t} \rightarrow c\bar{c}$	0.0004788	0.0004788	0	$1.347 \cdot 10^{-5}$	$1.347 \cdot 10^{-5}$	0
$t\bar{t} \rightarrow d\bar{d}$	0.0007903	0.0007903	0	$2.22 \cdot 10^{-5}$	$2.22 \cdot 10^{-5}$	0
$t\bar{t} \rightarrow s\bar{s}$	0.0004632	0.0004632	0	$1.351 \cdot 10^{-5}$	$1.351 \cdot 10^{-5}$	0
$u\bar{d} \rightarrow \mu^+ \nu_\mu$	0.0006535	0.0006535	0	$1.981 \cdot 10^{-5}$	$1.981 \cdot 10^{-5}$	0
$u\bar{d} \rightarrow c\bar{s}$	0.005283	0.005283	0	0.0003203	0.0003203	0
$u\bar{d} \rightarrow u\bar{d}$	$4.36 \cdot 10^{-5}$	$4.36 \cdot 10^{-5}$	0	$9.442 \cdot 10^{-6}$	$9.442 \cdot 10^{-6}$	0
$u\bar{u} \rightarrow \nu_e \bar{\nu}_e$	$2.864 \cdot 10^{-5}$	$2.864 \cdot 10^{-5}$	0	$1.261 \cdot 10^{-6}$	$1.261 \cdot 10^{-6}$	0
$u\bar{u} \rightarrow u\bar{u}$	-0.0007655	-0.0007655	0	$3.065 \cdot 10^{-5}$	$3.065 \cdot 10^{-5}$	0

## 2.6 cG

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$gg \rightarrow gg$	$-7.279 \cdot 10^{-10}$	$-7.279 \cdot 10^{-10}$	$8.435 \cdot 10^{-6}$	137.8	137.8	$5.081 \cdot 10^{-7}$
$gg \rightarrow ggg$	-0.0003703	-0.0003703	$2.7 \cdot 10^{-7}$	0.2344	0.2343	$5.121 \cdot 10^{-7}$
$gg \rightarrow t\bar{t}$	0.1291	0.1291	$2.324 \cdot 10^{-7}$	2.576	2.576	$5.047 \cdot 10^{-7}$
$gg \rightarrow u\bar{u}$	$3.375 \cdot 10^{-11}$	$3.375 \cdot 10^{-11}$	$2.667 \cdot 10^{-7}$	3.679	3.679	$5.165 \cdot 10^{-7}$

## 2.7 cQQ1

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$b\bar{b} \rightarrow b\bar{b}$	-0.1327	-0.1327	0	0.3722	0.3722	0
$b\bar{b} \rightarrow t\bar{t}$	-0.06136	-0.06136	0	0.1116	0.1116	0
$t\bar{t} \rightarrow t\bar{t}$	-2.953	-2.953	0	4.298	4.298	0

## 2.8 cQQ8

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$b\bar{b} \rightarrow b\bar{b}$	-0.04424	-0.04424	0	0.04136	0.04136	0
$b\bar{b} \rightarrow t\bar{t}$	0.0404	0.0404	0	0.02479	0.02479	0
$t\bar{t} \rightarrow t\bar{t}$	-0.9842	-0.9842	0	0.4775	0.4775	0

## 2.9 cQd1

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$b\bar{b} \rightarrow b\bar{b}$	0.03256	0.03256	0	2.784	2.784	0
$b\bar{b} \rightarrow d\bar{d}$	-0.002805	-0.002805	0	0.1928	0.1928	0
$b\bar{b} \rightarrow t\bar{t}$	-0.007893	-0.007893	0	0.4432	0.4432	0
$t\bar{t} \rightarrow d\bar{d}$	-0.002261	-0.002261	0	0.04085	0.04085	0
$t\bar{t} \rightarrow s\bar{s}$	-0.003897	-0.003897	0	0.1577	0.1577	0

## 2.10 cQd8

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$b\bar{b} \rightarrow b\bar{b}$	-1.586	-1.586	0	0.6188	0.6188	0
$b\bar{b} \rightarrow d\bar{d}$	0.1269	0.1269	0	0.04284	0.04284	0
$b\bar{b} \rightarrow t\bar{t}$	0.3113	0.3113	0	0.09848	0.09848	0
$t\bar{t} \rightarrow d\bar{d}$	0.04638	0.04638	0	0.009078	0.009078	0
$t\bar{t} \rightarrow s\bar{s}$	0.1233	0.1233	0	0.03504	0.03504	0

## 2.11 cQl31

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$b\bar{t} \rightarrow e^- \bar{\nu}_e$	0.151	0.151	0	0.7137	0.7137	0

## 2.12 cQl32

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$b\bar{b} \rightarrow \mu^+ \mu^-$	0.003356	0.003356	0	0.03535	0.03535	0
$t\bar{t} \rightarrow \nu_\mu \bar{\nu}_\mu$	0.004199	0.004199	0	0.06196	0.06196	0

## 2.13 cQlM1

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$b\bar{b} \rightarrow \nu_e \bar{\nu}_e$	-0.00808	-0.00808	0	0.0346	0.0346	0

## 2.14 cQlM2

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$b\bar{b} \rightarrow \mu^+ \mu^-$	0.001678	0.001678	0	0.008839	0.008839	0
$t\bar{t} \rightarrow \nu_\mu \bar{\nu}_\mu$	0.0021	0.0021	0	0.01549	0.01549	0

## 2.15 cQlM3

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$t\bar{t} \rightarrow \tau^+\tau^-$	-0.009727	-0.009727	0	0.03824	0.03824	0

## 2.16 cQmu

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$b\bar{b} \rightarrow \mu^+\mu^-$	-0.0102	-0.0102	0	0.2336	0.2336	0

## 2.17 cQq11

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$b\bar{b} \rightarrow d\bar{d}$	0.1378	0.1378	0	1.259	1.259	0
$b\bar{b} \rightarrow u\bar{u}$	-0.2962	-0.2962	0	2.897	2.897	0
$t\bar{t} \rightarrow c\bar{c}$	0.1758	0.1758	0	1.594	1.594	0
$t\bar{t} \rightarrow d\bar{d}$	-0.2782	-0.2782	0	2.739	2.739	0
$t\bar{t} \rightarrow s\bar{s}$	-0.1618	-0.1618	0	1.6	1.6	0

## 2.18 cQq13

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$\bar{b}t \rightarrow \bar{d}u$	0.8424	0.8424	0	7.964	7.964	0
$b\bar{b} \rightarrow d\bar{d}$	0.1378	0.1378	0	1.259	1.259	0
$b\bar{b} \rightarrow u\bar{u}$	0.2962	0.2962	0	2.897	2.897	0
$t\bar{t} \rightarrow c\bar{c}$	0.1758	0.1758	0	1.594	1.594	0



$t\bar{t} \rightarrow d\bar{d}$	0.2782	0.2782	0	2.739	2.739	0
$t\bar{t} \rightarrow s\bar{s}$	0.1618	0.1618	0	1.6	1.6	0

## 2.19 cQq81

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$b\bar{b} \rightarrow d\bar{d}$	0.4144	0.4144	0	0.2797	0.2797	0
$b\bar{b} \rightarrow u\bar{u}$	0.954	0.954	0	0.6439	0.6439	0
$t\bar{t} \rightarrow c\bar{c}$	0.5639	0.5639	0	0.3543	0.3543	0
$t\bar{t} \rightarrow d\bar{d}$	0.9407	0.9407	0	0.6086	0.6086	0
$t\bar{t} \rightarrow s\bar{s}$	0.5658	0.5658	0	0.3556	0.3556	0

## 2.20 cQq83

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$\bar{b}t \rightarrow \bar{d}u$	$1.085 \cdot 10^{-18}$	$1.085 \cdot 10^{-18}$	0	1.77	1.77	0
$b\bar{b} \rightarrow d\bar{d}$	0.4144	0.4144	0	0.2797	0.2797	0
$b\bar{b} \rightarrow u\bar{u}$	-0.954	-0.954	0	0.6439	0.6439	0
$t\bar{t} \rightarrow c\bar{c}$	0.5639	0.5639	0	0.3543	0.3543	0
$t\bar{t} \rightarrow d\bar{d}$	-0.9407	-0.9407	0	0.6086	0.6086	0
$t\bar{t} \rightarrow s\bar{s}$	-0.5658	-0.5658	0	0.3556	0.3556	0

## 2.21 cQt1

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

$b\bar{b} \rightarrow t\bar{t}$	-0.2241	-0.2241	0	0.4432	0.4432	0
$t\bar{t} \rightarrow t\bar{t}$	-0.4579	-0.4579	0	8.027	8.027	0

## 2.22 cQt8

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$b\bar{b} \rightarrow t\bar{t}$	0.003336	0.003336	0	0.09848	0.09848	0
$t\bar{t} \rightarrow t\bar{t}$	-5.99	-5.99	0	1.739	1.739	0

## 2.23 cQta

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$t\bar{t} \rightarrow \tau^+\tau^-$	-0.008371	-0.008371	0	0.1591	0.1591	0

## 2.24 cQu1

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$b\bar{b} \rightarrow u\bar{u}$	0.0006451	0.0006451	0	0.02217	0.02217	0
$t\bar{t} \rightarrow c\bar{c}$	0.007819	0.007819	0	0.1586	0.1586	0

## 2.25 cQu8

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$b\bar{b} \rightarrow u\bar{u}$	0.0146	0.0146	0	0.004927	0.004927	0

$t\bar{t} \rightarrow c\bar{c}$	0.1239	0.1239	0	0.03524	0.03524	0
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## 2.26 cWWW

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$HH \rightarrow W^+W^-\gamma$	$1.114 \cdot 10^{-5}$	$1.114 \cdot 10^{-5}$	0	$9.1 \cdot 10^{-6}$	$9.1 \cdot 10^{-6}$	0
$HW^+ \rightarrow \gamma t\bar{b}$	$-9.667 \cdot 10^{-7}$	$-9.667 \cdot 10^{-7}$	0	$4.626 \cdot 10^{-6}$	$4.626 \cdot 10^{-6}$	0
$HW^+ \rightarrow \gamma u\bar{d}$	$-1.451 \cdot 10^{-9}$	$-1.451 \cdot 10^{-9}$	0	$4.881 \cdot 10^{-9}$	$4.881 \cdot 10^{-9}$	0
$HW^- \rightarrow \gamma e^-\bar{\nu}_e$	$-1.64 \cdot 10^{-9}$	$-1.64 \cdot 10^{-9}$	0	$3.702 \cdot 10^{-9}$	$3.702 \cdot 10^{-9}$	0
$W^+W^- \rightarrow Hb\bar{b}$	0.00764	0.00764	0	0.003136	0.003136	0
$W^+W^- \rightarrow Hc\bar{c}$	$5.17 \cdot 10^{-7}$	$5.17 \cdot 10^{-7}$	0	$1.247 \cdot 10^{-6}$	$1.247 \cdot 10^{-6}$	0
$W^+W^- \rightarrow Hd\bar{d}$	$3.189 \cdot 10^{-7}$	$3.189 \cdot 10^{-7}$	0	$7.875 \cdot 10^{-7}$	$7.875 \cdot 10^{-7}$	0
$W^+W^- \rightarrow Ht\bar{t}$	$1.286 \cdot 10^{-6}$	$1.286 \cdot 10^{-6}$	0	$4.061 \cdot 10^{-6}$	$4.061 \cdot 10^{-6}$	0
$W^+W^- \rightarrow W^+W^-$	0.0007587	0.0007587	0	17.16	17.16	0
$W^+W^- \rightarrow \gamma\gamma$	-0.0005652	-0.0005652	0	0.721	0.721	0
$W^+W^- \rightarrow \gamma\gamma\gamma$	$2.873 \cdot 10^{-8}$	$2.873 \cdot 10^{-8}$	0	$1.502 \cdot 10^{-6}$	$1.502 \cdot 10^{-6}$	0
$\gamma W^+ \rightarrow zW^+$	-0.007403	-0.007403	0	1.237	1.237	0
$zz \rightarrow W^+W^-$	0.0441	0.0441	0	15.32	15.32	0

## 2.27 cdp

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$HH \rightarrow HH$	0.4442	0.4442	0	0.2338	0.2338	0
$HH \rightarrow HHH$	$-1.847 \cdot 10^{-6}$	$-1.847 \cdot 10^{-6}$	0	$7.385 \cdot 10^{-6}$	$7.385 \cdot 10^{-6}$	0
$HH \rightarrow Ht\bar{t}$	$1.038 \cdot 10^{-5}$	$1.038 \cdot 10^{-5}$	0	$1.128 \cdot 10^{-5}$	$1.128 \cdot 10^{-5}$	0
$HH \rightarrow Hzz$	$-1.192 \cdot 10^{-6}$	$-1.192 \cdot 10^{-6}$	0	$4.001 \cdot 10^{-6}$	$4.001 \cdot 10^{-6}$	0
$HH \rightarrow W^+W^-$	-8.895	-8.895	0	2.84	2.84	0

$HH \rightarrow W^+W^-\gamma$	$1.3 \cdot 10^{-5}$	$1.3 \cdot 10^{-5}$	0	$1.288 \cdot 10^{-5}$	$1.288 \cdot 10^{-5}$	0
$HH \rightarrow W^+\bar{t}b$	$-5.11 \cdot 10^{-6}$	$-5.11 \cdot 10^{-6}$	0	$3.879 \cdot 10^{-5}$	$3.879 \cdot 10^{-5}$	0
$HH \rightarrow W^+e^-\bar{\nu}_e$	$-2.817 \cdot 10^{-7}$	$-2.817 \cdot 10^{-7}$	0	$2.215 \cdot 10^{-7}$	$2.215 \cdot 10^{-7}$	0
$HH \rightarrow W^-u\bar{d}$	$-1.114 \cdot 10^{-7}$	$-1.114 \cdot 10^{-7}$	0	$5.037 \cdot 10^{-7}$	$5.037 \cdot 10^{-7}$	0
$HH \rightarrow z\bar{b}b$	$-3.472 \cdot 10^{-5}$	$-3.472 \cdot 10^{-5}$	0	$2.925 \cdot 10^{-5}$	$2.925 \cdot 10^{-5}$	0
$HH \rightarrow z\nu_e\bar{\nu}_e$	$2.634 \cdot 10^{-9}$	$2.634 \cdot 10^{-9}$	0	$6.996 \cdot 10^{-8}$	$6.996 \cdot 10^{-8}$	0
$HH \rightarrow zc\bar{c}$	$4.738 \cdot 10^{-8}$	$4.738 \cdot 10^{-8}$	0	$7.039 \cdot 10^{-9}$	$7.039 \cdot 10^{-9}$	0
$HH \rightarrow zd\bar{d}$	$-9.028 \cdot 10^{-6}$	$-9.028 \cdot 10^{-6}$	0	$2.783 \cdot 10^{-6}$	$2.783 \cdot 10^{-6}$	0
$HH \rightarrow ze^+e^-$	$6.146 \cdot 10^{-9}$	$6.146 \cdot 10^{-9}$	0	$1.149 \cdot 10^{-8}$	$1.149 \cdot 10^{-8}$	0
$HH \rightarrow zt\bar{t}$	$1.925 \cdot 10^{-5}$	$1.925 \cdot 10^{-5}$	0	0.0001506	0.0001506	0
$HH \rightarrow zz$	-8.093	-8.093	0	0.3895	0.3895	0
$HW^+ \rightarrow \gamma t\bar{b}$	$2.349 \cdot 10^{-7}$	$2.349 \cdot 10^{-7}$	0	$7.12 \cdot 10^{-9}$	$7.12 \cdot 10^{-9}$	0
$HW^+ \rightarrow \gamma u\bar{d}$	$5.118 \cdot 10^{-10}$	$5.118 \cdot 10^{-10}$	0	$1.551 \cdot 10^{-11}$	$1.551 \cdot 10^{-11}$	0
$HW^+ \rightarrow u\bar{d}$	0.00156	0.00156	0	$4.729 \cdot 10^{-5}$	$4.729 \cdot 10^{-5}$	0
$HW^- \rightarrow \bar{t}b$	0.1027	0.1027	0	0.003113	0.003113	0
$HW^- \rightarrow \gamma e^-\bar{\nu}_e$	$5.563 \cdot 10^{-11}$	$5.563 \cdot 10^{-11}$	0	$1.686 \cdot 10^{-12}$	$1.686 \cdot 10^{-12}$	0
$HW^- \rightarrow \mu^-\bar{\nu}_\mu$	0.0009133	0.0009133	0	$2.768 \cdot 10^{-5}$	$2.768 \cdot 10^{-5}$	0
$H\gamma \rightarrow t\bar{t}$	0.06863	0.06863	0	0.00208	0.00208	0
$H z \rightarrow \mu^+\mu^-$	$3.235 \cdot 10^{-5}$	$3.235 \cdot 10^{-5}$	0	$9.807 \cdot 10^{-7}$	$9.807 \cdot 10^{-7}$	0
$H z \rightarrow \nu_\tau\bar{\nu}_\tau$	0.0007156	0.0007156	0	$2.169 \cdot 10^{-5}$	$2.169 \cdot 10^{-5}$	0
$H z \rightarrow b\bar{b}$	0.0016	0.0016	0	$4.85 \cdot 10^{-5}$	$4.85 \cdot 10^{-5}$	0
$H z \rightarrow s\bar{s}$	0.0002403	0.0002403	0	$7.285 \cdot 10^{-6}$	$7.285 \cdot 10^{-6}$	0
$H z \rightarrow t\bar{t}$	0.2322	0.2322	0	0.007037	0.007037	0
$H z \rightarrow u\bar{u}$	0.001348	0.001348	0	$4.087 \cdot 10^{-5}$	$4.087 \cdot 10^{-5}$	0
$W^+W^- \rightarrow Hb\bar{b}$	0.00874	0.00874	0	0.0002649	0.0002649	0
$W^+W^- \rightarrow Hc\bar{c}$	$8.571 \cdot 10^{-8}$	$8.571 \cdot 10^{-8}$	0	$2.598 \cdot 10^{-9}$	$2.598 \cdot 10^{-9}$	0
$W^+W^- \rightarrow Hd\bar{d}$	$8.971 \cdot 10^{-8}$	$8.971 \cdot 10^{-8}$	0	$2.719 \cdot 10^{-9}$	$2.719 \cdot 10^{-9}$	0
$W^+W^- \rightarrow Ht\bar{t}$	$3.704 \cdot 10^{-6}$	$3.704 \cdot 10^{-6}$	0	$3.971 \cdot 10^{-6}$	$3.971 \cdot 10^{-6}$	0
$W^+W^- \rightarrow W^+W^-$	9.447	9.447	0	0.3183	0.3183	0

$t\bar{t} \rightarrow t\bar{t}$	-0.1405	-0.1405	0	0.008846	0.008846	0
$zz \rightarrow W^+W^-$	7.135	7.135	0	0.4473	0.4473	0
$zz \rightarrow zz$	0.01915	0.01915	0	0.001161	0.001161	0

## 2.28 cll1111

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$e^+\nu_e \rightarrow e^+\nu_e$	0.939	0.939	0	2.041	2.041	0
$e^+e^- \rightarrow e^+e^-$	-4.998	-4.998	0	11.89	11.89	0

## 2.29 cll1122

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$\nu_e\bar{\nu}_e \rightarrow \nu_\mu\bar{\nu}_\mu$	0.06967	0.06967	0	0.5037	0.5037	0
$e^+\nu_\mu \rightarrow e^+\nu_\mu$	0.1781	0.1781	0	1.151	1.151	0
$e^+e^- \rightarrow \mu^+\mu^-$	0.3136	0.3136	0	2.281	2.281	0

## 2.30 cll1133

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$e^+\tau^- \rightarrow e^+\tau^-$	-0.9175	-0.9175	0	1.988	1.988	0

## 2.31 cll1221

interference square

	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$HH \rightarrow HH$	0.02558	0.02558	0	0.0007754	0.0007754	0
$HH \rightarrow HHH$	$2.099 \cdot 10^{-8}$	$2.099 \cdot 10^{-8}$	0	$9.546 \cdot 10^{-10}$	$9.546 \cdot 10^{-10}$	0
$HH \rightarrow Ht\bar{t}$	$5.915 \cdot 10^{-6}$	$5.915 \cdot 10^{-6}$	0	$2.69 \cdot 10^{-7}$	$2.69 \cdot 10^{-7}$	0
$HH \rightarrow Hzz$	$1.53 \cdot 10^{-6}$	$1.53 \cdot 10^{-6}$	0	$6.955 \cdot 10^{-8}$	$6.955 \cdot 10^{-8}$	0
$HH \rightarrow W^+W^-$	0.8621	0.8621	0	0.02613	0.02613	0
$HH \rightarrow W^+W^-\gamma$	$5.859 \cdot 10^{-6}$	$5.859 \cdot 10^{-6}$	0	$2.664 \cdot 10^{-7}$	$2.664 \cdot 10^{-7}$	0
$HH \rightarrow W^+t\bar{b}$	$5.863 \cdot 10^{-7}$	$5.863 \cdot 10^{-7}$	0	$2.666 \cdot 10^{-8}$	$2.666 \cdot 10^{-8}$	0
$HH \rightarrow W^+e^-\bar{\nu}_e$	$5.992 \cdot 10^{-8}$	$5.992 \cdot 10^{-8}$	0	$2.725 \cdot 10^{-9}$	$2.725 \cdot 10^{-9}$	0
$HH \rightarrow W^-u\bar{d}$	$1.378 \cdot 10^{-7}$	$1.378 \cdot 10^{-7}$	0	$6.263 \cdot 10^{-9}$	$6.263 \cdot 10^{-9}$	0
$HH \rightarrow z\bar{b}b$	$2.665 \cdot 10^{-6}$	$2.665 \cdot 10^{-6}$	0	$1.212 \cdot 10^{-7}$	$1.212 \cdot 10^{-7}$	0
$HH \rightarrow z\nu_e\bar{\nu}_e$	$9.57 \cdot 10^{-9}$	$9.57 \cdot 10^{-9}$	0	$4.351 \cdot 10^{-10}$	$4.351 \cdot 10^{-10}$	0
$HH \rightarrow zcc$	$4.029 \cdot 10^{-8}$	$4.029 \cdot 10^{-8}$	0	$1.832 \cdot 10^{-9}$	$1.832 \cdot 10^{-9}$	0
$HH \rightarrow zdd$	$1.582 \cdot 10^{-6}$	$1.582 \cdot 10^{-6}$	0	$7.193 \cdot 10^{-8}$	$7.193 \cdot 10^{-8}$	0
$HH \rightarrow ze^+e^-$	$1.182 \cdot 10^{-8}$	$1.182 \cdot 10^{-8}$	0	$5.373 \cdot 10^{-10}$	$5.373 \cdot 10^{-10}$	0
$HH \rightarrow zt\bar{t}$	$1.027 \cdot 10^{-6}$	$1.027 \cdot 10^{-6}$	0	$4.672 \cdot 10^{-8}$	$4.672 \cdot 10^{-8}$	0
$HH \rightarrow zz$	5.165	5.165	0	0.1566	0.1566	0
$HW^+ \rightarrow \gamma t\bar{b}$	$3.523 \cdot 10^{-7}$	$3.523 \cdot 10^{-7}$	0	$1.602 \cdot 10^{-8}$	$1.602 \cdot 10^{-8}$	0
$HW^+ \rightarrow \gamma u\bar{d}$	$7.677 \cdot 10^{-10}$	$7.677 \cdot 10^{-10}$	0	$3.491 \cdot 10^{-11}$	$3.491 \cdot 10^{-11}$	0
$HW^+ \rightarrow u\bar{d}$	0.00156	0.00156	0	$4.729 \cdot 10^{-5}$	$4.729 \cdot 10^{-5}$	0
$HW^- \rightarrow \gamma t\bar{b}$	0.1027	0.1027	0	0.003113	0.003113	0
$HW^- \rightarrow \gamma e^-\bar{\nu}_e$	$8.344 \cdot 10^{-11}$	$8.344 \cdot 10^{-11}$	0	$3.794 \cdot 10^{-12}$	$3.794 \cdot 10^{-12}$	0
$HW^- \rightarrow \mu^-\bar{\nu}_\mu$	0.0009133	0.0009133	0	$2.768 \cdot 10^{-5}$	$2.768 \cdot 10^{-5}$	0
$H\gamma \rightarrow t\bar{t}$	0.06863	0.06863	0	0.00208	0.00208	0
$H\gamma \rightarrow \mu^+\mu^-$	$3.235 \cdot 10^{-5}$	$3.235 \cdot 10^{-5}$	0	$9.807 \cdot 10^{-7}$	$9.807 \cdot 10^{-7}$	0
$H\gamma \rightarrow \nu_\tau\bar{\nu}_\tau$	0.0007156	0.0007156	0	$2.169 \cdot 10^{-5}$	$2.169 \cdot 10^{-5}$	0
$H\gamma \rightarrow b\bar{b}$	0.0016	0.0016	0	$4.85 \cdot 10^{-5}$	$4.85 \cdot 10^{-5}$	0
$H\gamma \rightarrow s\bar{s}$	0.0002403	0.0002403	0	$7.285 \cdot 10^{-6}$	$7.285 \cdot 10^{-6}$	0
$H\gamma \rightarrow t\bar{t}$	0.2322	0.2322	0	0.007037	0.007037	0

$H z \rightarrow u \bar{u}$	0.001348	0.001348	0	$4.087 \cdot 10^{-5}$	$4.087 \cdot 10^{-5}$	0
$W^+ W^- \rightarrow H b \bar{b}$	0.01311	0.01311	0	0.0005961	0.0005961	0
$W^+ W^- \rightarrow H c \bar{c}$	$1.286 \cdot 10^{-7}$	$1.286 \cdot 10^{-7}$	0	$5.846 \cdot 10^{-9}$	$5.846 \cdot 10^{-9}$	0
$W^+ W^- \rightarrow H d \bar{d}$	$1.346 \cdot 10^{-7}$	$1.346 \cdot 10^{-7}$	0	$6.118 \cdot 10^{-9}$	$6.118 \cdot 10^{-9}$	0
$W^+ W^- \rightarrow H t \bar{t}$	$4.969 \cdot 10^{-6}$	$4.969 \cdot 10^{-6}$	0	$2.259 \cdot 10^{-7}$	$2.259 \cdot 10^{-7}$	0
$W^+ W^- \rightarrow W^+ W^-$	9.292	9.292	0	0.2817	0.2817	0
$W^+ W^- \rightarrow \gamma \gamma$	0.009435	0.009435	0	0.000286	0.000286	0
$W^+ W^- \rightarrow \gamma \gamma \gamma$	$7.648 \cdot 10^{-8}$	$7.648 \cdot 10^{-8}$	0	$3.478 \cdot 10^{-9}$	$3.478 \cdot 10^{-9}$	0
$\bar{b} t \rightarrow \bar{d} u$	0.002701	0.002701	0	$8.188 \cdot 10^{-5}$	$8.188 \cdot 10^{-5}$	0
$\gamma W^+ \rightarrow z W^+$	0.03755	0.03755	0	0.001138	0.001138	0
$\mu^+ \mu^- \rightarrow \tau^+ \tau^-$	0.0008885	0.0008885	0	$2.693 \cdot 10^{-5}$	$2.693 \cdot 10^{-5}$	0
$\nu_\tau \bar{\nu}_\tau \rightarrow \nu_\tau \bar{\nu}_\tau$	$3.222 \cdot 10^{-7}$	$3.222 \cdot 10^{-7}$	0	$9.765 \cdot 10^{-9}$	$9.765 \cdot 10^{-9}$	0
$\nu_e \bar{\nu}_e \rightarrow \nu_\mu \bar{\nu}_\mu$	0.06996	0.06996	0	0.5079	0.5079	0
$b \bar{b} \rightarrow \gamma \gamma$	$3.464 \cdot 10^{-5}$	$3.464 \cdot 10^{-5}$	0	$1.05 \cdot 10^{-6}$	$1.05 \cdot 10^{-6}$	0
$b \bar{b} \rightarrow \mu^+ \mu^-$	$3.793 \cdot 10^{-5}$	$3.793 \cdot 10^{-5}$	0	$1.15 \cdot 10^{-6}$	$1.15 \cdot 10^{-6}$	0
$b \bar{b} \rightarrow \nu_e \bar{\nu}_e$	$6.582 \cdot 10^{-5}$	$6.582 \cdot 10^{-5}$	0	$1.995 \cdot 10^{-6}$	$1.995 \cdot 10^{-6}$	0
$b \bar{b} \rightarrow b \bar{b}$	-0.003834	-0.003834	0	$1.611 \cdot 10^{-5}$	$1.611 \cdot 10^{-5}$	0
$b \bar{b} \rightarrow d \bar{d}$	0.0004676	0.0004676	0	$1.417 \cdot 10^{-5}$	$1.417 \cdot 10^{-5}$	0
$b \bar{b} \rightarrow t \bar{t}$	0.00213	0.00213	0	0.001046	0.001046	0
$b \bar{b} \rightarrow u \bar{u}$	0.0009899	0.0009899	0	$3 \cdot 10^{-5}$	$3 \cdot 10^{-5}$	0
$b \bar{t} \rightarrow e^- \bar{\nu}_e$	0.0009683	0.0009683	0	$2.935 \cdot 10^{-5}$	$2.935 \cdot 10^{-5}$	0
$c \bar{c} \rightarrow \mu^+ \mu^-$	0.0004139	0.0004139	0	$1.255 \cdot 10^{-5}$	$1.255 \cdot 10^{-5}$	0
$c \bar{s} \rightarrow \tau^+ \nu_\tau$	0.0001264	0.0001264	0	$3.831 \cdot 10^{-6}$	$3.831 \cdot 10^{-6}$	0
$d \bar{d} \rightarrow c \bar{c}$	0.0001975	0.0001975	0	$5.986 \cdot 10^{-6}$	$5.986 \cdot 10^{-6}$	0
$d \bar{d} \rightarrow e^+ e^-$	$3.971 \cdot 10^{-5}$	$3.971 \cdot 10^{-5}$	0	$1.204 \cdot 10^{-6}$	$1.204 \cdot 10^{-6}$	0
$e^+ \nu_\mu \rightarrow e^+ \nu_\mu$	0.003073	0.003073	0	$9.314 \cdot 10^{-5}$	$9.314 \cdot 10^{-5}$	0
$e^+ \nu_e \rightarrow \mu^+ \nu_\mu$	0.09344	0.09344	0	0.4445	0.4445	0
$e^+ \nu_e \rightarrow e^+ \nu_e$	0.01886	0.01886	0	0.0005717	0.0005717	0
$e^+ \tau^- \rightarrow e^+ \tau^-$	0.03587	0.03587	0	0.001087	0.001087	0

$e^+e^- \rightarrow \mu^+\mu^-$	0.3161	0.3161	0	2.3	2.3	0
$e^+e^- \rightarrow e^+e^-$	0.1753	0.1753	0	0.005314	0.005314	0
$s\bar{s} \rightarrow \nu_\tau\bar{\nu}_\tau$	$2.909 \cdot 10^{-5}$	$2.909 \cdot 10^{-5}$	0	$8.818 \cdot 10^{-7}$	$8.818 \cdot 10^{-7}$	0
$s\bar{s} \rightarrow s\bar{s}$	-0.0002627	-0.0002627	0	$1.727 \cdot 10^{-6}$	$1.727 \cdot 10^{-6}$	0
$t\bar{t} \rightarrow \nu_\mu\bar{\nu}_\mu$	$5.695 \cdot 10^{-5}$	$5.695 \cdot 10^{-5}$	0	$1.726 \cdot 10^{-6}$	$1.726 \cdot 10^{-6}$	0
$t\bar{t} \rightarrow \tau^+\tau^-$	0.0001562	0.0001562	0	$4.734 \cdot 10^{-6}$	$4.734 \cdot 10^{-6}$	0
$t\bar{t} \rightarrow c\bar{c}$	0.0007582	0.0007582	0	$2.298 \cdot 10^{-5}$	$2.298 \cdot 10^{-5}$	0
$t\bar{t} \rightarrow d\bar{d}$	0.000927	0.000927	0	$2.81 \cdot 10^{-5}$	$2.81 \cdot 10^{-5}$	0
$t\bar{t} \rightarrow s\bar{s}$	0.000542	0.000542	0	$1.643 \cdot 10^{-5}$	$1.643 \cdot 10^{-5}$	0
$t\bar{t} \rightarrow t\bar{t}$	-0.1758	-0.1758	0	0.003925	0.003925	0
$u\bar{d} \rightarrow \mu^+\nu_\mu$	0.0006535	0.0006535	0	$1.981 \cdot 10^{-5}$	$1.981 \cdot 10^{-5}$	0
$u\bar{d} \rightarrow c\bar{s}$	0.002642	0.002642	0	$8.008 \cdot 10^{-5}$	$8.008 \cdot 10^{-5}$	0
$u\bar{d} \rightarrow u\bar{d}$	$2.544 \cdot 10^{-5}$	$2.544 \cdot 10^{-5}$	0	$1.141 \cdot 10^{-6}$	$1.141 \cdot 10^{-6}$	0
$u\bar{u} \rightarrow \nu_e\bar{\nu}_e$	$6.4 \cdot 10^{-5}$	$6.4 \cdot 10^{-5}$	0	$1.94 \cdot 10^{-6}$	$1.94 \cdot 10^{-6}$	0
$u\bar{u} \rightarrow u\bar{u}$	-0.0003081	-0.0003081	0	$4.401 \cdot 10^{-6}$	$4.401 \cdot 10^{-6}$	0
$zz \rightarrow W^+W^-$	3.916	3.916	0	0.1187	0.1187	0
$zz \rightarrow zz$	0.009576	0.009576	0	0.0002903	0.0002903	0

## 2.32 cll1331

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$e^+\tau^- \rightarrow e^+\tau^-$	-0.9175	-0.9175	0	1.988	1.988	0

## 2.33 cll2233

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$\mu^+\mu^- \rightarrow \tau^+\tau^-$	0.001963	0.001963	0	0.01428	0.01428	0



## 2.34 cll2332

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$\mu^+\mu^- \rightarrow \tau^+\tau^-$	0.001963	0.001963	0	0.01428	0.01428	0

## 2.35 cll3333

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$\nu_\tau\bar{\nu}_\tau \rightarrow \nu_\tau\bar{\nu}_\tau$	-0.001453	-0.001453	0	0.1988	0.1988	0

## 2.36 cp

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$HH \rightarrow HH$	-1.342	-1.342	0	2.135	2.135	0
$HH \rightarrow HHH$	$5.36 \cdot 10^{-6}$	$5.36 \cdot 10^{-6}$	0	$6.223 \cdot 10^{-5}$	$6.223 \cdot 10^{-5}$	0
$HH \rightarrow Ht\bar{t}$	$6.017 \cdot 10^{-6}$	$6.017 \cdot 10^{-6}$	0	$2.018 \cdot 10^{-5}$	$2.018 \cdot 10^{-5}$	0
$HH \rightarrow Hzz$	$9.651 \cdot 10^{-6}$	$9.651 \cdot 10^{-6}$	0	$1.441 \cdot 10^{-5}$	$1.441 \cdot 10^{-5}$	0
$HH \rightarrow W^+W^-$	1.931	1.931	0	0.1331	0.1331	0
$HH \rightarrow W^+W^-\gamma$	$-9.433 \cdot 10^{-7}$	$-9.433 \cdot 10^{-7}$	0	$3.894 \cdot 10^{-7}$	$3.894 \cdot 10^{-7}$	0
$HH \rightarrow W^+\bar{t}b$	$1.04 \cdot 10^{-6}$	$1.04 \cdot 10^{-6}$	0	$1.23 \cdot 10^{-6}$	$1.23 \cdot 10^{-6}$	0
$HH \rightarrow W^+e^-\bar{\nu}_e$	$6.577 \cdot 10^{-8}$	$6.577 \cdot 10^{-8}$	0	$8.617 \cdot 10^{-9}$	$8.617 \cdot 10^{-9}$	0
$HH \rightarrow W^-u\bar{d}$	$5.367 \cdot 10^{-8}$	$5.367 \cdot 10^{-8}$	0	$1.748 \cdot 10^{-8}$	$1.748 \cdot 10^{-8}$	0
$HH \rightarrow z\bar{b}b$	$6.961 \cdot 10^{-6}$	$6.961 \cdot 10^{-6}$	0	$1.114 \cdot 10^{-6}$	$1.114 \cdot 10^{-6}$	0
$HH \rightarrow z\nu_e\bar{\nu}_e$	$1.842 \cdot 10^{-9}$	$1.842 \cdot 10^{-9}$	0	$2.329 \cdot 10^{-9}$	$2.329 \cdot 10^{-9}$	0
$HH \rightarrow z c\bar{c}$	$1.154 \cdot 10^{-9}$	$1.154 \cdot 10^{-9}$	0	$1.506 \cdot 10^{-10}$	$1.506 \cdot 10^{-10}$	0
$HH \rightarrow z d\bar{d}$	$2.026 \cdot 10^{-6}$	$2.026 \cdot 10^{-6}$	0	$1.325 \cdot 10^{-7}$	$1.325 \cdot 10^{-7}$	0

$HH \rightarrow ze^+e^-$	$1.748 \cdot 10^{-9}$	$1.748 \cdot 10^{-9}$	0	$3.869 \cdot 10^{-10}$	$3.869 \cdot 10^{-10}$	0
$HH \rightarrow zt\bar{t}$	$-1.723 \cdot 10^{-6}$	$-1.723 \cdot 10^{-6}$	0	$1.377 \cdot 10^{-6}$	$1.377 \cdot 10^{-6}$	0
$HH \rightarrow zz$	3.351	3.351	0	0.06606	0.06606	0
$W^+W^- \rightarrow Ht\bar{t}$	$-4.87 \cdot 10^{-8}$	$-4.87 \cdot 10^{-8}$	0	$5.574 \cdot 10^{-8}$	$5.574 \cdot 10^{-8}$	0

## 2.37 cpBB

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$HH \rightarrow Hzz$	$-7.969 \cdot 10^{-7}$	$-7.969 \cdot 10^{-7}$	0	$5.021 \cdot 10^{-7}$	$5.021 \cdot 10^{-7}$	0
$HH \rightarrow W^+W^-\gamma$	$2.185 \cdot 10^{-7}$	$2.185 \cdot 10^{-7}$	0	$5.746 \cdot 10^{-7}$	$5.746 \cdot 10^{-7}$	0
$HH \rightarrow z\bar{b}b$	$2.472 \cdot 10^{-6}$	$2.472 \cdot 10^{-6}$	0	$1.063 \cdot 10^{-5}$	$1.063 \cdot 10^{-5}$	0
$HH \rightarrow z\nu_e\bar{\nu}_e$	$-1.339 \cdot 10^{-7}$	$-1.339 \cdot 10^{-7}$	0	$1.144 \cdot 10^{-7}$	$1.144 \cdot 10^{-7}$	0
$HH \rightarrow zcc$	$2.698 \cdot 10^{-8}$	$2.698 \cdot 10^{-8}$	0	$3.542 \cdot 10^{-7}$	$3.542 \cdot 10^{-7}$	0
$HH \rightarrow zdd$	$1.176 \cdot 10^{-6}$	$1.176 \cdot 10^{-6}$	0	$2.386 \cdot 10^{-6}$	$2.386 \cdot 10^{-6}$	0
$HH \rightarrow ze^+e^-$	$5.559 \cdot 10^{-8}$	$5.559 \cdot 10^{-8}$	0	$2.881 \cdot 10^{-7}$	$2.881 \cdot 10^{-7}$	0
$HH \rightarrow zt\bar{t}$	$-4.314 \cdot 10^{-7}$	$-4.314 \cdot 10^{-7}$	0	$2.087 \cdot 10^{-6}$	$2.087 \cdot 10^{-6}$	0
$HH \rightarrow zz$	0.1417	0.1417	0	0.3795	0.3795	0
$HW^+ \rightarrow \gamma t\bar{b}$	$2.213 \cdot 10^{-6}$	$2.213 \cdot 10^{-6}$	0	$1.604 \cdot 10^{-6}$	$1.604 \cdot 10^{-6}$	0
$HW^+ \rightarrow \gamma u\bar{d}$	$6.639 \cdot 10^{-9}$	$6.639 \cdot 10^{-9}$	0	$5.457 \cdot 10^{-8}$	$5.457 \cdot 10^{-8}$	0
$HW^- \rightarrow \gamma e^-\bar{\nu}_e$	$-4.013 \cdot 10^{-10}$	$-4.013 \cdot 10^{-10}$	0	$4.25 \cdot 10^{-9}$	$4.25 \cdot 10^{-9}$	0
$H\gamma \rightarrow b\bar{b}$	0	0	0	0.00599	0.00599	0
$H\gamma \rightarrow c\bar{c}$	0	0	0	0.02727	0.02727	0
$H\gamma \rightarrow d\bar{d}$	0	0	0	0.005349	0.005349	0
$H\gamma \rightarrow e^+e^-$	0	0	0	0.02484	0.02484	0
$H\gamma \rightarrow t\bar{t}$	-0.04207	-0.04207	0	0.02248	0.02248	0
$H\gamma \rightarrow \mu^+\mu^-$	0.0005775	0.0005775	0	0.006011	0.006011	0
$H\gamma \rightarrow \nu_\tau\bar{\nu}_\tau$	0.0008032	0.0008032	0	0.0006843	0.0006843	0
$H\gamma \rightarrow b\bar{b}$	0.0009189	0.0009189	0	0.001115	0.001115	0

$H z \rightarrow s \bar{s}$	0.001619	0.001619	0	0.001964	0.001964	0
$H z \rightarrow t \bar{t}$	-0.01293	-0.01293	0	0.004816	0.004816	0
$H z \rightarrow u \bar{u}$	0.0004166	0.0004166	0	0.003491	0.003491	0
$W^+ W^- \rightarrow H b \bar{b}$	-0.0001238	-0.0001238	0	$1.022 \cdot 10^{-7}$	$1.022 \cdot 10^{-7}$	0
$W^+ W^- \rightarrow H c \bar{c}$	$7.467 \cdot 10^{-9}$	$7.467 \cdot 10^{-9}$	0	$5.808 \cdot 10^{-10}$	$5.808 \cdot 10^{-10}$	0
$W^+ W^- \rightarrow H d \bar{d}$	$-1.129 \cdot 10^{-8}$	$-1.129 \cdot 10^{-8}$	0	$1.979 \cdot 10^{-10}$	$1.979 \cdot 10^{-10}$	0
$W^+ W^- \rightarrow H t \bar{t}$	$3.621 \cdot 10^{-8}$	$3.621 \cdot 10^{-8}$	0	$5.563 \cdot 10^{-10}$	$5.563 \cdot 10^{-10}$	0
$W^+ W^- \rightarrow \gamma \gamma$	-0.04694	-0.04694	0	0.2694	0.2694	0
$W^+ W^- \rightarrow \gamma \gamma \gamma$	$5.821 \cdot 10^{-9}$	$5.821 \cdot 10^{-9}$	0	$7.393 \cdot 10^{-8}$	$7.393 \cdot 10^{-8}$	0
$\gamma W^+ \rightarrow z W^+$	-0.0388	-0.0388	0	0.04138	0.04138	0
$z z \rightarrow W^+ W^-$	-0.04126	-0.04126	0	0.04883	0.04883	0
$z z \rightarrow z z$	0.001799	0.001799	0	0.08814	0.08814	0

## 2.38 cpDC

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$HH \rightarrow HH$	-0.1111	-0.1111	0	0.01461	0.01461	0
$HH \rightarrow HHH$	$4.617 \cdot 10^{-7}$	$4.617 \cdot 10^{-7}$	0	$4.616 \cdot 10^{-7}$	$4.616 \cdot 10^{-7}$	0
$HH \rightarrow H t \bar{t}$	$-2.595 \cdot 10^{-6}$	$-2.595 \cdot 10^{-6}$	0	$7.051 \cdot 10^{-7}$	$7.051 \cdot 10^{-7}$	0
$HH \rightarrow H z z$	$1.891 \cdot 10^{-6}$	$1.891 \cdot 10^{-6}$	0	$1.053 \cdot 10^{-6}$	$1.053 \cdot 10^{-6}$	0
$HH \rightarrow W^+ W^-$	2.224	2.224	0	0.1775	0.1775	0
$HH \rightarrow W^+ W^- \gamma$	$-6.451 \cdot 10^{-6}$	$-6.451 \cdot 10^{-6}$	0	$1.046 \cdot 10^{-6}$	$1.046 \cdot 10^{-6}$	0
$HH \rightarrow W^+ t \bar{b}$	$1.278 \cdot 10^{-6}$	$1.278 \cdot 10^{-6}$	0	$2.425 \cdot 10^{-6}$	$2.425 \cdot 10^{-6}$	0
$HH \rightarrow W^+ e^- \bar{\nu}_e$	$7.044 \cdot 10^{-8}$	$7.044 \cdot 10^{-8}$	0	$1.384 \cdot 10^{-8}$	$1.384 \cdot 10^{-8}$	0
$HH \rightarrow W^- u \bar{d}$	$2.786 \cdot 10^{-8}$	$2.786 \cdot 10^{-8}$	0	$3.148 \cdot 10^{-8}$	$3.148 \cdot 10^{-8}$	0
$HH \rightarrow z \bar{b} b$	$-1.737 \cdot 10^{-5}$	$-1.737 \cdot 10^{-5}$	0	$7.127 \cdot 10^{-6}$	$7.127 \cdot 10^{-6}$	0
$HH \rightarrow z \nu_e \bar{\nu}_e$	$-3.23 \cdot 10^{-9}$	$-3.23 \cdot 10^{-9}$	0	$1.593 \cdot 10^{-8}$	$1.593 \cdot 10^{-8}$	0
$HH \rightarrow z c \bar{c}$	$1.275 \cdot 10^{-8}$	$1.275 \cdot 10^{-8}$	0	$1.858 \cdot 10^{-9}$	$1.858 \cdot 10^{-9}$	0

$HH \rightarrow z d \bar{d}$	$-4.793 \cdot 10^{-6}$	$-4.793 \cdot 10^{-6}$	0	$7.64 \cdot 10^{-7}$	$7.64 \cdot 10^{-7}$	0
$HH \rightarrow z e^+ e^-$	$-1.827 \cdot 10^{-9}$	$-1.827 \cdot 10^{-9}$	0	$3.147 \cdot 10^{-9}$	$3.147 \cdot 10^{-9}$	0
$HH \rightarrow z t \bar{t}$	$9.168 \cdot 10^{-6}$	$9.168 \cdot 10^{-6}$	0	$3.731 \cdot 10^{-5}$	$3.731 \cdot 10^{-5}$	0
$HH \rightarrow z z$	-6.197	-6.197	0	0.2266	0.2266	0
$HW^+ \rightarrow \gamma t \bar{b}$	$-2.513 \cdot 10^{-7}$	$-2.513 \cdot 10^{-7}$	0	$8.148 \cdot 10^{-9}$	$8.148 \cdot 10^{-9}$	0
$HW^+ \rightarrow \gamma u \bar{d}$	$-5.475 \cdot 10^{-10}$	$-5.475 \cdot 10^{-10}$	0	$1.775 \cdot 10^{-11}$	$1.775 \cdot 10^{-11}$	0
$HW^+ \rightarrow u \bar{d}$	-0.00039	-0.00039	0	$2.956 \cdot 10^{-6}$	$2.956 \cdot 10^{-6}$	0
$HW^- \rightarrow t \bar{b}$	-0.02567	-0.02567	0	0.0001946	0.0001946	0
$HW^- \rightarrow \gamma e^- \bar{\nu}_e$	$-5.951 \cdot 10^{-11}$	$-5.951 \cdot 10^{-11}$	0	$1.93 \cdot 10^{-12}$	$1.93 \cdot 10^{-12}$	0
$HW^- \rightarrow \mu^- \bar{\nu}_\mu$	-0.0002283	-0.0002283	0	$1.73 \cdot 10^{-6}$	$1.73 \cdot 10^{-6}$	0
$H\gamma \rightarrow b \bar{b}$	0	0	0	0	$1.278 \cdot 10^{-38}$	$\infty$
$H\gamma \rightarrow c \bar{c}$	0	0	0	0	$1.34 \cdot 10^{-38}$	$\infty$
$H\gamma \rightarrow d \bar{d}$	0	0	0	0	$1.142 \cdot 10^{-38}$	$\infty$
$H\gamma \rightarrow e^+ e^-$	0	0	0	0	$4.056 \cdot 10^{-39}$	$\infty$
$H\gamma \rightarrow t \bar{t}$	-0.07342	-0.07342	0	0.002381	0.002381	0
$H z \rightarrow \mu^+ \mu^-$	$3.22 \cdot 10^{-6}$	$3.22 \cdot 10^{-6}$	0	$2.294 \cdot 10^{-6}$	$2.294 \cdot 10^{-6}$	0
$H z \rightarrow \nu_\tau \bar{\nu}_\tau$	$9.031 \cdot 10^{-19}$	$2.749 \cdot 10^{-18}$	-2.044	$2.079 \cdot 10^{-34}$	$3.356 \cdot 10^{-34}$	-0.6141
$H z \rightarrow b \bar{b}$	0.0003818	0.0003818	0	$8.588 \cdot 10^{-6}$	$8.588 \cdot 10^{-6}$	0
$H z \rightarrow s \bar{s}$	$5.734 \cdot 10^{-5}$	$5.734 \cdot 10^{-5}$	0	$1.29 \cdot 10^{-6}$	$1.29 \cdot 10^{-6}$	0
$H z \rightarrow t \bar{t}$	0.01288	0.01288	0	0.01743	0.01743	0
$H z \rightarrow u \bar{u}$	0.0004546	0.0004546	0	$3.736 \cdot 10^{-5}$	$3.736 \cdot 10^{-5}$	0
$W^+ W^- \rightarrow H b \bar{b}$	-0.005359	-0.005359	0	0.0001334	0.0001334	0
$W^+ W^- \rightarrow H c \bar{c}$	$-5.835 \cdot 10^{-8}$	$-5.835 \cdot 10^{-8}$	0	$1.351 \cdot 10^{-9}$	$1.351 \cdot 10^{-9}$	0
$W^+ W^- \rightarrow H d \bar{d}$	$-6.81 \cdot 10^{-8}$	$-6.81 \cdot 10^{-8}$	0	$1.638 \cdot 10^{-9}$	$1.638 \cdot 10^{-9}$	0
$W^+ W^- \rightarrow H t \bar{t}$	$-3.115 \cdot 10^{-6}$	$-3.115 \cdot 10^{-6}$	0	$3.466 \cdot 10^{-7}$	$3.466 \cdot 10^{-7}$	0
$W^+ W^- \rightarrow W^+ W^-$	4.39	4.39	0	0.07025	0.07025	0
$W^+ W^- \rightarrow \gamma \gamma$	-0.01547	-0.01547	0	0.0007688	0.0007688	0
$W^+ W^- \rightarrow \gamma \gamma \gamma$	$-1.254 \cdot 10^{-7}$	$-1.254 \cdot 10^{-7}$	0	$9.348 \cdot 10^{-9}$	$9.348 \cdot 10^{-9}$	0
$\gamma W^+ \rightarrow z W^+$	-0.02139	-0.02139	0	0.0003695	0.0003695	0

$\mu^+\mu^- \rightarrow \tau^+\tau^-$	-0.001893	-0.001893	0	0.0001229	0.0001229	0
$\nu_\tau\bar{\nu}_\tau \rightarrow \nu_\tau\bar{\nu}_\tau$	$-1.611 \cdot 10^{-7}$	$-1.611 \cdot 10^{-7}$	0	$2.441 \cdot 10^{-9}$	$2.441 \cdot 10^{-9}$	0
$\nu_e\bar{\nu}_e \rightarrow \nu_\mu\bar{\nu}_\mu$	-0.000146	-0.000146	0	$2.213 \cdot 10^{-6}$	$2.213 \cdot 10^{-6}$	0
$b\bar{b} \rightarrow \gamma\gamma$	$-5.679 \cdot 10^{-5}$	$-5.679 \cdot 10^{-5}$	0	$2.822 \cdot 10^{-6}$	$2.822 \cdot 10^{-6}$	0
$b\bar{b} \rightarrow \mu^+\mu^-$	$-5.811 \cdot 10^{-5}$	$-5.811 \cdot 10^{-5}$	0	$3.942 \cdot 10^{-6}$	$3.942 \cdot 10^{-6}$	0
$b\bar{b} \rightarrow \nu_e\bar{\nu}_e$	$-2.974 \cdot 10^{-5}$	$-2.974 \cdot 10^{-5}$	0	$1.264 \cdot 10^{-6}$	$1.264 \cdot 10^{-6}$	0
$b\bar{b} \rightarrow b\bar{b}$	0.001229	0.001229	0	$6.052 \cdot 10^{-6}$	$6.052 \cdot 10^{-6}$	0
$b\bar{b} \rightarrow d\bar{d}$	$-5.34 \cdot 10^{-5}$	$-5.34 \cdot 10^{-5}$	0	$1.489 \cdot 10^{-6}$	$1.489 \cdot 10^{-6}$	0
$b\bar{b} \rightarrow t\bar{t}$	0.000419	0.000419	0	$3.753 \cdot 10^{-6}$	$3.753 \cdot 10^{-6}$	0
$b\bar{b} \rightarrow u\bar{u}$	$-8.32 \cdot 10^{-5}$	$-8.32 \cdot 10^{-5}$	0	$1.023 \cdot 10^{-5}$	$1.023 \cdot 10^{-5}$	0
$c\bar{c} \rightarrow \mu^+\mu^-$	-0.0003741	-0.0003741	0	$2.134 \cdot 10^{-5}$	$2.134 \cdot 10^{-5}$	0
$d\bar{d} \rightarrow c\bar{c}$	$-4.225 \cdot 10^{-5}$	$-4.225 \cdot 10^{-5}$	0	$3.641 \cdot 10^{-6}$	$3.641 \cdot 10^{-6}$	0
$d\bar{d} \rightarrow e^+e^-$	$-5.594 \cdot 10^{-5}$	$-5.594 \cdot 10^{-5}$	0	$3.846 \cdot 10^{-6}$	$3.846 \cdot 10^{-6}$	0
$e^+\nu_\mu \rightarrow e^+\nu_\mu$	-0.004002	-0.004002	0	0.0003327	0.0003327	0
$e^+\nu_e \rightarrow e^+\nu_e$	-0.005696	-0.005696	0	0.0009021	0.0009021	0
$e^+\tau^- \rightarrow e^+\tau^-$	-0.05563	-0.05563	0	0.003256	0.003256	0
$e^+e^- \rightarrow \mu^+\mu^-$	-0.003217	-0.003217	0	0.0001767	0.0001767	0
$e^+e^- \rightarrow e^+e^-$	-0.2704	-0.2704	0	0.01559	0.01559	0
$s\bar{s} \rightarrow \nu_\tau\bar{\nu}_\tau$	$-3.076 \cdot 10^{-5}$	$-3.076 \cdot 10^{-5}$	0	$1.806 \cdot 10^{-6}$	$1.806 \cdot 10^{-6}$	0
$s\bar{s} \rightarrow s\bar{s}$	$4.206 \cdot 10^{-5}$	$4.206 \cdot 10^{-5}$	0	$3.566 \cdot 10^{-6}$	$3.566 \cdot 10^{-6}$	0
$t\bar{t} \rightarrow \nu_\mu\bar{\nu}_\mu$	$-9.299 \cdot 10^{-5}$	$-9.299 \cdot 10^{-5}$	0	$7.086 \cdot 10^{-6}$	$7.086 \cdot 10^{-6}$	0
$t\bar{t} \rightarrow \tau^+\tau^-$	-0.0002011	-0.0002011	0	$1.162 \cdot 10^{-5}$	$1.162 \cdot 10^{-5}$	0
$t\bar{t} \rightarrow c\bar{c}$	-0.0004157	-0.0004157	0	$2.391 \cdot 10^{-5}$	$2.391 \cdot 10^{-5}$	0
$t\bar{t} \rightarrow d\bar{d}$	$-7.21 \cdot 10^{-5}$	$-7.21 \cdot 10^{-5}$	0	$1.001 \cdot 10^{-5}$	$1.001 \cdot 10^{-5}$	0
$t\bar{t} \rightarrow s\bar{s}$	$-4.789 \cdot 10^{-5}$	$-4.789 \cdot 10^{-5}$	0	$6.539 \cdot 10^{-6}$	$6.539 \cdot 10^{-6}$	0
$t\bar{t} \rightarrow t\bar{t}$	0.1002	0.1002	0	0.00115	0.00115	0
$u\bar{d} \rightarrow u\bar{d}$	$-6.77 \cdot 10^{-5}$	$-6.77 \cdot 10^{-5}$	0	$4.403 \cdot 10^{-6}$	$4.403 \cdot 10^{-6}$	0
$u\bar{u} \rightarrow \nu_e\bar{\nu}_e$	$-8.996 \cdot 10^{-5}$	$-8.996 \cdot 10^{-5}$	0	$6.179 \cdot 10^{-6}$	$6.179 \cdot 10^{-6}$	0
$u\bar{u} \rightarrow u\bar{u}$	0.0001128	0.0001128	0	$1.55 \cdot 10^{-5}$	$1.55 \cdot 10^{-5}$	0

$zz \rightarrow W^+W^-$	0.1742	0.1742	0	0.003561	0.003561	0
$zz \rightarrow zz$	0.004788	0.004788	0	$7.257 \cdot 10^{-5}$	$7.257 \cdot 10^{-5}$	0

### 2.39 cpG

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$gg \rightarrow t\bar{t}$	-0.05642	-0.05642	0	0.04035	0.04035	0

### 2.40 cpQ3

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$HH \rightarrow z\bar{b}b$	$5.022 \cdot 10^{-6}$	$5.022 \cdot 10^{-6}$	0	$4.452 \cdot 10^{-7}$	$4.452 \cdot 10^{-7}$	0
$HH \rightarrow zt\bar{t}$	$3.798 \cdot 10^{-6}$	$3.798 \cdot 10^{-6}$	0	$5.633 \cdot 10^{-6}$	$5.633 \cdot 10^{-6}$	0
$H z \rightarrow b\bar{b}$	0.2214	0.2214	0	0.9603	0.9603	0
$H z \rightarrow t\bar{t}$	2.071	2.071	0	1.388	1.388	0
$W^+W^- \rightarrow Hb\bar{b}$	0.009934	0.009934	0	0.0003522	0.0003522	0
$W^+W^- \rightarrow Ht\bar{t}$	$-5.422 \cdot 10^{-8}$	$-5.422 \cdot 10^{-8}$	0	$7.732 \cdot 10^{-7}$	$7.732 \cdot 10^{-7}$	0
$b\bar{b} \rightarrow \mu^+\mu^-$	$4.745 \cdot 10^{-5}$	$4.745 \cdot 10^{-5}$	0	$3.764 \cdot 10^{-6}$	$3.764 \cdot 10^{-6}$	0
$b\bar{b} \rightarrow \nu_e\bar{\nu}_e$	$6.775 \cdot 10^{-5}$	$6.775 \cdot 10^{-5}$	0	$2.433 \cdot 10^{-6}$	$2.433 \cdot 10^{-6}$	0
$b\bar{b} \rightarrow b\bar{b}$	-0.007076	-0.007076	0	$7.681 \cdot 10^{-5}$	$7.681 \cdot 10^{-5}$	0
$b\bar{b} \rightarrow d\bar{d}$	0.0004914	0.0004914	0	$1.61 \cdot 10^{-5}$	$1.61 \cdot 10^{-5}$	0
$b\bar{b} \rightarrow t\bar{t}$	-0.0006554	-0.0006554	0	$4.174 \cdot 10^{-6}$	$4.174 \cdot 10^{-6}$	0
$b\bar{b} \rightarrow u\bar{u}$	0.0008564	0.0008564	0	$2.429 \cdot 10^{-5}$	$2.429 \cdot 10^{-5}$	0
$t\bar{t} \rightarrow \nu_\mu\bar{\nu}_\mu$	$-1.76 \cdot 10^{-5}$	$-1.76 \cdot 10^{-5}$	0	$1.089 \cdot 10^{-6}$	$1.089 \cdot 10^{-6}$	0
$t\bar{t} \rightarrow \tau^+\tau^-$	$-1.063 \cdot 10^{-5}$	$-1.063 \cdot 10^{-5}$	0	$3.206 \cdot 10^{-6}$	$3.206 \cdot 10^{-6}$	0
$t\bar{t} \rightarrow c\bar{c}$	-0.0004869	-0.0004869	0	$1.436 \cdot 10^{-5}$	$1.436 \cdot 10^{-5}$	0
$t\bar{t} \rightarrow d\bar{d}$	-0.0009817	-0.0009817	0	$3.438 \cdot 10^{-5}$	$3.438 \cdot 10^{-5}$	0

$t\bar{t} \rightarrow s\bar{s}$	-0.0005677	-0.0005677	0	$2.031 \cdot 10^{-5}$	$2.031 \cdot 10^{-5}$	0
$t\bar{t} \rightarrow t\bar{t}$	0.1778	0.1778	0	0.009255	0.009255	0

## 2.41 cpW

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$HH \rightarrow Hzz$	$-2.613 \cdot 10^{-6}$	$-2.613 \cdot 10^{-6}$	0	$5.399 \cdot 10^{-6}$	$5.399 \cdot 10^{-6}$	0
$HH \rightarrow W^+W^-$	0.25	0.25	0	10.25	10.25	0
$HH \rightarrow W^+W^-\gamma$	$4.914 \cdot 10^{-7}$	$4.914 \cdot 10^{-7}$	0	$8.319 \cdot 10^{-5}$	$8.319 \cdot 10^{-5}$	0
$HH \rightarrow W^+\bar{t}b$	$-2.393 \cdot 10^{-6}$	$-2.393 \cdot 10^{-6}$	0	$7.204 \cdot 10^{-6}$	$7.204 \cdot 10^{-6}$	0
$HH \rightarrow W^+e^-\bar{\nu}_e$	$1.503 \cdot 10^{-6}$	$1.503 \cdot 10^{-6}$	0	$6.417 \cdot 10^{-6}$	$6.417 \cdot 10^{-6}$	0
$HH \rightarrow W^-u\bar{d}$	$1.989 \cdot 10^{-6}$	$1.989 \cdot 10^{-6}$	0	$4.78 \cdot 10^{-5}$	$4.78 \cdot 10^{-5}$	0
$HH \rightarrow z\bar{b}b$	$1.074 \cdot 10^{-5}$	$1.074 \cdot 10^{-5}$	0	0.0001964	0.0001964	0
$HH \rightarrow z\nu_e\bar{\nu}_e$	$-4.389 \cdot 10^{-7}$	$-4.389 \cdot 10^{-7}$	0	$1.23 \cdot 10^{-6}$	$1.23 \cdot 10^{-6}$	0
$HH \rightarrow z c\bar{c}$	$3.398 \cdot 10^{-7}$	$3.398 \cdot 10^{-7}$	0	$1.964 \cdot 10^{-6}$	$1.964 \cdot 10^{-6}$	0
$HH \rightarrow z d\bar{d}$	$7.15 \cdot 10^{-6}$	$7.15 \cdot 10^{-6}$	0	$4.683 \cdot 10^{-5}$	$4.683 \cdot 10^{-5}$	0
$HH \rightarrow ze^+e^-$	$2.432 \cdot 10^{-7}$	$2.432 \cdot 10^{-7}$	0	$6.137 \cdot 10^{-7}$	$6.137 \cdot 10^{-7}$	0
$HH \rightarrow zt\bar{t}$	$-3.789 \cdot 10^{-6}$	$-3.789 \cdot 10^{-6}$	0	$1.192 \cdot 10^{-5}$	$1.192 \cdot 10^{-5}$	0
$HH \rightarrow zz$	0.4646	0.4646	0	4.081	4.081	0
$HW^+ \rightarrow \gamma t\bar{b}$	$-2.077 \cdot 10^{-6}$	$-2.077 \cdot 10^{-6}$	0	$1.875 \cdot 10^{-6}$	$1.875 \cdot 10^{-6}$	0
$HW^+ \rightarrow \gamma u\bar{d}$	$1.275 \cdot 10^{-8}$	$1.275 \cdot 10^{-8}$	0	$6.655 \cdot 10^{-7}$	$6.655 \cdot 10^{-7}$	0
$HW^+ \rightarrow u\bar{d}$	0.01587	0.01587	0	0.0755	0.0755	0
$HW^- \rightarrow \bar{t}b$	-0.043	-0.043	0	0.05341	0.05341	0
$HW^- \rightarrow \gamma e^-\bar{\nu}_e$	$8.822 \cdot 10^{-10}$	$8.822 \cdot 10^{-10}$	0	$8.857 \cdot 10^{-9}$	$8.857 \cdot 10^{-9}$	0
$HW^- \rightarrow \mu^-\bar{\nu}_\mu$	0.003676	0.003676	0	0.01749	0.01749	0
$H\gamma \rightarrow b\bar{b}$	0	0	0	0.01081	0.01081	0
$H\gamma \rightarrow c\bar{c}$	0	0	0	0.01458	0.01458	0
$H\gamma \rightarrow d\bar{d}$	0	0	0	0.009652	0.009652	0

$H\gamma \rightarrow e^+e^-$	0	0	0	0.005006	0.005006	0
$H\gamma \rightarrow t\bar{t}$	-0.02537	-0.02537	0	0.01152	0.01152	0
$H z \rightarrow \mu^+\mu^-$	0.002501	0.002501	0	0.01302	0.01302	0
$H z \rightarrow \nu_\tau\bar{\nu}_\tau$	0.002634	0.002634	0	0.007357	0.007357	0
$H z \rightarrow b\bar{b}$	0.006546	0.006546	0	0.02163	0.02163	0
$H z \rightarrow s\bar{s}$	0.01153	0.01153	0	0.0381	0.0381	0
$H z \rightarrow t\bar{t}$	-0.04717	-0.04717	0	0.02654	0.02654	0
$H z \rightarrow u\bar{u}$	0.004964	0.004964	0	0.02007	0.02007	0
$W^+W^- \rightarrow Hb\bar{b}$	-0.0009772	-0.0009772	0	0.001507	0.001507	0
$W^+W^- \rightarrow Hc\bar{c}$	$-9.995 \cdot 10^{-8}$	$-9.995 \cdot 10^{-8}$	0	$4.376 \cdot 10^{-8}$	$4.376 \cdot 10^{-8}$	0
$W^+W^- \rightarrow Hdd\bar{d}$	$-1.127 \cdot 10^{-7}$	$-1.127 \cdot 10^{-7}$	0	$2.561 \cdot 10^{-8}$	$2.561 \cdot 10^{-8}$	0
$W^+W^- \rightarrow Ht\bar{t}$	$7.411 \cdot 10^{-6}$	$7.411 \cdot 10^{-6}$	0	$1.102 \cdot 10^{-5}$	$1.102 \cdot 10^{-5}$	0
$W^+W^- \rightarrow W^+W^-$	0.2058	0.2058	0	1.892	1.892	0
$W^+W^- \rightarrow \gamma\gamma$	-0.01432	-0.01432	0	0.02506	0.02506	0
$W^+W^- \rightarrow \gamma\gamma\gamma$	$1.775 \cdot 10^{-9}$	$1.775 \cdot 10^{-9}$	0	$6.876 \cdot 10^{-9}$	$6.876 \cdot 10^{-9}$	0
$\gamma W^+ \rightarrow zW^+$	0.0388	0.0388	0	0.04138	0.04138	0
$zz \rightarrow W^+W^-$	-0.3626	-0.3626	0	1.42	1.42	0
$zz \rightarrow zz$	0.005898	0.005898	0	0.9476	0.9476	0

## 2.42 cpWB

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$HH \rightarrow Hzz$	$-1.443 \cdot 10^{-6}$	$-1.443 \cdot 10^{-6}$	0	$1.646 \cdot 10^{-6}$	$1.646 \cdot 10^{-6}$	0
$HH \rightarrow W^+W^-\gamma$	$-1.126 \cdot 10^{-5}$	$-1.126 \cdot 10^{-5}$	0	$3.89 \cdot 10^{-5}$	$3.89 \cdot 10^{-5}$	0
$HH \rightarrow z\bar{b}b$	$5.671 \cdot 10^{-6}$	$5.671 \cdot 10^{-6}$	0	$4.25 \cdot 10^{-5}$	$4.25 \cdot 10^{-5}$	0
$HH \rightarrow z\nu_e\bar{\nu}_e$	$-2.424 \cdot 10^{-7}$	$-2.424 \cdot 10^{-7}$	0	$3.75 \cdot 10^{-7}$	$3.75 \cdot 10^{-7}$	0
$HH \rightarrow z c\bar{c}$	$1.283 \cdot 10^{-7}$	$1.283 \cdot 10^{-7}$	0	$3.291 \cdot 10^{-7}$	$3.291 \cdot 10^{-7}$	0
$HH \rightarrow z d\bar{d}$	$3.316 \cdot 10^{-6}$	$3.316 \cdot 10^{-6}$	0	$8.945 \cdot 10^{-6}$	$8.945 \cdot 10^{-6}$	0



$HH \rightarrow ze^+e^-$	$1.183 \cdot 10^{-7}$	$1.183 \cdot 10^{-7}$	0	$1.749 \cdot 10^{-7}$	$1.749 \cdot 10^{-7}$	0
$HH \rightarrow zt\bar{t}$	$-1.282 \cdot 10^{-6}$	$-1.282 \cdot 10^{-6}$	0	$1.945 \cdot 10^{-6}$	$1.945 \cdot 10^{-6}$	0
$HH \rightarrow zz$	0.2566	0.2566	0	1.245	1.245	0
$HW^+ \rightarrow \gamma t\bar{b}$	$1.922 \cdot 10^{-6}$	$1.922 \cdot 10^{-6}$	0	$7.106 \cdot 10^{-6}$	$7.106 \cdot 10^{-6}$	0
$HW^+ \rightarrow \gamma u\bar{d}$	$1.486 \cdot 10^{-8}$	$1.486 \cdot 10^{-8}$	0	$4.723 \cdot 10^{-7}$	$4.723 \cdot 10^{-7}$	0
$HW^- \rightarrow \gamma e^-\bar{\nu}_e$	$3.23 \cdot 10^{-9}$	$3.23 \cdot 10^{-9}$	0	$1.316 \cdot 10^{-8}$	$1.316 \cdot 10^{-8}$	0
$H\gamma \rightarrow b\bar{b}$	0	0	0	0.007485	0.007485	0
$H\gamma \rightarrow c\bar{c}$	0	0	0	0.01638	0.01638	0
$H\gamma \rightarrow d\bar{d}$	0	0	0	0.006685	0.006685	0
$H\gamma \rightarrow e^+e^-$	0	0	0	0.008459	0.008459	0
$H\gamma \rightarrow t\bar{t}$	-0.08969	-0.08969	0	0.01675	0.01675	0
$H z \rightarrow \mu^+\mu^-$	0.001217	0.001217	0	0.003838	0.003838	0
$H z \rightarrow \nu_\tau\bar{\nu}_\tau$	0.001454	0.001454	0	0.002244	0.002244	0
$H z \rightarrow b\bar{b}$	0.003061	0.003061	0	0.003715	0.003715	0
$H z \rightarrow s\bar{s}$	0.004713	0.004713	0	0.006528	0.006528	0
$H z \rightarrow t\bar{t}$	-0.01198	-0.01198	0	0.005402	0.005402	0
$H z \rightarrow u\bar{u}$	0.00225	0.00225	0	0.003406	0.003406	0
$W^+W^- \rightarrow Hb\bar{b}$	0.005018	0.005018	0	0.0002506	0.0002506	0
$W^+W^- \rightarrow Hc\bar{c}$	$5.002 \cdot 10^{-8}$	$5.002 \cdot 10^{-8}$	0	$1.365 \cdot 10^{-7}$	$1.365 \cdot 10^{-7}$	0
$W^+W^- \rightarrow Hd\bar{d}$	$-7.363 \cdot 10^{-8}$	$-7.363 \cdot 10^{-8}$	0	$1.873 \cdot 10^{-8}$	$1.873 \cdot 10^{-8}$	0
$W^+W^- \rightarrow Ht\bar{t}$	$1.078 \cdot 10^{-6}$	$1.078 \cdot 10^{-6}$	0	$1.463 \cdot 10^{-7}$	$1.463 \cdot 10^{-7}$	0
$W^+W^- \rightarrow W^+W^-$	0.2968	0.2968	0	0.03328	0.03328	0
$W^+W^- \rightarrow \gamma\gamma$	-0.04955	-0.04955	0	0.08299	0.08299	0
$W^+W^- \rightarrow \gamma\gamma\gamma$	$-2.405 \cdot 10^{-7}$	$-2.405 \cdot 10^{-7}$	0	$1.355 \cdot 10^{-7}$	$1.355 \cdot 10^{-7}$	0
$\gamma W^+ \rightarrow zW^+$	0.07006	0.07006	0	0.5501	0.5501	0
$\mu^+\mu^- \rightarrow \tau^+\tau^-$	-0.004803	-0.004803	0	0.0007914	0.0007914	0
$\nu_\tau\bar{\nu}_\tau \rightarrow \nu_\tau\bar{\nu}_\tau$	$-8.218 \cdot 10^{-22}$	0	1	$1.058 \cdot 10^{-37}$	0	1
$\nu_e\bar{\nu}_e \rightarrow \nu_\mu\bar{\nu}_\mu$	$4.29 \cdot 10^{-20}$	0	1	$1.91 \cdot 10^{-37}$	0	1
$b\bar{b} \rightarrow \gamma\gamma$	-0.0001254	-0.0001254	0	$1.377 \cdot 10^{-5}$	$1.377 \cdot 10^{-5}$	0

$b\bar{b} \rightarrow \mu^+\mu^-$	$-5.345 \cdot 10^{-5}$	$-5.345 \cdot 10^{-5}$	0	$1.359 \cdot 10^{-5}$	$1.359 \cdot 10^{-5}$	0
$b\bar{b} \rightarrow \nu_e\bar{\nu}_e$	$3.501 \cdot 10^{-6}$	$3.501 \cdot 10^{-6}$	0	$1.051 \cdot 10^{-6}$	$1.051 \cdot 10^{-6}$	0
$b\bar{b} \rightarrow b\bar{b}$	0.001071	0.001071	0	$7.941 \cdot 10^{-6}$	$7.941 \cdot 10^{-6}$	0
$b\bar{b} \rightarrow d\bar{d}$	$8.62 \cdot 10^{-5}$	$8.62 \cdot 10^{-5}$	0	$4.121 \cdot 10^{-6}$	$4.121 \cdot 10^{-6}$	0
$b\bar{b} \rightarrow t\bar{t}$	-0.0003669	-0.0003669	0	$1.363 \cdot 10^{-5}$	$1.363 \cdot 10^{-5}$	0
$b\bar{b} \rightarrow u\bar{u}$	-0.0001367	-0.0001367	0	$2.935 \cdot 10^{-5}$	$2.935 \cdot 10^{-5}$	0
$c\bar{c} \rightarrow \mu^+\mu^-$	-0.0008297	-0.0008297	0	$7.501 \cdot 10^{-5}$	$7.501 \cdot 10^{-5}$	0
$d\bar{d} \rightarrow c\bar{c}$	$-2.947 \cdot 10^{-5}$	$-2.947 \cdot 10^{-5}$	0	$1.244 \cdot 10^{-5}$	$1.244 \cdot 10^{-5}$	0
$d\bar{d} \rightarrow e^+e^-$	$-5.309 \cdot 10^{-5}$	$-5.309 \cdot 10^{-5}$	0	$1.319 \cdot 10^{-5}$	$1.319 \cdot 10^{-5}$	0
$e^+\nu_\mu \rightarrow e^+\nu_\mu$	-0.002723	-0.002723	0	0.0002863	0.0002863	0
$e^+\nu_e \rightarrow e^+\nu_e$	0.0007988	0.0007988	0	0.0008655	0.0008655	0
$e^+\tau^- \rightarrow e^+\tau^-$	-0.1261	-0.1261	0	0.0159	0.0159	0
$e^+e^- \rightarrow \mu^+\mu^-$	-0.006653	-0.006653	0	0.0006191	0.0006191	0
$e^+e^- \rightarrow e^+e^-$	-0.6103	-0.6103	0	0.07542	0.07542	0
$s\bar{s} \rightarrow \nu_\tau\bar{\nu}_\tau$	$-1.791 \cdot 10^{-5}$	$-1.791 \cdot 10^{-5}$	0	$1.335 \cdot 10^{-6}$	$1.335 \cdot 10^{-6}$	0
$s\bar{s} \rightarrow s\bar{s}$	0.0001186	0.0001186	0	$2.823 \cdot 10^{-6}$	$2.823 \cdot 10^{-6}$	0
$t\bar{t} \rightarrow \nu_\mu\bar{\nu}_\mu$	$-7.125 \cdot 10^{-5}$	$-7.125 \cdot 10^{-5}$	0	$5.732 \cdot 10^{-6}$	$5.732 \cdot 10^{-6}$	0
$t\bar{t} \rightarrow \tau^+\tau^-$	-0.0005196	-0.0005196	0	$7.498 \cdot 10^{-5}$	$7.498 \cdot 10^{-5}$	0
$t\bar{t} \rightarrow c\bar{c}$	-0.0009972	-0.0009972	0	$9.293 \cdot 10^{-5}$	$9.293 \cdot 10^{-5}$	0
$t\bar{t} \rightarrow d\bar{d}$	-0.0001486	-0.0001486	0	$2.946 \cdot 10^{-5}$	$2.946 \cdot 10^{-5}$	0
$t\bar{t} \rightarrow s\bar{s}$	$-9.615 \cdot 10^{-5}$	$-9.615 \cdot 10^{-5}$	0	$2.014 \cdot 10^{-5}$	$2.014 \cdot 10^{-5}$	0
$t\bar{t} \rightarrow t\bar{t}$	0.06017	0.06017	0	0.001771	0.001771	0
$u\bar{d} \rightarrow u\bar{d}$	$-1.318 \cdot 10^{-5}$	$-1.318 \cdot 10^{-5}$	0	$1.889 \cdot 10^{-5}$	$1.889 \cdot 10^{-5}$	0
$u\bar{u} \rightarrow \nu_e\bar{\nu}_e$	$-6.401 \cdot 10^{-5}$	$-6.401 \cdot 10^{-5}$	0	$4.802 \cdot 10^{-6}$	$4.802 \cdot 10^{-6}$	0
$u\bar{u} \rightarrow u\bar{u}$	-0.0002704	-0.0002704	0	0.0002572	0.0002572	0
$zz \rightarrow W^+W^-$	0.2223	0.2223	0	0.1821	0.1821	0
$zz \rightarrow zz$	0.003257	0.003257	0	0.289	0.289	0

## 2.43 cpd

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$HH \rightarrow z\bar{b}b$	$-9.328 \cdot 10^{-7}$	$-9.328 \cdot 10^{-7}$	0	$4.48 \cdot 10^{-7}$	$4.48 \cdot 10^{-7}$	0
$HH \rightarrow z\bar{d}d$	$-1.262 \cdot 10^{-6}$	$-1.262 \cdot 10^{-6}$	0	$1.382 \cdot 10^{-6}$	$1.382 \cdot 10^{-6}$	0
$H\bar{z} \rightarrow b\bar{b}$	-0.04086	-0.04086	0	0.9603	0.9603	0
$H\bar{z} \rightarrow s\bar{s}$	-0.00611	-0.00611	0	0.143	0.143	0
$W^+W^- \rightarrow Hb\bar{b}$	-0.001692	-0.001692	0	0.0003524	0.0003524	0
$W^+W^- \rightarrow Hd\bar{d}$	$-2.432 \cdot 10^{-8}$	$-2.432 \cdot 10^{-8}$	0	$1.976 \cdot 10^{-7}$	$1.976 \cdot 10^{-7}$	0
$b\bar{b} \rightarrow \mu^+\mu^-$	$4.142 \cdot 10^{-5}$	$4.142 \cdot 10^{-5}$	0	$4.795 \cdot 10^{-6}$	$4.795 \cdot 10^{-6}$	0
$b\bar{b} \rightarrow \nu_e\bar{\nu}_e$	$-5.534 \cdot 10^{-5}$	$-5.534 \cdot 10^{-5}$	0	$1.077 \cdot 10^{-5}$	$1.077 \cdot 10^{-5}$	0
$b\bar{b} \rightarrow b\bar{b}$	0.0009247	0.0009247	0	0.0002862	0.0002862	0
$b\bar{b} \rightarrow d\bar{d}$	$-6.317 \cdot 10^{-5}$	$-6.317 \cdot 10^{-5}$	0	$2.147 \cdot 10^{-5}$	$2.147 \cdot 10^{-5}$	0
$b\bar{b} \rightarrow t\bar{t}$	$2.784 \cdot 10^{-5}$	$2.784 \cdot 10^{-5}$	0	$1.463 \cdot 10^{-5}$	$1.463 \cdot 10^{-5}$	0
$b\bar{b} \rightarrow u\bar{u}$	-0.0001063	-0.0001063	0	$5.683 \cdot 10^{-6}$	$5.683 \cdot 10^{-6}$	0
$d\bar{d} \rightarrow c\bar{c}$	$1.209 \cdot 10^{-5}$	$1.209 \cdot 10^{-5}$	0	$1.424 \cdot 10^{-5}$	$1.424 \cdot 10^{-5}$	0
$d\bar{d} \rightarrow e^+e^-$	$3.857 \cdot 10^{-5}$	$3.857 \cdot 10^{-5}$	0	$4.612 \cdot 10^{-6}$	$4.612 \cdot 10^{-6}$	0
$s\bar{s} \rightarrow \nu_\tau\bar{\nu}_\tau$	$-8.268 \cdot 10^{-5}$	$-8.268 \cdot 10^{-5}$	0	$1.609 \cdot 10^{-5}$	$1.609 \cdot 10^{-5}$	0
$s\bar{s} \rightarrow s\bar{s}$	-0.0002997	-0.0002997	0	0.0002026	0.0002026	0
$t\bar{t} \rightarrow d\bar{d}$	$-9.017 \cdot 10^{-5}$	$-9.017 \cdot 10^{-5}$	0	$5.143 \cdot 10^{-6}$	$5.143 \cdot 10^{-6}$	0
$t\bar{t} \rightarrow s\bar{s}$	$-3.826 \cdot 10^{-5}$	$-3.826 \cdot 10^{-5}$	0	$7.093 \cdot 10^{-6}$	$7.093 \cdot 10^{-6}$	0
$u\bar{d} \rightarrow u\bar{d}$	$8.67 \cdot 10^{-5}$	$8.67 \cdot 10^{-5}$	0	$3.4 \cdot 10^{-5}$	$3.4 \cdot 10^{-5}$	0

## 2.44 cpe

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$HH \rightarrow ze^+e^-$	$-2.775 \cdot 10^{-7}$	$-2.775 \cdot 10^{-7}$	0	$6.81 \cdot 10^{-7}$	$6.81 \cdot 10^{-7}$	0
$d\bar{d} \rightarrow e^+e^-$	$-7.004 \cdot 10^{-5}$	$-7.004 \cdot 10^{-5}$	0	$1.118 \cdot 10^{-5}$	$1.118 \cdot 10^{-5}$	0
$e^+\nu_\mu \rightarrow e^+\nu_\mu$	-0.004786	-0.004786	0	0.0003104	0.0003104	0

$e^+\nu_e \rightarrow e^+\nu_e$	-0.01234	-0.01234	0	0.0008001	0.0008001	0
$e^+\tau^- \rightarrow e^+\tau^-$	0.0009377	0.0009377	0	0.0002949	0.0002949	0
$e^+e^- \rightarrow \mu^+\mu^-$	-0.00054	-0.00054	0	$9.954 \cdot 10^{-6}$	$9.954 \cdot 10^{-6}$	0
$e^+e^- \rightarrow e^+e^-$	0.004909	0.004909	0	0.003359	0.003359	0

## 2.45 cpl1

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$HH \rightarrow z\nu_e\bar{\nu}_e$	$-1.588 \cdot 10^{-7}$	$-1.588 \cdot 10^{-7}$	0	$1.198 \cdot 10^{-7}$	$1.198 \cdot 10^{-7}$	0
$HH \rightarrow ze^+e^-$	$3.162 \cdot 10^{-7}$	$3.162 \cdot 10^{-7}$	0	$6.809 \cdot 10^{-7}$	$6.809 \cdot 10^{-7}$	0
$\nu_e\bar{\nu}_e \rightarrow \nu_\mu\bar{\nu}_\mu$	-0.0002921	-0.0002921	0	$8.853 \cdot 10^{-6}$	$8.853 \cdot 10^{-6}$	0
$b\bar{b} \rightarrow \nu_e\bar{\nu}_e$	$-6.582 \cdot 10^{-5}$	$-6.582 \cdot 10^{-5}$	0	$1.995 \cdot 10^{-6}$	$1.995 \cdot 10^{-6}$	0
$d\bar{d} \rightarrow e^+e^-$	$2.579 \cdot 10^{-6}$	$2.579 \cdot 10^{-6}$	0	$9.375 \cdot 10^{-7}$	$9.375 \cdot 10^{-7}$	0
$e^+\nu_\mu \rightarrow e^+\nu_\mu$	0.001569	0.001569	0	$8.93 \cdot 10^{-5}$	$8.93 \cdot 10^{-5}$	0
$e^+\nu_e \rightarrow e^+\nu_e$	0.0004412	0.0004412	0	0.000264	0.000264	0
$e^+\tau^- \rightarrow e^+\tau^-$	0.001047	0.001047	0	0.0002703	0.0002703	0
$e^+e^- \rightarrow \mu^+\mu^-$	0.0006703	0.0006703	0	$1.229 \cdot 10^{-5}$	$1.229 \cdot 10^{-5}$	0
$e^+e^- \rightarrow e^+e^-$	0.0136	0.0136	0	0.003393	0.003393	0
$u\bar{u} \rightarrow \nu_e\bar{\nu}_e$	$-6.4 \cdot 10^{-5}$	$-6.4 \cdot 10^{-5}$	0	$1.94 \cdot 10^{-6}$	$1.94 \cdot 10^{-6}$	0

## 2.46 cpl2

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$H z \rightarrow \mu^+\mu^-$	0.004127	0.004127	0	0.02825	0.02825	0
$\mu^+\mu^- \rightarrow \tau^+\tau^-$	-0.0004378	-0.0004378	0	$1.365 \cdot 10^{-5}$	$1.365 \cdot 10^{-5}$	0
$\nu_e\bar{\nu}_e \rightarrow \nu_\mu\bar{\nu}_\mu$	-0.0002921	-0.0002921	0	$8.853 \cdot 10^{-6}$	$8.853 \cdot 10^{-6}$	0
$b\bar{b} \rightarrow \mu^+\mu^-$	$-1.105 \cdot 10^{-6}$	$-1.105 \cdot 10^{-6}$	0	$8.415 \cdot 10^{-7}$	$8.415 \cdot 10^{-7}$	0

$c\bar{c} \rightarrow \mu^+\mu^-$	0.0002083	0.0002083	0	$5.559 \cdot 10^{-6}$	$5.559 \cdot 10^{-6}$	0
$e^+\nu_\mu \rightarrow e^+\nu_\mu$	-0.003073	-0.003073	0	$9.314 \cdot 10^{-5}$	$9.314 \cdot 10^{-5}$	0
$e^+e^- \rightarrow \mu^+\mu^-$	0.0006703	0.0006703	0	$1.229 \cdot 10^{-5}$	$1.229 \cdot 10^{-5}$	0
$t\bar{t} \rightarrow \nu_\mu\bar{\nu}_\mu$	$-5.695 \cdot 10^{-5}$	$-5.695 \cdot 10^{-5}$	0	$1.726 \cdot 10^{-6}$	$1.726 \cdot 10^{-6}$	0

## 2.47 cpl3

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$H z \rightarrow \nu_\tau\bar{\nu}_\tau$	-0.08606	-0.08606	0	0.3137	0.3137	0
$\mu^+\mu^- \rightarrow \tau^+\tau^-$	-0.0004378	-0.0004378	0	$1.365 \cdot 10^{-5}$	$1.365 \cdot 10^{-5}$	0
$\nu_\tau\bar{\nu}_\tau \rightarrow \nu_\tau\bar{\nu}_\tau$	$-6.443 \cdot 10^{-7}$	$-6.443 \cdot 10^{-7}$	0	$3.906 \cdot 10^{-8}$	$3.906 \cdot 10^{-8}$	0
$e^+\tau^- \rightarrow e^+\tau^-$	0.001047	0.001047	0	0.0002703	0.0002703	0
$s\bar{s} \rightarrow \nu_\tau\bar{\nu}_\tau$	$-2.909 \cdot 10^{-5}$	$-2.909 \cdot 10^{-5}$	0	$8.818 \cdot 10^{-7}$	$8.818 \cdot 10^{-7}$	0
$t\bar{t} \rightarrow \tau^+\tau^-$	$1.478 \cdot 10^{-5}$	$1.478 \cdot 10^{-5}$	0	$2.063 \cdot 10^{-6}$	$2.063 \cdot 10^{-6}$	0

## 2.48 cpmu

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$H z \rightarrow \mu^+\mu^-$	-0.003622	-0.003622	0	0.02825	0.02825	0
$\mu^+\mu^- \rightarrow \tau^+\tau^-$	0.0005003	0.0005003	0	$1.769 \cdot 10^{-5}$	$1.769 \cdot 10^{-5}$	0
$b\bar{b} \rightarrow \mu^+\mu^-$	$-7.316 \cdot 10^{-5}$	$-7.316 \cdot 10^{-5}$	0	$1.172 \cdot 10^{-5}$	$1.172 \cdot 10^{-5}$	0
$c\bar{c} \rightarrow \mu^+\mu^-$	$-6.422 \cdot 10^{-5}$	$-6.422 \cdot 10^{-5}$	0	$2.137 \cdot 10^{-6}$	$2.137 \cdot 10^{-6}$	0
$e^+e^- \rightarrow \mu^+\mu^-$	-0.00054	-0.00054	0	$9.954 \cdot 10^{-6}$	$9.954 \cdot 10^{-6}$	0

## 2.49 cpqi

interference square

	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$HH \rightarrow z c \bar{c}$	$-1.507 \cdot 10^{-6}$	$-1.507 \cdot 10^{-6}$	0	$3.087 \cdot 10^{-6}$	$3.087 \cdot 10^{-6}$	0
$HH \rightarrow z d \bar{d}$	$6.795 \cdot 10^{-6}$	$6.795 \cdot 10^{-6}$	0	$1.373 \cdot 10^{-6}$	$1.373 \cdot 10^{-6}$	0
$H z \rightarrow s \bar{s}$	0.03311	0.03311	0	0.143	0.143	0
$H z \rightarrow u \bar{u}$	-0.1955	-0.1955	0	1.035	1.035	0
$W^+ W^- \rightarrow H c \bar{c}$	$1.656 \cdot 10^{-8}$	$1.656 \cdot 10^{-8}$	0	$5.055 \cdot 10^{-8}$	$5.055 \cdot 10^{-8}$	0
$W^+ W^- \rightarrow H d \bar{d}$	$2.173 \cdot 10^{-7}$	$2.173 \cdot 10^{-7}$	0	$1.977 \cdot 10^{-7}$	$1.977 \cdot 10^{-7}$	0
$b \bar{b} \rightarrow d \bar{d}$	0.0004914	0.0004914	0	$1.61 \cdot 10^{-5}$	$1.61 \cdot 10^{-5}$	0
$b \bar{b} \rightarrow u \bar{u}$	-0.001048	-0.001048	0	$3.633 \cdot 10^{-5}$	$3.633 \cdot 10^{-5}$	0
$c \bar{c} \rightarrow \mu^+ \mu^-$	-0.0001614	-0.0001614	0	$3.68 \cdot 10^{-6}$	$3.68 \cdot 10^{-6}$	0
$d \bar{d} \rightarrow c \bar{c}$	$1.532 \cdot 10^{-6}$	$1.532 \cdot 10^{-6}$	0	$3.64 \cdot 10^{-6}$	$3.64 \cdot 10^{-6}$	0
$d \bar{d} \rightarrow e^+ e^-$	$4.752 \cdot 10^{-5}$	$4.752 \cdot 10^{-5}$	0	$3.642 \cdot 10^{-6}$	$3.642 \cdot 10^{-6}$	0
$s \bar{s} \rightarrow \nu_\tau \bar{\nu}_\tau$	$1.92 \cdot 10^{-5}$	$1.92 \cdot 10^{-5}$	0	$6.894 \cdot 10^{-7}$	$6.894 \cdot 10^{-7}$	0
$s \bar{s} \rightarrow s \bar{s}$	-0.0004599	-0.0004599	0	$1.121 \cdot 10^{-5}$	$1.121 \cdot 10^{-5}$	0
$t \bar{t} \rightarrow c \bar{c}$	-0.0004788	-0.0004788	0	$1.347 \cdot 10^{-5}$	$1.347 \cdot 10^{-5}$	0
$t \bar{t} \rightarrow d \bar{d}$	0.0007903	0.0007903	0	$2.22 \cdot 10^{-5}$	$2.22 \cdot 10^{-5}$	0
$t \bar{t} \rightarrow s \bar{s}$	0.0004632	0.0004632	0	$1.351 \cdot 10^{-5}$	$1.351 \cdot 10^{-5}$	0
$u \bar{d} \rightarrow u \bar{d}$	$9.491 \cdot 10^{-5}$	$9.491 \cdot 10^{-5}$	0	$8.707 \cdot 10^{-6}$	$8.707 \cdot 10^{-6}$	0
$u \bar{u} \rightarrow \nu_e \bar{\nu}_e$	$-2.864 \cdot 10^{-5}$	$-2.864 \cdot 10^{-5}$	0	$1.261 \cdot 10^{-6}$	$1.261 \cdot 10^{-6}$	0
$u \bar{u} \rightarrow u \bar{u}$	0.0007655	0.0007655	0	$3.065 \cdot 10^{-5}$	$3.065 \cdot 10^{-5}$	0

## 2.50 cpt

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$HH \rightarrow z t \bar{t}$	$-1.325 \cdot 10^{-6}$	$-1.325 \cdot 10^{-6}$	0	$5.633 \cdot 10^{-6}$	$5.633 \cdot 10^{-6}$	0
$H z \rightarrow t \bar{t}$	-2.211	-2.211	0	1.388	1.388	0
$W^+ W^- \rightarrow H t \bar{t}$	$-1.337 \cdot 10^{-6}$	$-1.337 \cdot 10^{-6}$	0	$7.736 \cdot 10^{-7}$	$7.736 \cdot 10^{-7}$	0
$b \bar{b} \rightarrow t \bar{t}$	-0.001578	-0.001578	0	$2.24 \cdot 10^{-5}$	$2.24 \cdot 10^{-5}$	0

$t\bar{t} \rightarrow \nu_\mu \bar{\nu}_\mu$	0.0001439	0.0001439	0	$1.553 \cdot 10^{-5}$	$1.553 \cdot 10^{-5}$	0
$t\bar{t} \rightarrow \tau^+ \tau^-$	$-4.341 \cdot 10^{-5}$	$-4.341 \cdot 10^{-5}$	0	$3.76 \cdot 10^{-6}$	$3.76 \cdot 10^{-6}$	0
$t\bar{t} \rightarrow c\bar{c}$	$5.815 \cdot 10^{-5}$	$5.815 \cdot 10^{-5}$	0	$8.005 \cdot 10^{-6}$	$8.005 \cdot 10^{-6}$	0
$t\bar{t} \rightarrow d\bar{d}$	$1.722 \cdot 10^{-5}$	$1.722 \cdot 10^{-5}$	0	$3.215 \cdot 10^{-6}$	$3.215 \cdot 10^{-6}$	0
$t\bar{t} \rightarrow s\bar{s}$	$2.005 \cdot 10^{-5}$	$2.005 \cdot 10^{-5}$	0	$8.584 \cdot 10^{-6}$	$8.584 \cdot 10^{-6}$	0
$t\bar{t} \rightarrow t\bar{t}$	-0.158	-0.158	0	0.009744	0.009744	0

## 2.51 cpta

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$\mu^+ \mu^- \rightarrow \tau^+ \tau^-$	0.0005003	0.0005003	0	$1.769 \cdot 10^{-5}$	$1.769 \cdot 10^{-5}$	0
$e^+ \tau^- \rightarrow e^+ \tau^-$	0.0009377	0.0009377	0	0.0002949	0.0002949	0
$t\bar{t} \rightarrow \tau^+ \tau^-$	$3.013 \cdot 10^{-5}$	$3.013 \cdot 10^{-5}$	0	$5.265 \cdot 10^{-6}$	$5.265 \cdot 10^{-6}$	0

## 2.52 cpu

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$HH \rightarrow z c \bar{c}$	$6.82 \cdot 10^{-7}$	$6.82 \cdot 10^{-7}$	0	$3.087 \cdot 10^{-6}$	$3.087 \cdot 10^{-6}$	0
$H z \rightarrow u \bar{u}$	0.08849	0.08849	0	1.035	1.035	0
$W^+ W^- \rightarrow H c \bar{c}$	$2.593 \cdot 10^{-8}$	$2.593 \cdot 10^{-8}$	0	$5.059 \cdot 10^{-8}$	$5.059 \cdot 10^{-8}$	0
$b \bar{b} \rightarrow u \bar{u}$	$5.86 \cdot 10^{-5}$	$5.86 \cdot 10^{-5}$	0	$2.347 \cdot 10^{-6}$	$2.347 \cdot 10^{-6}$	0
$c \bar{c} \rightarrow \mu^+ \mu^-$	$9.582 \cdot 10^{-5}$	$9.582 \cdot 10^{-5}$	0	$3.088 \cdot 10^{-6}$	$3.088 \cdot 10^{-6}$	0
$d \bar{d} \rightarrow c \bar{c}$	$9.239 \cdot 10^{-5}$	$9.239 \cdot 10^{-5}$	0	$2.025 \cdot 10^{-5}$	$2.025 \cdot 10^{-5}$	0
$t\bar{t} \rightarrow c \bar{c}$	$7.595 \cdot 10^{-5}$	$7.595 \cdot 10^{-5}$	0	$7.113 \cdot 10^{-6}$	$7.113 \cdot 10^{-6}$	0
$u \bar{d} \rightarrow u \bar{d}$	0.0002048	0.0002048	0	$5.112 \cdot 10^{-5}$	$5.112 \cdot 10^{-5}$	0
$u \bar{u} \rightarrow \nu_e \bar{\nu}_e$	0.0001421	0.0001421	0	$1.382 \cdot 10^{-5}$	$1.382 \cdot 10^{-5}$	0
$u \bar{u} \rightarrow u \bar{u}$	-0.0008969	-0.0008969	0	0.0001355	0.0001355	0

## 2.53 ctB

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$HH \rightarrow zt\bar{t}$	$-3.232 \cdot 10^{-7}$	$-3.232 \cdot 10^{-7}$	0	$8.138 \cdot 10^{-6}$	$8.138 \cdot 10^{-6}$	0
$HW^+ \rightarrow \gamma t\bar{b}$	$1.821 \cdot 10^{-6}$	$1.821 \cdot 10^{-6}$	0	$8.147 \cdot 10^{-6}$	$8.147 \cdot 10^{-6}$	0
$H\gamma \rightarrow t\bar{t}$	-0.3547	-0.3547	0	2.12	2.12	0
$HZ \rightarrow t\bar{t}$	0.02008	0.02008	0	0.8373	0.8373	0
$W^+W^- \rightarrow Ht\bar{t}$	$1.763 \cdot 10^{-7}$	$1.763 \cdot 10^{-7}$	0	$2.317 \cdot 10^{-8}$	$2.317 \cdot 10^{-8}$	0
$b\bar{b} \rightarrow t\bar{t}$	-0.002951	-0.002951	0	0.001101	0.001101	0
$t\bar{t} \rightarrow \nu_\mu \bar{\nu}_\mu$	0.0002099	0.0002099	0	0.0005403	0.0005403	0
$t\bar{t} \rightarrow \tau^+ \tau^-$	0.002225	0.002225	0	0.003419	0.003419	0
$t\bar{t} \rightarrow c\bar{c}$	0.003432	0.003432	0	0.004133	0.004133	0
$t\bar{t} \rightarrow d\bar{d}$	-0.0004746	-0.0004746	0	0.0008599	0.0008599	0
$t\bar{t} \rightarrow s\bar{s}$	-0.0002626	-0.0002626	0	0.001227	0.001227	0
$t\bar{t} \rightarrow t\bar{t}$	-0.327	-0.327	0	0.155	0.155	0

## 2.54 ctG

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$b\bar{b} \rightarrow t\bar{t}$	0.1364	0.1364	$2.933 \cdot 10^{-7}$	0.0596	0.0596	$5.033 \cdot 10^{-7}$
$gg \rightarrow t\bar{t}$	0.3067	0.3067	$2.609 \cdot 10^{-7}$	0.1467	0.1467	$4.771 \cdot 10^{-7}$
$t\bar{t} \rightarrow c\bar{c}$	0.2406	0.2406	$2.493 \cdot 10^{-7}$	0.06648	0.06648	$5.114 \cdot 10^{-7}$
$t\bar{t} \rightarrow d\bar{d}$	0.2406	0.2406	$2.493 \cdot 10^{-7}$	0.04657	0.04657	$4.939 \cdot 10^{-7}$
$t\bar{t} \rightarrow s\bar{s}$	0.2406	0.2406	$2.493 \cdot 10^{-7}$	0.06642	0.06642	$4.969 \cdot 10^{-7}$
$t\bar{t} \rightarrow t\bar{t}$	0.3665	0.3665	$2.455 \cdot 10^{-7}$	1.721	1.721	$5.229 \cdot 10^{-7}$



## 2.55 ctW

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$HH \rightarrow W^+ \bar{t}b$	$5.282 \cdot 10^{-6}$	$5.282 \cdot 10^{-6}$	0	$1.646 \cdot 10^{-5}$	$1.646 \cdot 10^{-5}$	0
$HH \rightarrow z t \bar{t}$	$5.852 \cdot 10^{-7}$	$5.852 \cdot 10^{-7}$	0	$2.669 \cdot 10^{-5}$	$2.669 \cdot 10^{-5}$	0
$HW^+ \rightarrow \gamma t \bar{b}$	$3.016 \cdot 10^{-6}$	$3.016 \cdot 10^{-6}$	0	$1.967 \cdot 10^{-6}$	$1.967 \cdot 10^{-6}$	0
$HW^- \rightarrow \bar{t}b$	-0.2339	-0.2339	0	2.053	2.053	0
$H\gamma \rightarrow t \bar{t}$	-0.1959	-0.1959	0	0.6465	0.6465	0
$H z \rightarrow t \bar{t}$	-0.03636	-0.03636	0	2.746	2.746	0
$W^+ W^- \rightarrow H b \bar{b}$	-0.0002082	-0.0002082	0	$9.959 \cdot 10^{-6}$	$9.959 \cdot 10^{-6}$	0
$W^+ W^- \rightarrow H t \bar{t}$	$-8.791 \cdot 10^{-6}$	$-8.791 \cdot 10^{-6}$	0	$4.369 \cdot 10^{-5}$	$4.369 \cdot 10^{-5}$	0
$\bar{b}t \rightarrow \bar{d}u$	0.01159	0.01159	0	0.01157	0.01157	0
$b\bar{b} \rightarrow t \bar{t}$	0.02292	0.02292	0	0.0416	0.0416	0
$b\bar{t} \rightarrow e^- \bar{\nu}_e$	0.004011	0.004011	0	0.00368	0.00368	0
$t \bar{t} \rightarrow \nu_\mu \bar{\nu}_\mu$	-0.00038	-0.00038	0	0.001771	0.001771	0
$t \bar{t} \rightarrow \tau^+ \tau^-$	0.001784	0.001784	0	0.002259	0.002259	0
$t \bar{t} \rightarrow c \bar{c}$	0.005813	0.005813	0	0.007245	0.007245	0
$t \bar{t} \rightarrow d \bar{d}$	0.006383	0.006383	0	0.005088	0.005088	0
$t \bar{t} \rightarrow s \bar{s}$	0.004602	0.004602	0	0.007257	0.007257	0
$t \bar{t} \rightarrow t \bar{t}$	-0.3664	-0.3664	0	0.2586	0.2586	0

## 2.56 ctd1

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$b\bar{b} \rightarrow t \bar{t}$	-0.006784	-0.006784	0	0.1116	0.1116	0
$t \bar{t} \rightarrow d \bar{d}$	-0.03951	-0.03951	0	0.6847	0.6847	0
$t \bar{t} \rightarrow s \bar{s}$	-0.02325	-0.02325	0	0.4	0.4	0

## 2.57 ctd8

	interference			square		
	mod1	mod2	1 − mod2/mod1	mod1	mod2	1 − mod2/mod1
$b\bar{b} \rightarrow t\bar{t}$	0.09295	0.09295	0	0.02479	0.02479	0
$t\bar{t} \rightarrow d\bar{d}$	0.4703	0.4703	0	0.1522	0.1522	0
$t\bar{t} \rightarrow s\bar{s}$	0.2829	0.2829	0	0.08889	0.08889	0

## 2.58 ctl2

	interference			square		
	mod1	mod2	1 − mod2/mod1	mod1	mod2	1 − mod2/mod1
$t\bar{t} \rightarrow \nu_\mu \bar{\nu}_\mu$	−0.01716	−0.01716	0	0.2209	0.2209	0

## 2.59 ctl3

	interference			square		
	mod1	mod2	1 − mod2/mod1	mod1	mod2	1 − mod2/mod1
$t\bar{t} \rightarrow \tau^+ \tau^-$	−0.01583	−0.01583	0	0.1591	0.1591	0

## 2.60 ctp

	interference			square		
	mod1	mod2	1 − mod2/mod1	mod1	mod2	1 − mod2/mod1
$HH \rightarrow Ht\bar{t}$	$-1.254 \cdot 10^{-5}$	$-1.254 \cdot 10^{-5}$	0	$1.185 \cdot 10^{-5}$	$1.185 \cdot 10^{-5}$	0
$HH \rightarrow W^+ t\bar{b}$	$2.342 \cdot 10^{-6}$	$2.342 \cdot 10^{-6}$	0	$1.051 \cdot 10^{-6}$	$1.051 \cdot 10^{-6}$	0
$HH \rightarrow zt\bar{t}$	$2.844 \cdot 10^{-7}$	$2.844 \cdot 10^{-7}$	0	$6.326 \cdot 10^{-7}$	$6.326 \cdot 10^{-7}$	0
$HW^+ \rightarrow \gamma t\bar{b}$	$-5.028 \cdot 10^{-8}$	$-5.028 \cdot 10^{-8}$	0	$8.963 \cdot 10^{-9}$	$8.963 \cdot 10^{-9}$	0

$HW^- \rightarrow \bar{t}b$	0.07617	0.07617	0	0.05118	0.05118	0
$H\gamma \rightarrow t\bar{t}$	-0.06947	-0.06947	0	0.002132	0.002132	0
$HZ \rightarrow t\bar{t}$	0.002696	0.002696	0	0.06893	0.06893	0
$W^+W^- \rightarrow Hb\bar{b}$	$-1.792 \cdot 10^{-5}$	$-1.792 \cdot 10^{-5}$	0	$1.133 \cdot 10^{-8}$	$1.133 \cdot 10^{-8}$	0
$W^+W^- \rightarrow Ht\bar{t}$	$6.951 \cdot 10^{-7}$	$6.951 \cdot 10^{-7}$	0	$4.454 \cdot 10^{-7}$	$4.454 \cdot 10^{-7}$	0
$t\bar{t} \rightarrow t\bar{t}$	0.1423	0.1423	0	0.009064	0.009064	0

## 2.61 ctq1

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$t\bar{t} \rightarrow c\bar{c}$	0.0109	0.0109	0	0.1586	0.1586	0
$t\bar{t} \rightarrow d\bar{d}$	-0.004859	-0.004859	0	0.04085	0.04085	0
$t\bar{t} \rightarrow s\bar{s}$	-0.001459	-0.001459	0	0.1577	0.1577	0

## 2.62 ctq8

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$t\bar{t} \rightarrow c\bar{c}$	0.1239	0.1239	0	0.03524	0.03524	0
$t\bar{t} \rightarrow d\bar{d}$	0.04638	0.04638	0	0.009078	0.009078	0
$t\bar{t} \rightarrow s\bar{s}$	0.1233	0.1233	0	0.03504	0.03504	0

## 2.63 ctt1

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$t\bar{t} \rightarrow t\bar{t}$	-5.407	-5.407	0	17.19	17.19	0

## 2.64 cttt

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$t\bar{t} \rightarrow \tau^+\tau^-$	-0.006964	-0.006964	0	0.03824	0.03824	0

## 2.65 ctu1

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$t\bar{t} \rightarrow c\bar{c}$	0.09269	0.09269	0	1.594	1.594	0

## 2.66 ctu8

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$t\bar{t} \rightarrow c\bar{c}$	0.5639	0.5639	0	0.3543	0.3543	0

## 2.67 sm

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$HH \rightarrow HH$	0	0	0	0.211	0.211	0
$HH \rightarrow HHH$	0	0	0	$1.154 \cdot 10^{-7}$	$1.154 \cdot 10^{-7}$	0
$HH \rightarrow Ht\bar{t}$	0	0	0	$3.252 \cdot 10^{-5}$	$3.252 \cdot 10^{-5}$	0
$HH \rightarrow Hzz$	0	0	0	$8.41 \cdot 10^{-6}$	$8.41 \cdot 10^{-6}$	0
$HH \rightarrow W^+W^-$	0	0	0	7.11	7.11	0
$HH \rightarrow W^+W^-\gamma$	0	0	0	$3.221 \cdot 10^{-5}$	$3.221 \cdot 10^{-5}$	0

$HH \rightarrow W^+ \bar{t}b$	0	0	0	$3.224 \cdot 10^{-6}$	$3.224 \cdot 10^{-6}$	0
$HH \rightarrow W^+ e^- \bar{\nu}_e$	0	0	0	$3.295 \cdot 10^{-7}$	$3.295 \cdot 10^{-7}$	0
$HH \rightarrow W^- u \bar{d}$	0	0	0	$7.574 \cdot 10^{-7}$	$7.574 \cdot 10^{-7}$	0
$HH \rightarrow z \bar{b}b$	0	0	0	$1.465 \cdot 10^{-5}$	$1.465 \cdot 10^{-5}$	0
$HH \rightarrow z \nu_e \bar{\nu}_e$	0	0	0	$5.262 \cdot 10^{-8}$	$5.262 \cdot 10^{-8}$	0
$HH \rightarrow z c \bar{c}$	0	0	0	$2.215 \cdot 10^{-7}$	$2.215 \cdot 10^{-7}$	0
$HH \rightarrow z d \bar{d}$	0	0	0	$8.698 \cdot 10^{-6}$	$8.698 \cdot 10^{-6}$	0
$HH \rightarrow z e^+ e^-$	0	0	0	$6.498 \cdot 10^{-8}$	$6.498 \cdot 10^{-8}$	0
$HH \rightarrow z t \bar{t}$	0	0	0	$5.649 \cdot 10^{-6}$	$5.649 \cdot 10^{-6}$	0
$HH \rightarrow z z$	0	0	0	42.6	42.6	0
$HW^+ \rightarrow \gamma t \bar{b}$	0	0	0	$1.937 \cdot 10^{-6}$	$1.937 \cdot 10^{-6}$	0
$HW^+ \rightarrow \gamma u \bar{d}$	0	0	0	$4.221 \cdot 10^{-9}$	$4.221 \cdot 10^{-9}$	0
$HW^+ \rightarrow u \bar{d}$	0	0	0	0.01287	0.01287	0
$HW^- \rightarrow \bar{t}b$	0	0	0	0.847	0.847	0
$HW^- \rightarrow \gamma e^- \bar{\nu}_e$	0	0	0	$4.588 \cdot 10^{-10}$	$4.588 \cdot 10^{-10}$	0
$HW^- \rightarrow \mu^- \bar{\nu}_\mu$	0	0	0	0.007532	0.007532	0
$H\gamma \rightarrow t \bar{t}$	0	0	0	0.5661	0.5661	0
$H z \rightarrow \mu^+ \mu^-$	0	0	0	0.0002668	0.0002668	0
$H z \rightarrow \nu_\tau \bar{\nu}_\tau$	0	0	0	0.005902	0.005902	0
$H z \rightarrow b \bar{b}$	0	0	0	0.0132	0.0132	0
$H z \rightarrow s \bar{s}$	0	0	0	0.001982	0.001982	0
$H z \rightarrow t \bar{t}$	0	0	0	1.915	1.915	0
$H z \rightarrow u \bar{u}$	0	0	0	0.01112	0.01112	0
$W^+ W^- \rightarrow H b \bar{b}$	0	0	0	0.07209	0.07209	0
$W^+ W^- \rightarrow H c \bar{c}$	0	0	0	$7.069 \cdot 10^{-7}$	$7.069 \cdot 10^{-7}$	0
$W^+ W^- \rightarrow H d \bar{d}$	0	0	0	$7.399 \cdot 10^{-7}$	$7.399 \cdot 10^{-7}$	0
$W^+ W^- \rightarrow H t \bar{t}$	0	0	0	$2.732 \cdot 10^{-5}$	$2.732 \cdot 10^{-5}$	0
$W^+ W^- \rightarrow W^+ W^-$	0	0	0	76.64	76.64	0
$W^+ W^- \rightarrow \gamma \gamma$	0	0	0	0.07781	0.07781	0

$W^+W^- \rightarrow \gamma\gamma\gamma$	0	0	0	$4.205 \cdot 10^{-7}$	$4.205 \cdot 10^{-7}$	0
$\bar{b}t \rightarrow \bar{d}u$	0	0	0	0.02228	0.02228	0
$\gamma W^+ \rightarrow zW^+$	0	0	0	0.3097	0.3097	0
$\mu^+\mu^- \rightarrow \tau^+\tau^-$	0	0	0	0.007328	0.007328	0
$\nu_\tau\bar{\nu}_\tau \rightarrow \nu_\tau\bar{\nu}_\tau$	0	0	0	$2.657 \cdot 10^{-6}$	$2.657 \cdot 10^{-6}$	0
$\nu_e\bar{\nu}_e \rightarrow \nu_\mu\bar{\nu}_\mu$	0	0	0	0.002409	0.002409	0
$b\bar{b} \rightarrow \gamma\gamma$	0	0	0	0.0002857	0.0002857	0
$b\bar{b} \rightarrow \mu^+\mu^-$	0	0	0	0.0003129	0.0003129	0
$b\bar{b} \rightarrow \nu_e\bar{\nu}_e$	0	0	0	0.0005428	0.0005428	0
$b\bar{b} \rightarrow b\bar{b}$	0	0	0	3.43	3.43	0
$b\bar{b} \rightarrow d\bar{d}$	0	0	0	0.4989	0.4989	0
$b\bar{b} \rightarrow t\bar{t}$	0	0	0	0.3494	0.3494	0
$b\bar{b} \rightarrow u\bar{u}$	0	0	0	0.7365	0.7365	0
$b\bar{t} \rightarrow e^-\bar{\nu}_e$	0	0	0	0.007986	0.007986	0
$c\bar{c} \rightarrow \mu^+\mu^-$	0	0	0	0.003414	0.003414	0
$c\bar{s} \rightarrow \tau^+\nu_\tau$	0	0	0	0.001042	0.001042	0
$d\bar{d} \rightarrow c\bar{c}$	0	0	0	0.5235	0.5235	0
$d\bar{d} \rightarrow e^+e^-$	0	0	0	0.0003275	0.0003275	0
$e^+\nu_\mu \rightarrow e^+\nu_\mu$	0	0	0	0.02534	0.02534	0
$e^+\nu_e \rightarrow \mu^+\nu_\mu$	0	0	0	0.00491	0.00491	0
$e^+\nu_e \rightarrow e^+\nu_e$	0	0	0	0.1556	0.1556	0
$e^+\tau^- \rightarrow e^+\tau^-$	0	0	0	0.2959	0.2959	0
$e^+e^- \rightarrow \mu^+\mu^-$	0	0	0	0.02068	0.02068	0
$e^+e^- \rightarrow e^+e^-$	0	0	0	1.446	1.446	0
$gg \rightarrow gg$	0	0	0	45.35	45.35	0
$gg \rightarrow ggg$	0	0	0	0.08681	0.08681	0
$gg \rightarrow t\bar{t}$	0	0	0	0.9601	0.9601	0
$gg \rightarrow u\bar{u}$	0	0	0	0.3274	0.3274	0
$s\bar{s} \rightarrow \nu_\tau\bar{\nu}_\tau$	0	0	0	0.0002399	0.0002399	0

$s\bar{s} \rightarrow s\bar{s}$	0	0	0	2.053	2.053	0
$t\bar{t} \rightarrow \nu_\mu \bar{\nu}_\mu$	0	0	0	0.0004697	0.0004697	0
$t\bar{t} \rightarrow \tau^+ \tau^-$	0	0	0	0.001288	0.001288	0
$t\bar{t} \rightarrow c\bar{c}$	0	0	0	0.6076	0.6076	0
$t\bar{t} \rightarrow d\bar{d}$	0	0	0	0.7732	0.7732	0
$t\bar{t} \rightarrow s\bar{s}$	0	0	0	0.6063	0.6063	0
$t\bar{t} \rightarrow t\bar{t}$	0	0	0	10.65	10.65	0
$u\bar{d} \rightarrow \mu^+ \nu_\mu$	0	0	0	0.00539	0.00539	0
$u\bar{d} \rightarrow c\bar{s}$	0	0	0	0.02179	0.02179	0
$u\bar{d} \rightarrow u\bar{d}$	0	0	0	1.03	1.03	0
$u\bar{u} \rightarrow \nu_e \bar{\nu}_e$	0	0	0	0.0005278	0.0005278	0
$u\bar{u} \rightarrow u\bar{u}$	0	0	0	2.057	2.057	0
$zz \rightarrow W^+ W^-$	0	0	0	32.3	32.3	0
$zz \rightarrow zz$	0	0	0	0.07898	0.07898	0