

# 1 By process

## 1.1 $HH \rightarrow HH$

			interference			square
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
sm	0	0	0	0.1158	0.1158	0

## 1.2 $HH \rightarrow HHH$

			interference			square
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
sm	0	0	0	$1.755 \cdot 10^{-7}$	$1.755 \cdot 10^{-7}$	0

## 1.3 $HH \rightarrow H\tau^+\tau^-$

			interference			square
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
sm	0	0	0	$8.084 \cdot 10^{-12}$	$8.084 \cdot 10^{-12}$	0

## 1.4 $HH \rightarrow Hb\bar{b}$

			interference			square
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
sm	0	0	0	$2.135 \cdot 10^{-9}$	$2.135 \cdot 10^{-9}$	0

## 1.5 $HH \rightarrow Ht\bar{t}$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
ctp	$1.321 \cdot 10^{-5}$	$1.321 \cdot 10^{-5}$	0	$1.12 \cdot 10^{-5}$	$1.12 \cdot 10^{-5}$	0
ctpI	$2.56 \cdot 10^{-5}$	$2.56 \cdot 10^{-5}$	0	$4.033 \cdot 10^{-5}$	$4.033 \cdot 10^{-5}$	0
sm	0	0	0	$1.41 \cdot 10^{-5}$	$1.41 \cdot 10^{-5}$	0

## 1.6 $HH \rightarrow Hzz$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
sm	0	0	0	$7.934 \cdot 10^{-6}$	$7.934 \cdot 10^{-6}$	0

## 1.7 $HH \rightarrow W^+W^-$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
sm	0	0	0	0.1343	0.1343	$7.445 \cdot 10^{-8}$

## 1.8 $HH \rightarrow W^+W^-\gamma$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
sm	0	0	0	$1.94 \cdot 10^{-7}$	$1.94 \cdot 10^{-7}$	$-2.062 \cdot 10^{-7}$

## 1.9 $HH \rightarrow W^+\bar{t}b$

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

cbW	$-2.93 \cdot 10^{-7}$	$-2.93 \cdot 10^{-7}$	$-3.413 \cdot 10^{-8}$	$1.311 \cdot 10^{-5}$	$1.311 \cdot 10^{-5}$	0
cbWI	$2.766 \cdot 10^{-7}$	$2.766 \cdot 10^{-7}$	0	$1.436 \cdot 10^{-5}$	$1.436 \cdot 10^{-5}$	0
cpQ3	$-2.373 \cdot 10^{-6}$	$-2.373 \cdot 10^{-6}$	$2.95 \cdot 10^{-7}$	$1.562 \cdot 10^{-5}$	$1.562 \cdot 10^{-5}$	0
cptb	$-6.048 \cdot 10^{-7}$	$-6.048 \cdot 10^{-7}$	0	$3.598 \cdot 10^{-6}$	$3.598 \cdot 10^{-6}$	0
cptbI	$-3.977 \cdot 10^{-8}$	$-3.977 \cdot 10^{-8}$	0	$1.977 \cdot 10^{-6}$	$1.977 \cdot 10^{-6}$	0
ctW	$1.295 \cdot 10^{-5}$	$1.295 \cdot 10^{-5}$	0	$6.036 \cdot 10^{-6}$	$6.036 \cdot 10^{-6}$	0
ctWI	$7.461 \cdot 10^{-7}$	$7.461 \cdot 10^{-7}$	$2.68 \cdot 10^{-8}$	$1.158 \cdot 10^{-5}$	$1.158 \cdot 10^{-5}$	0
ctp	$1.781 \cdot 10^{-6}$	$1.781 \cdot 10^{-6}$	$5.616 \cdot 10^{-8}$	$5.574 \cdot 10^{-7}$	$5.574 \cdot 10^{-7}$	$1.794 \cdot 10^{-8}$
ctpI	$5.892 \cdot 10^{-7}$	$5.892 \cdot 10^{-7}$	$1.697 \cdot 10^{-8}$	$5.345 \cdot 10^{-6}$	$5.345 \cdot 10^{-6}$	0
sm	0	0	0	$1.656 \cdot 10^{-5}$	$1.656 \cdot 10^{-5}$	0

### 1.10 $HH \rightarrow W^+ e^- \bar{\nu}_e$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
sm	0	0	0	$1.571 \cdot 10^{-7}$	$1.571 \cdot 10^{-7}$	0

### 1.11 $HH \rightarrow W^- u \bar{d}$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
sm	0	0	0	$1.206 \cdot 10^{-6}$	$1.206 \cdot 10^{-6}$	$8.291 \cdot 10^{-8}$

### 1.12 $HH \rightarrow z \bar{b} b$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
cbW	$6.328 \cdot 10^{-8}$	$6.328 \cdot 10^{-8}$	$3.161 \cdot 10^{-8}$	$1.947 \cdot 10^{-6}$	$1.947 \cdot 10^{-6}$	0

cbWI	$2.108 \cdot 10^{-9}$	$2.108 \cdot 10^{-9}$	$1.898 \cdot 10^{-7}$	$4.028 \cdot 10^{-7}$	$4.028 \cdot 10^{-7}$	0
cpQ3	0.0001217	0.0001217	0	0.0002384	0.0002384	0
cpQM	$1.903 \cdot 10^{-6}$	$1.903 \cdot 10^{-6}$	0	$3.826 \cdot 10^{-6}$	$3.826 \cdot 10^{-6}$	0
cpb	$-1.098 \cdot 10^{-7}$	$-1.098 \cdot 10^{-7}$	$-9.11 \cdot 10^{-8}$	$4.513 \cdot 10^{-7}$	$4.513 \cdot 10^{-7}$	0
sm	0	0	0	$1.608 \cdot 10^{-5}$	$1.608 \cdot 10^{-5}$	0

### 1.13 $HH \rightarrow z\nu_e\bar{\nu}_e$

			interference		square	
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
sm	0	0	0	$1.037 \cdot 10^{-7}$	$1.037 \cdot 10^{-7}$	0

### 1.14 $HH \rightarrow zc\bar{c}$

			interference		square	
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
sm	0	0	0	$3.842 \cdot 10^{-7}$	$3.842 \cdot 10^{-7}$	$2.603 \cdot 10^{-8}$

### 1.15 $HH \rightarrow zd\bar{d}$

			interference		square	
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
sm	0	0	0	$1.307 \cdot 10^{-6}$	$1.307 \cdot 10^{-6}$	0

### 1.16 $HH \rightarrow ze^+e^-$

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

sm	0	0	0	$9.792 \cdot 10^{-8}$	$9.792 \cdot 10^{-8}$	0
----	---	---	---	-----------------------	-----------------------	---

### 1.17 $HH \rightarrow zt\bar{t}$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
cpQM	$4.703 \cdot 10^{-5}$	$4.703 \cdot 10^{-5}$	$-2.126 \cdot 10^{-8}$	$4.516 \cdot 10^{-5}$	$4.516 \cdot 10^{-5}$	0
cpt	$-8.087 \cdot 10^{-5}$	$-8.087 \cdot 10^{-5}$	$1.237 \cdot 10^{-8}$	$4.714 \cdot 10^{-5}$	$4.714 \cdot 10^{-5}$	0
ctW	$-1.273 \cdot 10^{-12}$	0	1	$2.326 \cdot 10^{-17}$	0	1
ctWI	$-8.166 \cdot 10^{-13}$	0	1	$8.07 \cdot 10^{-18}$	0	1
ctZ	$5.645 \cdot 10^{-6}$	$5.645 \cdot 10^{-6}$	$6.2 \cdot 10^{-7}$	$3.042 \cdot 10^{-5}$	$3.042 \cdot 10^{-5}$	$1.085 \cdot 10^{-6}$
ctZI	$-1.579 \cdot 10^{-6}$	$-1.579 \cdot 10^{-6}$	$6.332 \cdot 10^{-7}$	$2.864 \cdot 10^{-5}$	$2.864 \cdot 10^{-5}$	$1.082 \cdot 10^{-6}$
ctp	$-1.501 \cdot 10^{-5}$	$-1.501 \cdot 10^{-5}$	0	$6.856 \cdot 10^{-6}$	$6.856 \cdot 10^{-6}$	$1.459 \cdot 10^{-8}$
ctpI	$-3.141 \cdot 10^{-6}$	$-3.141 \cdot 10^{-6}$	0	$1.12 \cdot 10^{-5}$	$1.12 \cdot 10^{-5}$	0
sm	0	0	0	0.0002436	0.0002436	0

### 1.18 $HH \rightarrow zz$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
sm	0	0	0	0.1559	0.1559	0

### 1.19 $HW^+ \rightarrow \gamma t\bar{b}$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
cbW	$-2.96 \cdot 10^{-9}$	$-2.96 \cdot 10^{-9}$	$-3.378 \cdot 10^{-8}$	$2.688 \cdot 10^{-6}$	$2.688 \cdot 10^{-6}$	$-3.721 \cdot 10^{-8}$
cbWI	$-1.061 \cdot 10^{-5}$	$-1.061 \cdot 10^{-5}$	$-9.428 \cdot 10^{-8}$	$4.934 \cdot 10^{-6}$	$4.934 \cdot 10^{-6}$	$-4.053 \cdot 10^{-8}$

cpQ3	$-4.758 \cdot 10^{-6}$	$-4.758 \cdot 10^{-6}$	$-4.203 \cdot 10^{-8}$	$3.584 \cdot 10^{-6}$	$3.584 \cdot 10^{-6}$	$-2.79 \cdot 10^{-8}$
cptb	$-1.033 \cdot 10^{-7}$	$-1.033 \cdot 10^{-7}$	$-9.682 \cdot 10^{-8}$	$4.041 \cdot 10^{-7}$	$4.041 \cdot 10^{-7}$	$-4.949 \cdot 10^{-8}$
cptbI	$6.867 \cdot 10^{-9}$	$6.867 \cdot 10^{-9}$	$-4.369 \cdot 10^{-8}$	$1.642 \cdot 10^{-7}$	$1.642 \cdot 10^{-7}$	0
ctW	$-7.863 \cdot 10^{-6}$	$-7.863 \cdot 10^{-6}$	$9.539 \cdot 10^{-7}$	$1.869 \cdot 10^{-5}$	$1.869 \cdot 10^{-5}$	$1.177 \cdot 10^{-6}$
ctWI	$1.68 \cdot 10^{-6}$	$1.68 \cdot 10^{-6}$	$7.739 \cdot 10^{-7}$	$5.1 \cdot 10^{-6}$	$5.1 \cdot 10^{-6}$	$1.137 \cdot 10^{-6}$
ctZ	$4.136 \cdot 10^{-8}$	$4.136 \cdot 10^{-8}$	$6.287 \cdot 10^{-7}$	$5.23 \cdot 10^{-6}$	$5.23 \cdot 10^{-6}$	$1.128 \cdot 10^{-6}$
ctZI	$3.597 \cdot 10^{-6}$	$3.597 \cdot 10^{-6}$	$5.56 \cdot 10^{-7}$	$7.777 \cdot 10^{-6}$	$7.777 \cdot 10^{-6}$	$1.132 \cdot 10^{-6}$
ctp	$1.077 \cdot 10^{-8}$	$1.077 \cdot 10^{-8}$	0	$2.097 \cdot 10^{-8}$	$2.097 \cdot 10^{-8}$	$-4.769 \cdot 10^{-8}$
ctpI	$-1.069 \cdot 10^{-8}$	$-1.069 \cdot 10^{-8}$	$9.353 \cdot 10^{-8}$	$1.723 \cdot 10^{-7}$	$1.723 \cdot 10^{-7}$	0
sm	0	0	0	$5.886 \cdot 10^{-6}$	$5.886 \cdot 10^{-6}$	$-3.398 \cdot 10^{-8}$

### 1.20 $HW^+ \rightarrow \gamma u \bar{d}$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
sm	0	0	0	$2.803 \cdot 10^{-8}$	$2.803 \cdot 10^{-8}$	0

### 1.21 $HW^+ \rightarrow u \bar{d}$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
sm	0	0	0	0.01408	0.01408	0

### 1.22 $HW^- \rightarrow \bar{t} b$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
cbW	0.008654	0.008654	$1.155 \cdot 10^{-8}$	1.439	1.439	0
cbWI	$1 \cdot 10^{-6}$	$1 \cdot 10^{-6}$	0	2.178	2.178	0

cpQ3	-2.443	-2.443	0	0.8598	0.8598	0
cptb	-0.05328	-0.05328	$1.877 \cdot 10^{-8}$	0.4891	0.4891	0
cptbI	$-8.636 \cdot 10^{-6}$	$-8.636 \cdot 10^{-6}$	$1.158 \cdot 10^{-8}$	0.367	0.367	0
ctW	0.5769	0.5769	$1.733 \cdot 10^{-8}$	0.1137	0.1137	0
ctWI	-0.0006926	-0.0006926	$1.444 \cdot 10^{-8}$	1.581	1.581	0
ctp	0.04852	0.04852	0	0.05044	0.05044	0
ctpI	-0.002784	-0.002784	0	0.05371	0.05371	0
sm	0	0	0	3.345	3.345	0

### 1.23 $HW^- \rightarrow \gamma e^- \bar{\nu}_e$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
sm	0	0	0	$7.079 \cdot 10^{-9}$	$7.079 \cdot 10^{-9}$	$-1.413 \cdot 10^{-8}$

### 1.24 $HW^- \rightarrow \mu^- \bar{\nu}_\mu$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
sm	0	0	0	0.003286	0.003286	$3.044 \cdot 10^{-8}$

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

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
cbW	$-2.352 \cdot 10^{-6}$	$-2.352 \cdot 10^{-6}$	$-8.504 \cdot 10^{-8}$	0.4177	0.4177	$-7.182 \cdot 10^{-8}$
cbWI	$-8.027 \cdot 10^{-20}$	$-8.032 \cdot 10^{-20}$	-0.0006596	0.6981	0.6981	$-5.73 \cdot 10^{-8}$
sm	0	0	0	0.0001239	0.0001239	0

### 1.26 $H\gamma \rightarrow t\bar{t}$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
ctW	-0.6605	-0.6605	$5.905 \cdot 10^{-7}$	14.45	14.45	$1.176 \cdot 10^{-6}$
ctWI	$-7.494 \cdot 10^{-16}$	$4.58 \cdot 10^{-16}$	1.611	1.67	1.67	$1.197 \cdot 10^{-6}$
ctZ	4.341	4.341	$5.529 \cdot 10^{-7}$	1.28	1.28	$1.094 \cdot 10^{-6}$
ctZI	$4.337 \cdot 10^{-19}$	$4.201 \cdot 10^{-19}$	0.03125	11.01	11.01	$1.09 \cdot 10^{-6}$
ctp	-0.5085	-0.5085	$-3.933 \cdot 10^{-8}$	0.0156	0.0156	$-6.409 \cdot 10^{-8}$
ctpI	$5.763 \cdot 10^{-18}$	$9.926 \cdot 10^{-19}$	0.8278	0.004026	0.004026	$-4.968 \cdot 10^{-8}$
sm	0	0	0	0.8784	0.8784	$-4.554 \cdot 10^{-8}$

### 1.27 $H\gamma \rightarrow \mu^+\mu^-$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
sm	0	0	0	0.0004103	0.0004103	0

### 1.28 $H\gamma \rightarrow \nu_\tau \bar{\nu}_\tau$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
sm	0	0	0	0.00522	0.00522	0

### 1.29 $H\gamma \rightarrow b\bar{b}$

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



cbW	0.001424	0.001424	0	0.6216	0.6216	$1.609 \cdot 10^{-8}$
cbWI	$1.251 \cdot 10^{-6}$	$1.251 \cdot 10^{-6}$	0	1.544	1.544	0
cpQ3	0.2798	0.2798	$3.574 \cdot 10^{-8}$	2.443	2.443	0
cpQM	0.101	0.101	0	0.443	0.443	0
cpb	-0.0233	-0.0233	$-4.292 \cdot 10^{-8}$	0.5817	0.5817	0
sm	0	0	0	0.008586	0.008586	$1.165 \cdot 10^{-8}$

### 1.30 $H_z \rightarrow s\bar{s}$

interference				square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
sm	0	0	0	0.005797	0.005797	$1.725 \cdot 10^{-8}$

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

interference				square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
cpQM	1.964	1.964	0	0.6501	0.6501	0
cpt	-2.103	-2.103	0	0.8523	0.8523	0
ctW	$2.675 \cdot 10^{-8}$	0	1	$1.524 \cdot 10^{-12}$	0	1
ctWI	$3.806 \cdot 10^{-10}$	0	1	$1.015 \cdot 10^{-12}$	0	1
ctZ	-0.08497	-0.08497	$6.238 \cdot 10^{-7}$	2.444	2.444	$1.064 \cdot 10^{-6}$
ctZI	-0.0004568	-0.0004568	$5.254 \cdot 10^{-7}$	1.954	1.954	$1.023 \cdot 10^{-6}$
ctp	-0.02413	-0.02413	$4.144 \cdot 10^{-8}$	0.06519	0.06519	0
ctpI	$6.48 \cdot 10^{-5}$	$6.48 \cdot 10^{-5}$	$7.716 \cdot 10^{-8}$	0.06906	0.06906	0
sm	0	0	0	1.804	1.804	0

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

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
sm	0	0	0	0.008114	0.008114	$2.465 \cdot 10^{-8}$

### 1.33 $W^+W^- \rightarrow Hb\bar{b}$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
cbW	$-2.958 \cdot 10^{-8}$	$-2.958 \cdot 10^{-8}$	$6.762 \cdot 10^{-8}$	$3.682 \cdot 10^{-6}$	$3.682 \cdot 10^{-6}$	$2.716 \cdot 10^{-8}$
cbWI	$-1.085 \cdot 10^{-7}$	$-1.085 \cdot 10^{-7}$	$9.22 \cdot 10^{-8}$	$2.034 \cdot 10^{-6}$	$2.034 \cdot 10^{-6}$	0
cpQ3	$-6.426 \cdot 10^{-7}$	$-6.426 \cdot 10^{-7}$	0	$1.558 \cdot 10^{-7}$	$1.558 \cdot 10^{-7}$	$6.42 \cdot 10^{-8}$
cpQM	$2.389 \cdot 10^{-6}$	$2.389 \cdot 10^{-6}$	$4.186 \cdot 10^{-8}$	$3.669 \cdot 10^{-7}$	$3.669 \cdot 10^{-7}$	0
cpb	$-4.056 \cdot 10^{-8}$	$-4.056 \cdot 10^{-8}$	$-2.465 \cdot 10^{-8}$	$2.043 \cdot 10^{-7}$	$2.043 \cdot 10^{-7}$	0
cptb	$-2.585 \cdot 10^{-7}$	$-2.585 \cdot 10^{-7}$	0	$8.809 \cdot 10^{-7}$	$8.809 \cdot 10^{-7}$	0
cptbI	$9.891 \cdot 10^{-8}$	$9.891 \cdot 10^{-8}$	$1.011 \cdot 10^{-8}$	$7.057 \cdot 10^{-7}$	$7.057 \cdot 10^{-7}$	0
ctW	$-2.467 \cdot 10^{-7}$	$-2.467 \cdot 10^{-7}$	$-4.053 \cdot 10^{-8}$	$3.682 \cdot 10^{-6}$	$3.682 \cdot 10^{-6}$	0
ctWI	$4.905 \cdot 10^{-6}$	$4.905 \cdot 10^{-6}$	$2.039 \cdot 10^{-8}$	$3.05 \cdot 10^{-6}$	$3.05 \cdot 10^{-6}$	0
ctp	$2.111 \cdot 10^{-6}$	$2.111 \cdot 10^{-6}$	0	$4.158 \cdot 10^{-8}$	$4.158 \cdot 10^{-8}$	0
ctpI	$3.229 \cdot 10^{-8}$	$3.229 \cdot 10^{-8}$	0	$2.498 \cdot 10^{-9}$	$2.498 \cdot 10^{-9}$	0
sm	0	0	0	$1.277 \cdot 10^{-6}$	$1.277 \cdot 10^{-6}$	$7.828 \cdot 10^{-8}$

### 1.34 $W^+W^- \rightarrow Hc\bar{c}$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
sm	0	0	0	$1.145 \cdot 10^{-5}$	$1.145 \cdot 10^{-5}$	$8.733 \cdot 10^{-8}$

### 1.35 $W^+W^- \rightarrow Hd\bar{d}$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
sm	0	0	0	$7.785 \cdot 10^{-7}$	$7.785 \cdot 10^{-7}$	$2.569 \cdot 10^{-8}$

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

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
cbW	$1.291 \cdot 10^{-7}$	$1.291 \cdot 10^{-7}$	0	$1.315 \cdot 10^{-8}$	$1.315 \cdot 10^{-8}$	0
cbWI	$3.637 \cdot 10^{-8}$	$3.637 \cdot 10^{-8}$	$-2.75 \cdot 10^{-8}$	$3.052 \cdot 10^{-8}$	$3.052 \cdot 10^{-8}$	0
cpQ3	$8.011 \cdot 10^{-6}$	$8.011 \cdot 10^{-6}$	$1.248 \cdot 10^{-8}$	$1.739 \cdot 10^{-5}$	$1.739 \cdot 10^{-5}$	0
cpQM	$7.751 \cdot 10^{-7}$	$7.751 \cdot 10^{-7}$	$1.29 \cdot 10^{-8}$	$1.77 \cdot 10^{-6}$	$1.77 \cdot 10^{-6}$	0
cpt	$1.067 \cdot 10^{-6}$	$1.067 \cdot 10^{-6}$	$9.376 \cdot 10^{-8}$	$8.031 \cdot 10^{-7}$	$8.031 \cdot 10^{-7}$	$1.245 \cdot 10^{-8}$
cptb	$1.033 \cdot 10^{-7}$	$1.033 \cdot 10^{-7}$	0	$2.399 \cdot 10^{-9}$	$2.399 \cdot 10^{-9}$	0
cptbI	$-1.757 \cdot 10^{-9}$	$-1.757 \cdot 10^{-9}$	$1.138 \cdot 10^{-7}$	$1.394 \cdot 10^{-9}$	$1.394 \cdot 10^{-9}$	0
ctW	$1.43 \cdot 10^{-5}$	$1.43 \cdot 10^{-5}$	0	$5.603 \cdot 10^{-5}$	$5.603 \cdot 10^{-5}$	$-1.785 \cdot 10^{-8}$
ctWI	$-2.053 \cdot 10^{-6}$	$-2.053 \cdot 10^{-6}$	$4.87 \cdot 10^{-8}$	$2.124 \cdot 10^{-5}$	$2.124 \cdot 10^{-5}$	0
ctZ	$2.346 \cdot 10^{-8}$	$2.346 \cdot 10^{-8}$	$2.558 \cdot 10^{-7}$	$1.517 \cdot 10^{-7}$	$1.517 \cdot 10^{-7}$	$1.054 \cdot 10^{-6}$
ctZI	$-9.138 \cdot 10^{-9}$	$-9.138 \cdot 10^{-9}$	$5.253 \cdot 10^{-7}$	$8.533 \cdot 10^{-8}$	$8.533 \cdot 10^{-8}$	$1.066 \cdot 10^{-6}$
ctp	$-3.37 \cdot 10^{-7}$	$-3.37 \cdot 10^{-7}$	$2.968 \cdot 10^{-8}$	$4.944 \cdot 10^{-8}$	$4.944 \cdot 10^{-8}$	0
ctpI	$1.876 \cdot 10^{-7}$	$1.876 \cdot 10^{-7}$	$5.33 \cdot 10^{-8}$	$9.123 \cdot 10^{-7}$	$9.123 \cdot 10^{-7}$	0
sm	0	0	0	$3.568 \cdot 10^{-6}$	$3.568 \cdot 10^{-6}$	0

### 1.37 $W^+W^- \rightarrow W^+W^-$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
sm	0	0	0	90.71	90.71	$3.307 \cdot 10^{-8}$

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

	interference			square		
sm	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
	0	0	0	0.09023	0.09023	$-7.758 \cdot 10^{-8}$

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

	interference			square		
sm	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
	0	0	0	$4.165 \cdot 10^{-7}$	$4.165 \cdot 10^{-7}$	$-9.604 \cdot 10^{-8}$

### 1.40 $\bar{b}t \rightarrow \bar{d}u$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
cQbqu1	0	0	0	0.25	0.25	0
cQbqu1I	0	0	0	0.25	0.25	0
cQbqu1T	0	0	0	22.1	0.581	0.9737
cQbqu1TI	0	0	0	7.751	1.585	0.7956
cQbqu8	0	0	0	0.05556	0.05556	0
cQbqu8I	0	0	0	0.05556	0.05556	0
cQbqu8T	0	0	0	4.912	0.1291	0.9737
cQbqu8TI	0	0	0	4.572	0.08541	0.9813
cQq13	0.05131	0.05131	$1.949 \cdot 10^{-8}$	0.2425	0.2425	0
cQq83	$1.541 \cdot 10^{-9}$	$2.085 \cdot 10^{-19}$	1	0.2428	0.2428	0
cQtqd1	0	0	0	0.25	0.25	0
cQtqd1I	0	0	0	0.25	0.25	0
cQtqd1T	0	0	0	17.3	0.139	0.992

cQtqd1TI	0	0	0	17.06	0.1315	0.9923
cQtqd8	0	0	0	0.05556	0.05556	0
cQtqd8I	0	0	0	0.05556	0.05556	0
cQtqd8T	0	0	0	4.572	0.08541	0.9813
cQtqd8TI	0	0	0	3.791	0.02922	0.9923
cbQqd1	0	0	0	0.25	0.25	$8 \cdot 10^{-8}$
cbQqd1I	0	0	0	0.25	0.25	$8 \cdot 10^{-8}$
cbQqd8	0	0	0	0.05556	0.05556	$-1.26 \cdot 10^{-7}$
cbQqd8I	0	0	0	0.05556	0.05556	$-1.26 \cdot 10^{-7}$
cbW	0.0002167	0.0002167	$4.615 \cdot 10^{-8}$	0.01328	0.01328	0
cbWI	$-5.115 \cdot 10^{-19}$	$2.876 \cdot 10^{-19}$	1.562	0.01018	0.01018	0
cbtud1	0	0	0	0.2223	0.2223	$-4.498 \cdot 10^{-8}$
cbtud1I	0	0	0	0.2732	0.2732	$-3.661 \cdot 10^{-8}$
cbtud8	0	0	0	0.1459	0.1459	$-2.057 \cdot 10^{-7}$
cbtud8I	0	0	0	0.03181	0.03181	$-1.886 \cdot 10^{-7}$
cpQ3	0.0007768	0.0007768	$2.575 \cdot 10^{-8}$	$2.355 \cdot 10^{-5}$	$2.355 \cdot 10^{-5}$	0
cptb	$-2.193 \cdot 10^{-6}$	$-2.193 \cdot 10^{-6}$	$4.559 \cdot 10^{-8}$	$9.956 \cdot 10^{-6}$	$9.956 \cdot 10^{-6}$	$4.018 \cdot 10^{-8}$
cptbI	$1.561 \cdot 10^{-21}$	$-9.578 \cdot 10^{-22}$	1.613	$1.887 \cdot 10^{-5}$	$1.887 \cdot 10^{-5}$	$5.299 \cdot 10^{-8}$
ctQqu1	0	0	0	0.25	0.25	$4 \cdot 10^{-8}$
ctQqu1I	0	0	0	0.25	0.25	$4 \cdot 10^{-8}$
ctQqu8	0	0	0	0.05556	0.05556	$-1.26 \cdot 10^{-7}$
ctQqu8I	0	0	0	0.05556	0.05556	$-1.26 \cdot 10^{-7}$
ctW	0.007789	0.007789	$2.568 \cdot 10^{-8}$	0.0132	0.0132	0
ctWI	$2.461 \cdot 10^{-18}$	$-6.483 \cdot 10^{-18}$	3.634	0.01153	0.01153	0
sm	0	0	0	0.006407	0.006407	$4.683 \cdot 10^{-8}$

### 1.41 $\gamma W^+ \rightarrow z W^+$

interference

square

	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
sm	0	0	0	0.3812	0.3812	0

### 1.42 $\mu^+\mu^- \rightarrow \tau^+\tau^-$

	mod1	mod2	interference 1 - mod2/mod1	mod1	mod2	square 1 - mod2/mod1
sm	0	0	0	0.00684	0.00684	$-7.31 \cdot 10^{-8}$

### 1.43 $\nu_\tau \bar{\nu}_\tau \rightarrow \nu_\tau \bar{\nu}_\tau$

	mod1	mod2	interference 1 - mod2/mod1	mod1	mod2	square 1 - mod2/mod1
sm	0	0	0	0.0003202	0.0003202	0

### 1.44 $\nu_e \bar{\nu}_e \rightarrow \nu_\mu \bar{\nu}_\mu$

	mod1	mod2	interference 1 - mod2/mod1	mod1	mod2	square 1 - mod2/mod1
sm	0	0	0	0.005542	0.005542	0

### 1.45 $b\bar{b} \rightarrow \gamma\gamma$

	mod1	mod2	interference 1 - mod2/mod1	mod1	mod2	square 1 - mod2/mod1
cbW	$1.506 \cdot 10^{-5}$	$1.506 \cdot 10^{-5}$	$-6.638 \cdot 10^{-8}$	0.0006187	0.0006187	$-8.081 \cdot 10^{-8}$
cbWI	$3.439 \cdot 10^{-23}$	$-2.307 \cdot 10^{-23}$	1.671	0.0006186	0.0006186	$-8.082 \cdot 10^{-8}$
sm	0	0	0	$8.34 \cdot 10^{-5}$	$8.34 \cdot 10^{-5}$	$-7.194 \cdot 10^{-8}$

### 1.46 $b\bar{b} \rightarrow \mu^+ \mu^-$

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
cQe2	-0.006986	-0.006986	$-4.294 \cdot 10^{-8}$	0.1601	0.1601	0
cQ132	0.008082	0.008082	$2.475 \cdot 10^{-8}$	0.08512	0.08512	0
cQ1M2	0.04296	0.04296	$2.328 \cdot 10^{-8}$	0.2262	0.2262	0
cbW	$4.457 \cdot 10^{-5}$	$4.457 \cdot 10^{-5}$	$2.244 \cdot 10^{-8}$	0.002109	0.002109	$4.742 \cdot 10^{-8}$
cbWI	$4.555 \cdot 10^{-16}$	$4.555 \cdot 10^{-16}$	$-3.895 \cdot 10^{-5}$	0.001047	0.001047	0
cbLS2	0	0	0	0.1667	0.1667	0
cbLSI2	0	0	0	0.1667	0.1667	0
cpQ3	0.0003229	0.0003229	$6.193 \cdot 10^{-8}$	$1.616 \cdot 10^{-5}$	$1.616 \cdot 10^{-5}$	$6.19 \cdot 10^{-8}$
cpQM	0.0001006	0.0001006	$9.943 \cdot 10^{-8}$	$3.086 \cdot 10^{-6}$	$3.086 \cdot 10^{-6}$	$3.24 \cdot 10^{-8}$
cpb	$-3.121 \cdot 10^{-7}$	$-3.121 \cdot 10^{-7}$	$-6.633 \cdot 10^{-6}$	$3.103 \cdot 10^{-6}$	$3.103 \cdot 10^{-6}$	$3.223 \cdot 10^{-8}$
sm	0	0	0	0.002039	0.002039	0

### 1.47 $b\bar{b} \rightarrow \nu_e \bar{\nu}_e$

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
cQ1M1	-0.01836	-0.01836	0	0.07861	0.07861	0
cbW	$3.323 \cdot 10^{-5}$	$3.323 \cdot 10^{-5}$	$3.01 \cdot 10^{-8}$	0.00216	0.00216	$4.631 \cdot 10^{-8}$
cbWI	$1.202 \cdot 10^{-19}$	$-7.779 \cdot 10^{-20}$	1.647	0.001424	0.001424	0
cpQ3	0.0003079	0.0003079	$3.248 \cdot 10^{-8}$	$2.211 \cdot 10^{-5}$	$2.211 \cdot 10^{-5}$	0
cpQM	0.0001583	0.0001583	0	$5.686 \cdot 10^{-6}$	$5.686 \cdot 10^{-6}$	0
cpb	$-5.513 \cdot 10^{-5}$	$-5.513 \cdot 10^{-5}$	$-3.628 \cdot 10^{-8}$	$1.073 \cdot 10^{-5}$	$1.073 \cdot 10^{-5}$	0
sm	0	0	0	0.001113	0.001113	0

### 1.48 $b\bar{b} \rightarrow b\bar{b}$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
cQQ1	-0.2456	-0.2456	0	0.5197	0.5197	0
cQQ8	-0.8156	-0.8156	$2.452 \cdot 10^{-8}$	0.1614	0.1614	$6.197 \cdot 10^{-8}$
cQb1	0.1903	0.1903	$-5.254 \cdot 10^{-8}$	2.031	2.031	0
cQb8	-0.714	-0.714	0	0.7444	0.7444	0
cbW	-0.02686	-0.02686	0	0.3545	0.3545	$2.821 \cdot 10^{-8}$
cbWI	$3 \cdot 10^{-18}$	$3.45 \cdot 10^{-18}$	-0.1501	0.06696	0.06696	$1.493 \cdot 10^{-8}$
cpQ3	-0.1108	-0.1108	0	0.00543	0.00543	$1.842 \cdot 10^{-8}$
cpQM	-0.0961	-0.0961	$-1.041 \cdot 10^{-8}$	0.008084	0.008084	$1.237 \cdot 10^{-8}$
cpb	0.0001522	0.0001522	$-6.569 \cdot 10^{-8}$	0.0002249	0.0002249	0
sm	0	0	0	23.31	23.31	0

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

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
cQd1	-0.003353	-0.003353	$-5.965 \cdot 10^{-8}$	0.2305	0.2305	0
cQd8	0.5519	0.5519	0	0.1862	0.1862	0
cQq11	0.1747	0.1747	0	0.7976	0.7976	0
cQq13	0.1786	0.1786	0	0.8156	0.8156	0
cQq81	0.03176	0.03176	0	0.01071	0.01071	0
cQq83	0.178	0.178	0	0.06007	0.06007	0
cbQqd1	0	0	0	0.5	0.5	$4 \cdot 10^{-8}$
cbQqd1I	0	0	0	0.5	0.5	$4 \cdot 10^{-8}$
cbQqd8	0	0	0	0.1111	0.1111	$-9 \cdot 10^{-8}$
cbQqd8I	0	0	0	0.1111	0.1111	$-9 \cdot 10^{-8}$



cbW	0.0002073	0.0002073	0	0.002469	0.002469	0
cbWI	$1.11 \cdot 10^{-17}$	$1.118 \cdot 10^{-17}$	$-0.006574$	0.002262	0.002262	0
cpQ3	$5.402 \cdot 10^{-5}$	$5.402 \cdot 10^{-5}$	$-3.703 \cdot 10^{-8}$	$7.154 \cdot 10^{-6}$	$7.154 \cdot 10^{-6}$	$-8.387 \cdot 10^{-8}$
cpQM	0.001237	0.001237	$8.087 \cdot 10^{-8}$	$3.998 \cdot 10^{-5}$	$3.998 \cdot 10^{-5}$	$2.501 \cdot 10^{-8}$
cpb	$-3.378 \cdot 10^{-5}$	$-3.378 \cdot 10^{-5}$	$-5.92 \cdot 10^{-8}$	$1.201 \cdot 10^{-5}$	$1.201 \cdot 10^{-5}$	$8.326 \cdot 10^{-8}$
sm	0	0	0	0.8248	0.8248	0

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

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
cQQ1	-1.002	-1.002	0	0.7182	0.7182	0
cQQ8	-1.176	-1.176	0	0.1735	0.1735	0
cQb1	-0.002331	-0.002331	$-4.29 \cdot 10^{-8}$	0.04175	0.04175	0
cQb8	0.0404	0.0404	0	0.007074	0.007074	0
cQt1	-0.1029	-0.1029	0	0.04175	0.04175	0
cQt8	-0.08437	-0.08437	$1.185 \cdot 10^{-8}$	0.007074	0.007074	0
cQtQb1	0.00231	0.00231	0	1.159	1.159	0
cQtQb1I	$-4.377 \cdot 10^{-18}$	$1.215 \cdot 10^{-18}$	$1.278$	0.5357	0.5357	0
cQtQb8	0.004464	0.004464	0	0.101	0.101	0
cQtQb8I	$7.257 \cdot 10^{-20}$	$2.424 \cdot 10^{-19}$	$-2.339$	0.09797	0.09797	0
cbW	0.01087	0.01087	0	0.4082	0.4082	$2.45 \cdot 10^{-8}$
cbWI	$-9.723 \cdot 10^{-19}$	$7.195 \cdot 10^{-21}$	$1.007$	0.6078	0.6078	$1.645 \cdot 10^{-8}$
cpQ3	0.9348	0.9348	$3.209 \cdot 10^{-8}$	0.07653	0.07653	$2.613 \cdot 10^{-8}$
cpQM	-0.001144	-0.001144	0	$1.638 \cdot 10^{-6}$	$1.638 \cdot 10^{-6}$	$-1.221 \cdot 10^{-7}$
cpb	$-4.484 \cdot 10^{-6}$	$-4.484 \cdot 10^{-6}$	$-4.237 \cdot 10^{-7}$	$1.209 \cdot 10^{-5}$	$1.209 \cdot 10^{-5}$	$8.269 \cdot 10^{-8}$
cpt	-0.002005	-0.002005	0	$4.045 \cdot 10^{-5}$	$4.045 \cdot 10^{-5}$	$2.472 \cdot 10^{-8}$
cptb	0.0001761	0.0001761	0	0.0007628	0.0007628	$1.311 \cdot 10^{-8}$
cptbI	$-8.564 \cdot 10^{-22}$	$-1.649 \cdot 10^{-20}$	$-18.26$	0.0005773	0.0005773	$1.732 \cdot 10^{-8}$

ctG	-0.06231	-0.06231	$4.814 \cdot 10^{-8}$	0.02533	0.02533	0
ctGI	$4.244 \cdot 10^{-18}$	$1.564 \cdot 10^{-17}$	-2.685	0.02123	0.02123	0
ctW	-0.3954	-0.3954	$5.059 \cdot 10^{-8}$	0.4537	0.4537	$4.408 \cdot 10^{-8}$
ctWI	$1.311 \cdot 10^{-17}$	$-3.097 \cdot 10^{-17}$	3.363	0.008876	0.008876	$1.577 \cdot 10^{-7}$
ctZ	0.004696	0.004696	$5.537 \cdot 10^{-7}$	0.002364	0.002364	$1.058 \cdot 10^{-6}$
ctZI	$-1.928 \cdot 10^{-18}$	$-1.029 \cdot 10^{-18}$	0.4664	0.002485	0.002485	$1.046 \cdot 10^{-6}$
ctb1	-0.03652	-0.03652	$-5.477 \cdot 10^{-8}$	0.6327	0.6327	0
ctb8	0.1368	0.1368	0	0.03961	0.03961	0
ctp	$-1.317 \cdot 10^{-5}$	$-1.317 \cdot 10^{-5}$	0	$6.089 \cdot 10^{-7}$	$6.089 \cdot 10^{-7}$	0
ctpI	$1.37 \cdot 10^{-21}$	$8.705 \cdot 10^{-22}$	0.3648	$6.906 \cdot 10^{-7}$	$6.906 \cdot 10^{-7}$	0
sm	0	0	0	3.337	3.337	$2.996 \cdot 10^{-8}$

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

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
cQbqu1	0	0	0	0.5	0.5	0
cQbqu1I	0	0	0	0.5	0.5	0
cQbqu1T	0	0	0	15.1	3.138	0.7922
cQbqu1TI	0	0	0	36.14	0.1264	0.9965
cQbqu8	0	0	0	0.1111	0.1111	0
cQbqu8I	0	0	0	0.1111	0.1111	0
cQbqu8T	0	0	0	3.355	0.6973	0.7922
cQbqu8TI	0	0	0	4.88	0.2094	0.9571
cQq11	-0.1056	-0.1056	$9.467 \cdot 10^{-8}$	0.5167	0.5167	0
cQq13	0.125	0.125	0	0.6116	0.6116	0
cQq81	0.3301	0.3301	0	0.1114	0.1114	0
cQq83	-0.04149	-0.04149	0	0.014	0.014	0
cQu1	0.01633	0.01633	0	0.5611	0.5611	0

cQu8	0.0313	0.0313	0	0.01056	0.01056	0
cbW	0.0001609	0.0001609	$6.213 \cdot 10^{-8}$	0.005212	0.005212	$1.919 \cdot 10^{-8}$
cbWI	$3.517 \cdot 10^{-18}$	$3.186 \cdot 10^{-18}$	0.09424	0.004395	0.004395	$2.276 \cdot 10^{-8}$
cpQ3	0.001081	0.001081	0	$6.306 \cdot 10^{-5}$	$6.306 \cdot 10^{-5}$	$4.758 \cdot 10^{-8}$
cpQM	0.0006157	0.0006157	$3.248 \cdot 10^{-8}$	$1.776 \cdot 10^{-5}$	$1.776 \cdot 10^{-5}$	$5.632 \cdot 10^{-8}$
cpb	$3.597 \cdot 10^{-5}$	$3.597 \cdot 10^{-5}$	$-2.78 \cdot 10^{-8}$	$1.912 \cdot 10^{-5}$	$1.912 \cdot 10^{-5}$	0
sm	0	0	0	0.5504	0.5504	0

## 1.52 $b\bar{t} \rightarrow e^- \bar{\nu}_e$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
cQl31	0.006343	0.006343	$1.576 \cdot 10^{-8}$	0.02998	0.02998	0
cbW	$2.459 \cdot 10^{-5}$	$2.459 \cdot 10^{-5}$	0	0.002423	0.002423	0
cbWI	$6.867 \cdot 10^{-21}$	$-2.049 \cdot 10^{-19}$	30.83	0.004432	0.004432	0
cbLS1	0	0	0	0.08333	0.08333	0
cbLSI1	0	0	0	0.08333	0.08333	0
cpQ3	0.001203	0.001203	$8.31 \cdot 10^{-8}$	$3.648 \cdot 10^{-5}$	$3.648 \cdot 10^{-5}$	$2.741 \cdot 10^{-8}$
cptb	$-7.312 \cdot 10^{-7}$	$-7.312 \cdot 10^{-7}$	$2.735 \cdot 10^{-8}$	$6.866 \cdot 10^{-6}$	$6.866 \cdot 10^{-6}$	$2.913 \cdot 10^{-8}$
cptbI	$6.384 \cdot 10^{-22}$	$-1.931 \cdot 10^{-21}$	4.025	$1.295 \cdot 10^{-6}$	$1.295 \cdot 10^{-6}$	$7.722 \cdot 10^{-8}$
ctW	0.0003773	0.0003773	$2.651 \cdot 10^{-8}$	0.0011	0.0011	0
ctWI	$1.882 \cdot 10^{-18}$	$7.82 \cdot 10^{-18}$	-3.155	0.003846	0.003846	$2.6 \cdot 10^{-8}$
ctlS1	0	0	0	0.08333	0.08333	0
ctlSI1	0	0	0	0.08333	0.08333	0
ctlT1	0	0	0	0.2535	0.2535	0
ctlTI1	0	0	0	0.8146	0.8146	0
sm	0	0	0	0.009925	0.009925	$3.023 \cdot 10^{-8}$

**1.53**  $c\bar{c} \rightarrow \mu^+\mu^-$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
sm	0	0	0	0.002946	0.002946	$-3.394 \cdot 10^{-8}$

**1.54**  $c\bar{s} \rightarrow \tau^+\nu_\tau$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
sm	0	0	0	0.01281	0.01281	0

**1.55**  $d\bar{d} \rightarrow c\bar{c}$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
sm	0	0	0	0.4941	0.4941	0

**1.56**  $d\bar{d} \rightarrow e^+e^-$

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
sm	0	0	0	0.0003053	0.0003053	$-9.827 \cdot 10^{-8}$

**1.57**  $d\bar{d} \rightarrow s\bar{s}$

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

sm	0	0	0	0.5468	0.5468	0
----	---	---	---	--------	--------	---

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

			interference			square		
		mod1	mod2	$1 - \text{mod2}/\text{mod1}$		mod1	mod2	$1 - \text{mod2}/\text{mod1}$
sm		0	0	0		14.4	14.4	0

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

			interference			square		
		mod1	mod2	$1 - \text{mod2}/\text{mod1}$		mod1	mod2	$1 - \text{mod2}/\text{mod1}$
sm		0	0	0		0.02038	0.02038	0

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

			interference			square		
		mod1	mod2	$1 - \text{mod2}/\text{mod1}$		mod1	mod2	$1 - \text{mod2}/\text{mod1}$
sm		0	0	0		0.2107	0.2107	0

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

			interference			square		
		mod1	mod2	$1 - \text{mod2}/\text{mod1}$		mod1	mod2	$1 - \text{mod2}/\text{mod1}$
sm		0	0	0		0.3763	0.3763	$-7.973 \cdot 10^{-8}$

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

			interference			square
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$		mod1	$1 - \text{mod2}/\text{mod1}$
sm	0	0	0	0.01424	0.01424	$-7.021 \cdot 10^{-8}$

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

			interference			square
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$		mod1	$1 - \text{mod2}/\text{mod1}$
sm	0	0	0	0.0165	0.0165	$-6.059 \cdot 10^{-8}$

### 1.64 $gg \rightarrow gg$

			interference			square
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$		mod1	$1 - \text{mod2}/\text{mod1}$
sm	0	0	0	431.9	431.9	0

### 1.65 $gg \rightarrow ggg$

			interference			square
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$		mod1	$1 - \text{mod2}/\text{mod1}$
sm	0	0	0	0.0435	0.0435	0

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

			interference			square
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$		mod1	$1 - \text{mod2}/\text{mod1}$
ctG	0.6775	0.6775	0	0.1214	0.1214	0
ctGI	$-3.161 \cdot 10^{-18}$	$-3.161 \cdot 10^{-18}$	0	0.0878	0.0878	0

sm	0	0	0	1.116	1.116	0
----	---	---	---	-------	-------	---

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

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
sm	0	0	0	0.4095	0.4095	0

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

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
sm	0	0	0	0.002067	0.002067	0

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

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
sm	0	0	0	4.637	4.637	0

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

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
cQ132	0.07545	0.07545	$2.651 \cdot 10^{-8}$	0.8103	0.8103	0
cQ1M2	0.03767	0.03767	$2.654 \cdot 10^{-8}$	0.2023	0.2023	0
cpQM	$-0.0002618$	$-0.0002618$	$3.82 \cdot 10^{-8}$	$1.184 \cdot 10^{-5}$	$1.184 \cdot 10^{-5}$	0
cpt	$2.05 \cdot 10^{-5}$	$2.05 \cdot 10^{-5}$	$-9.754 \cdot 10^{-8}$	$3.526 \cdot 10^{-6}$	$3.526 \cdot 10^{-6}$	0

ctW	$-1.231 \cdot 10^{-9}$	0	1	$1.072 \cdot 10^{-15}$	0	1
ctWI	$-3.372 \cdot 10^{-24}$	0	1	$1.047 \cdot 10^{-15}$	0	1
ctZ	0.001323	0.001323	$6.045 \cdot 10^{-7}$	0.00314	0.00314	$1.051 \cdot 10^{-6}$
ctZI	$-6.098 \cdot 10^{-18}$	$-4.513 \cdot 10^{-18}$	0.2599	0.002221	0.002221	$1.036 \cdot 10^{-6}$
ctl2	-0.002445	-0.002445	$-1.227 \cdot 10^{-7}$	0.05016	0.05016	0
sm	0	0	0	0.0008623	0.0008623	$2.319 \cdot 10^{-8}$

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

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
cQe3	-0.00885	-0.00885	$-4.52 \cdot 10^{-8}$	0.1705	0.1705	0
cQlM3	-0.03483	-0.03483	$2.871 \cdot 10^{-8}$	0.1462	0.1462	0
cpQM	$-2.02 \cdot 10^{-5}$	$-2.02 \cdot 10^{-5}$	$2.475 \cdot 10^{-7}$	$3.177 \cdot 10^{-6}$	$3.177 \cdot 10^{-6}$	$-3.148 \cdot 10^{-8}$
cpt	$7.351 \cdot 10^{-5}$	$7.351 \cdot 10^{-5}$	$-1.496 \cdot 10^{-7}$	$3.174 \cdot 10^{-6}$	$3.174 \cdot 10^{-6}$	$-6.302 \cdot 10^{-8}$
ctW	0.005148	0.005148	$4.857 \cdot 10^{-7}$	0.01509	0.01509	$1.126 \cdot 10^{-6}$
ctWI	$-1.297 \cdot 10^{-17}$	$-1.431 \cdot 10^{-17}$	-0.103	0.01452	0.01452	$1.102 \cdot 10^{-6}$
ctZ	-0.006545	-0.006545	$5.042 \cdot 10^{-7}$	0.01514	0.01514	$1.057 \cdot 10^{-6}$
ctZI	$1.153 \cdot 10^{-17}$	$4.756 \cdot 10^{-18}$	0.5877	0.01183	0.01183	$1.099 \cdot 10^{-6}$
cte3	-0.02546	-0.02546	$-7.855 \cdot 10^{-8}$	0.1462	0.1462	0
ctl3	-0.003466	-0.003466	0	0.01378	0.01378	0
ctlS3	0.003321	0.003321	0	0.1668	0.1668	0
ctlSI3	$-1.123 \cdot 10^{-21}$	$1.453 \cdot 10^{-21}$	2.293	0.1668	0.1668	0
ctlT3	0.005798	0.005798	0	0.5858	0.5858	0
ctlTI3	$8.72 \cdot 10^{-19}$	$1.56 \cdot 10^{-18}$	-0.7891	0.5857	0.5857	0
ctp	$-1.006 \cdot 10^{-6}$	$-1.006 \cdot 10^{-6}$	0	$3.101 \cdot 10^{-8}$	$3.101 \cdot 10^{-8}$	0
ctpI	$-4.136 \cdot 10^{-25}$	$3.676 \cdot 10^{-25}$	1.889	$3.49 \cdot 10^{-8}$	$3.49 \cdot 10^{-8}$	0
sm	0	0	0	0.004607	0.004607	$-2.171 \cdot 10^{-8}$



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

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
cQq11	0.03715	0.03715	$2.692 \cdot 10^{-8}$	0.1663	0.1663	0
cQq13	0.005101	0.005101	0	0.01956	0.01956	0
cQq81	0.02415	0.02415	0	0.001575	0.001575	0
cQq83	0.3144	0.3144	0	0.09951	0.09951	0
cQu1	0.007015	0.007015	$-4.277 \cdot 10^{-8}$	0.1299	0.1299	0
cQu8	0.5407	0.5407	0	0.1759	0.1759	0
cpQM	-0.0001773	-0.0001773	$5.64 \cdot 10^{-8}$	$8.179 \cdot 10^{-6}$	$8.179 \cdot 10^{-6}$	0
cpt	-0.000178	-0.000178	0	$2.992 \cdot 10^{-5}$	$2.992 \cdot 10^{-5}$	$6.684 \cdot 10^{-8}$
ctG	0.1977	0.1977	0	0.02459	0.02459	0
ctGI	$-4.407 \cdot 10^{-24}$	$-2.936 \cdot 10^{-24}$	0.3337	0.03576	0.03576	0
ctQqu1	0	0	0	0.5004	0.5004	$5.995 \cdot 10^{-8}$
ctQqu1I	0	0	0	0.5004	0.5004	$5.995 \cdot 10^{-8}$
ctQqu8	0	0	0	0.1112	0.1112	$-1.798 \cdot 10^{-7}$
ctQqu8I	0	0	0	0.1112	0.1112	$-1.798 \cdot 10^{-7}$
ctW	0.004191	0.004191	$4.056 \cdot 10^{-7}$	0.009893	0.009893	$9.4 \cdot 10^{-7}$
ctWI	$1.156 \cdot 10^{-10}$	$1.156 \cdot 10^{-10}$	$6.057 \cdot 10^{-7}$	0.004409	0.004409	$9.299 \cdot 10^{-7}$
ctZ	-0.002778	-0.002778	$4.68 \cdot 10^{-7}$	0.006785	0.006785	$1.061 \cdot 10^{-6}$
ctZI	$-1.012 \cdot 10^{-10}$	$-1.012 \cdot 10^{-10}$	$5.931 \cdot 10^{-7}$	0.01409	0.01409	$1.064 \cdot 10^{-6}$
ctq1	0.03149	0.03149	$-6.352 \cdot 10^{-8}$	0.8937	0.8937	0
ctq8	0.4274	0.4274	0	0.1377	0.1377	0
ctu1	0.01982	0.01982	$-5.047 \cdot 10^{-8}$	0.1663	0.1663	0
ctu8	0.03236	0.03236	0	0.004347	0.004347	0
sm	0	0	0	0.8047	0.8047	0

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

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
cQd1	-0.003886	-0.003886	$-5.146 \cdot 10^{-8}$	0.1569	0.1569	0
cQd8	0.05577	0.05577	0	0.01225	0.01225	0
cQq11	-0.1517	-0.1517	0	0.7463	0.7463	0
cQq13	-0.0003056	-0.0003056	$-1.964 \cdot 10^{-7}$	0.002716	0.002716	0
cQq81	0.2761	0.2761	0	0.08659	0.08659	0
cQq83	-0.2837	-0.2837	0	0.08916	0.08916	0
cQtqd1	0	0	0	0.5004	0.5004	0
cQtqd1I	0	0	0	0.5004	0.5004	0
cQtqd1T	0	0	0	13.4	4.373	0.6737
cQtqd1TI	0	0	0	25.67	0.8566	0.9666
cQtqd8	0	0	0	0.1112	0.1112	0
cQtqd8I	0	0	0	0.1112	0.1112	0
cQtqd8T	0	0	0	3.68	0.6629	0.8198
cQtqd8TI	0	0	0	5.705	0.1903	0.9666
cpQM	-0.001071	-0.001071	0	$3.744 \cdot 10^{-5}$	$3.744 \cdot 10^{-5}$	0
cpt	$2.784 \cdot 10^{-5}$	$2.784 \cdot 10^{-5}$	$-3.233 \cdot 10^{-7}$	$1.804 \cdot 10^{-6}$	$1.804 \cdot 10^{-6}$	$-5.543 \cdot 10^{-8}$
ctG	0.1977	0.1977	0	0.01286	0.01286	0
ctGI	$-2.573 \cdot 10^{-24}$	$3.676 \cdot 10^{-25}$	1.143	0.01814	0.01814	0
ctW	0.004068	0.004068	$-7.375 \cdot 10^{-8}$	0.006403	0.006403	$3.748 \cdot 10^{-7}$
ctWI	$1.36 \cdot 10^{-15}$	$1.36 \cdot 10^{-15}$	-0.0002107	0.0007788	0.0007788	$3.852 \cdot 10^{-7}$
ctZ	0.001287	0.001287	$6.216 \cdot 10^{-7}$	0.001749	0.001749	$1.086 \cdot 10^{-6}$
ctZI	$-1.171 \cdot 10^{-15}$	$-1.168 \cdot 10^{-15}$	0.002076	0.002123	0.002123	$1.036 \cdot 10^{-6}$
ctd1	-0.02266	-0.02266	$-4.413 \cdot 10^{-8}$	0.3897	0.3897	0
ctd8	0.2761	0.2761	0	0.08659	0.08659	0
ctq1	-0.001266	-0.001266	$3.158 \cdot 10^{-7}$	0.1643	0.1643	0
ctq8	0.3437	0.3437	0	0.1094	0.1094	0
sm	0	0	0	0.7349	0.7349	0

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

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
cQd1	-0.002587	-0.002587	$-3.865 \cdot 10^{-8}$	0.06416	0.06416	0
cQd8	0.205	0.205	0	0.06259	0.06259	0
cQq11	-0.1871	-0.1871	$5.345 \cdot 10^{-8}$	0.9195	0.9195	0
cQq13	0.1374	0.1374	0	0.6762	0.6762	0
cQq81	0.1481	0.1481	0	0.04341	0.04341	0
cQq83	-0.4163	-0.4163	0	0.1339	0.1339	0
cQtqd1	0	0	0	0.5004	0.5004	0
cQtqd1I	0	0	0	0.5004	0.5004	0
cQtqd1T	0	0	0	9.549	6.785	0.2894
cQtqd1TI	0	0	0	37.47	0.6429	0.9828
cQtqd8	0	0	0	0.1112	0.1112	0
cQtqd8I	0	0	0	0.1112	0.1112	0
cQtqd8T	0	0	0	7.458	0.107	0.9857
cQtqd8TI	0	0	0	8.326	0.1429	0.9828
cpQM	-0.001322	-0.001322	$7.563 \cdot 10^{-8}$	$4.608 \cdot 10^{-5}$	$4.608 \cdot 10^{-5}$	$2.17 \cdot 10^{-8}$
cpt	$2.947 \cdot 10^{-5}$	$2.947 \cdot 10^{-5}$	$-1.697 \cdot 10^{-7}$	$1.275 \cdot 10^{-5}$	$1.275 \cdot 10^{-5}$	0
ctG	0.1977	0.1977	0	0.03194	0.03194	0
ctGI	$-2.966 \cdot 10^{-29}$	$-2.39 \cdot 10^{-24}$	$-8.056 \cdot 10^4$	0.006098	0.006098	0
ctW	0.002763	0.002763	0	0.006554	0.006554	$3.814 \cdot 10^{-7}$
ctWI	$5.663 \cdot 10^{-13}$	$5.663 \cdot 10^{-13}$	$5.881 \cdot 10^{-6}$	0.005325	0.005325	$3.756 \cdot 10^{-7}$
ctZ	0.0003239	0.0003239	$8.645 \cdot 10^{-7}$	0.0055	0.0055	$1.073 \cdot 10^{-6}$
ctZI	$-4.953 \cdot 10^{-13}$	$-4.953 \cdot 10^{-13}$	$1.009 \cdot 10^{-6}$	0.0007139	0.0007139	$1.065 \cdot 10^{-6}$
ctd1	-0.01157	-0.01157	$-8.644 \cdot 10^{-8}$	0.1954	0.1954	0
ctd8	0.1481	0.1481	0	0.04341	0.04341	0
ctq1	0.003998	0.003998	$-1.751 \cdot 10^{-7}$	0.3453	0.3453	0
ctq8	0.1318	0.1318	0	0.03789	0.03789	0

sm	0	0	0	0.5781	0.5781	0
----	---	---	---	--------	--------	---

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

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
cQQ1	-49.35	-49.35	0	8.426	8.426	0
cQQ8	-4.577	-4.577	$2.185 \cdot 10^{-8}$	0.7693	0.7693	$3.9 \cdot 10^{-8}$
cQt1	-1.934	-1.934	0	7.417	7.417	0
cQt8	-3.335	-3.335	0	1.979	1.979	0
cpQM	0.4501	0.4501	0	0.01299	0.01299	0
cpt	-0.03533	-0.03533	$-2.83 \cdot 10^{-8}$	0.008758	0.008758	0
ctG	2.248	2.248	0	10.4	10.4	0
ctGI	$1.878 \cdot 10^{-16}$	$1.199 \cdot 10^{-16}$	0.3617	2.914	2.914	0
ctW	-0.3846	-0.3846	$4.681 \cdot 10^{-7}$	0.6002	0.6002	$9.497 \cdot 10^{-7}$
ctWI	$-3.131 \cdot 10^{-18}$	$-2.514 \cdot 10^{-18}$	0.1968	0.06355	0.06355	$9.441 \cdot 10^{-7}$
ctZ	0.03977	0.03977	$5.531 \cdot 10^{-7}$	0.07601	0.07601	$1.066 \cdot 10^{-6}$
ctZI	$-9.034 \cdot 10^{-16}$	$1.822 \cdot 10^{-16}$	1.202	1.396	1.396	$1.074 \cdot 10^{-6}$
ctp	0.0423	0.0423	0	0.008405	0.008405	0
ctpI	$7.706 \cdot 10^{-18}$	$1.557 \cdot 10^{-17}$	-1.021	0.005143	0.005143	0
ctt1	-90.83	-90.83	$-1.101 \cdot 10^{-8}$	33.7	33.7	0
sm	0	0	0	77.07	77.07	0

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

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
sm	0	0	0	0.01291	0.01291	0

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

interference				square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
sm	0	0	0	0.00712	0.00712	$2.809 \cdot 10^{-8}$

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

interference				square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
sm	0	0	0	6.715	6.715	0

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

interference				square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
sm	0	0	0	0.0006499	0.0006499	0

**1.80**  $u\bar{u} \rightarrow c\bar{c}$

interference				square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
sm	0	0	0	0.9546	0.9546	0

**1.81**  $u\bar{u} \rightarrow u\bar{u}$

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

sm	0	0	0	165.1	165.1	0
----	---	---	---	-------	-------	---

## 1.82 $zz \rightarrow W^+W^-$

sm	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
	0	0	0	33.53	33.53	$5.965 \cdot 10^{-8}$

## 1.83 $zz \rightarrow zz$

sm	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
	0	0	0	0.07904	0.07904	0

# 2 By parameter point

## 2.1 cQQ1

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$b\bar{b} \rightarrow b\bar{b}$	-0.2456	-0.2456	0	0.5197	0.5197	0
$b\bar{b} \rightarrow t\bar{t}$	-1.002	-1.002	0	0.7182	0.7182	0
$t\bar{t} \rightarrow t\bar{t}$	-49.35	-49.35	0	8.426	8.426	0

## 2.2 cQQ8

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

$b\bar{b} \rightarrow b\bar{b}$	-0.8156	-0.8156	$2.452 \cdot 10^{-8}$	0.1614	0.1614	$6.197 \cdot 10^{-8}$
$b\bar{b} \rightarrow t\bar{t}$	-1.176	-1.176	0	0.1735	0.1735	0
$t\bar{t} \rightarrow t\bar{t}$	-4.577	-4.577	$2.185 \cdot 10^{-8}$	0.7693	0.7693	$3.9 \cdot 10^{-8}$

### 2.3 cQb1

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$b\bar{b} \rightarrow b\bar{b}$	0.1903	0.1903	$-5.254 \cdot 10^{-8}$	2.031	2.031	0
$b\bar{b} \rightarrow t\bar{t}$	-0.002331	-0.002331	$-4.29 \cdot 10^{-8}$	0.04175	0.04175	0

### 2.4 cQb8

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$b\bar{b} \rightarrow b\bar{b}$	-0.714	-0.714	0	0.7444	0.7444	0
$b\bar{b} \rightarrow t\bar{t}$	0.0404	0.0404	0	0.007074	0.007074	0

### 2.5 cQbqu1

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$\bar{b}t \rightarrow \bar{d}u$	0	0	0	0.25	0.25	0
$b\bar{b} \rightarrow u\bar{u}$	0	0	0	0.5	0.5	0

### 2.6 cQbqu1I

interference	square
--------------	--------

	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$\bar{b}t \rightarrow \bar{d}u$	0	0	0	0.25	0.25	0
$b\bar{b} \rightarrow u\bar{u}$	0	0	0	0.5	0.5	0

## 2.7 cQbqu1T

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$\bar{b}t \rightarrow \bar{d}u$	0	0	0	22.1	0.581	0.9737
$b\bar{b} \rightarrow u\bar{u}$	0	0	0	15.1	3.138	0.7922

## 2.8 cQbqu1TI

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$\bar{b}t \rightarrow \bar{d}u$	0	0	0	7.751	1.585	0.7956
$b\bar{b} \rightarrow u\bar{u}$	0	0	0	36.14	0.1264	0.9965

## 2.9 cQbqu8

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$\bar{b}t \rightarrow \bar{d}u$	0	0	0	0.05556	0.05556	0
$b\bar{b} \rightarrow u\bar{u}$	0	0	0	0.1111	0.1111	0

## 2.10 cQbqu8I

interference square



	mod1	mod2	1 − mod2/mod1	mod1	mod2	1 − mod2/mod1
$\bar{b}t \rightarrow \bar{d}u$	0	0	0	0.05556	0.05556	0
$b\bar{b} \rightarrow u\bar{u}$	0	0	0	0.1111	0.1111	0

## 2.11 cQbqu8T

	interference			square		
	mod1	mod2	1 − mod2/mod1	mod1	mod2	1 − mod2/mod1
$\bar{b}t \rightarrow \bar{d}u$	0	0	0	4.912	0.1291	0.9737
$b\bar{b} \rightarrow u\bar{u}$	0	0	0	3.355	0.6973	0.7922

## 2.12 cQbqu8TI

	interference			square		
	mod1	mod2	1 − mod2/mod1	mod1	mod2	1 − mod2/mod1
$\bar{b}t \rightarrow \bar{d}u$	0	0	0	4.572	0.08541	0.9813
$b\bar{b} \rightarrow u\bar{u}$	0	0	0	4.88	0.2094	0.9571

## 2.13 cQd1

	interference			square		
	mod1	mod2	1 − mod2/mod1	mod1	mod2	1 − mod2/mod1
$b\bar{b} \rightarrow d\bar{d}$	−0.003353	−0.003353	$−5.965 \cdot 10^{-8}$	0.2305	0.2305	0
$t\bar{t} \rightarrow d\bar{d}$	−0.003886	−0.003886	$−5.146 \cdot 10^{-8}$	0.1569	0.1569	0
$t\bar{t} \rightarrow s\bar{s}$	−0.002587	−0.002587	$−3.865 \cdot 10^{-8}$	0.06416	0.06416	0

## 2.14 cQd8

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$b\bar{b} \rightarrow d\bar{d}$	0.5519	0.5519	0	0.1862	0.1862	0
$t\bar{t} \rightarrow d\bar{d}$	0.05577	0.05577	0	0.01225	0.01225	0
$t\bar{t} \rightarrow s\bar{s}$	0.205	0.205	0	0.06259	0.06259	0

## 2.15 cQe2

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$b\bar{b} \rightarrow \mu^+\mu^-$	-0.006986	-0.006986	$-4.294 \cdot 10^{-8}$	0.1601	0.1601	0

## 2.16 cQe3

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$t\bar{t} \rightarrow \tau^+\tau^-$	-0.00885	-0.00885	$-4.52 \cdot 10^{-8}$	0.1705	0.1705	0

## 2.17 cQl31

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$b\bar{t} \rightarrow e^-\bar{\nu}_e$	0.006343	0.006343	$1.576 \cdot 10^{-8}$	0.02998	0.02998	0

## 2.18 cQl32

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

$b\bar{b} \rightarrow \mu^+\mu^-$	0.008082	0.008082	$2.475 \cdot 10^{-8}$	0.08512	0.08512	0
$t\bar{t} \rightarrow \nu_\mu\bar{\nu}_\mu$	0.07545	0.07545	$2.651 \cdot 10^{-8}$	0.8103	0.8103	0

## 2.19 cQIM1

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$b\bar{b} \rightarrow \nu_e\bar{\nu}_e$	-0.01836	-0.01836	0	0.07861	0.07861	0

## 2.20 cQIM2

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$b\bar{b} \rightarrow \mu^+\mu^-$	0.04296	0.04296	$2.328 \cdot 10^{-8}$	0.2262	0.2262	0
$t\bar{t} \rightarrow \nu_\mu\bar{\nu}_\mu$	0.03767	0.03767	$2.654 \cdot 10^{-8}$	0.2023	0.2023	0

## 2.21 cQIM3

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$t\bar{t} \rightarrow \tau^+\tau^-$	-0.03483	-0.03483	$2.871 \cdot 10^{-8}$	0.1462	0.1462	0

## 2.22 cQq11

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$b\bar{b} \rightarrow d\bar{d}$	0.1747	0.1747	0	0.7976	0.7976	0
$b\bar{b} \rightarrow u\bar{u}$	-0.1056	-0.1056	$9.467 \cdot 10^{-8}$	0.5167	0.5167	0

$t\bar{t} \rightarrow c\bar{c}$	0.03715	0.03715	$2.692 \cdot 10^{-8}$	0.1663	0.1663	0
$t\bar{t} \rightarrow d\bar{d}$	-0.1517	-0.1517	0	0.7463	0.7463	0
$t\bar{t} \rightarrow s\bar{s}$	-0.1871	-0.1871	$5.345 \cdot 10^{-8}$	0.9195	0.9195	0

## 2.23 cQq13

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$b\bar{t} \rightarrow \bar{d}u$	0.05131	0.05131	$1.949 \cdot 10^{-8}$	0.2425	0.2425	0
$b\bar{b} \rightarrow d\bar{d}$	0.1786	0.1786	0	0.8156	0.8156	0
$b\bar{b} \rightarrow u\bar{u}$	0.125	0.125	0	0.6116	0.6116	0
$t\bar{t} \rightarrow c\bar{c}$	0.005101	0.005101	0	0.01956	0.01956	0
$t\bar{t} \rightarrow d\bar{d}$	-0.0003056	-0.0003056	$-1.964 \cdot 10^{-7}$	0.002716	0.002716	0
$t\bar{t} \rightarrow s\bar{s}$	0.1374	0.1374	0	0.6762	0.6762	0

## 2.24 cQq81

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$b\bar{b} \rightarrow d\bar{d}$	0.03176	0.03176	0	0.01071	0.01071	0
$b\bar{b} \rightarrow u\bar{u}$	0.3301	0.3301	0	0.1114	0.1114	0
$t\bar{t} \rightarrow c\bar{c}$	0.02415	0.02415	0	0.001575	0.001575	0
$t\bar{t} \rightarrow d\bar{d}$	0.2761	0.2761	0	0.08659	0.08659	0
$t\bar{t} \rightarrow s\bar{s}$	0.1481	0.1481	0	0.04341	0.04341	0

## 2.25 cQq83

interference square

	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$\bar{b}t \rightarrow \bar{d}u$	$1.541 \cdot 10^{-9}$	$2.085 \cdot 10^{-19}$	1	0.2428	0.2428	0
$\bar{b}\bar{b} \rightarrow d\bar{d}$	0.178	0.178	0	0.06007	0.06007	0
$\bar{b}\bar{b} \rightarrow u\bar{u}$	-0.04149	-0.04149	0	0.014	0.014	0
$t\bar{t} \rightarrow c\bar{c}$	0.3144	0.3144	0	0.09951	0.09951	0
$t\bar{t} \rightarrow d\bar{d}$	-0.2837	-0.2837	0	0.08916	0.08916	0
$t\bar{t} \rightarrow s\bar{s}$	-0.4163	-0.4163	0	0.1339	0.1339	0

## 2.26 cQt1

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$\bar{b}\bar{b} \rightarrow t\bar{t}$	-0.1029	-0.1029	0	0.04175	0.04175	0
$t\bar{t} \rightarrow t\bar{t}$	-1.934	-1.934	0	7.417	7.417	0

## 2.27 cQt8

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$\bar{b}\bar{b} \rightarrow t\bar{t}$	-0.08437	-0.08437	$1.185 \cdot 10^{-8}$	0.007074	0.007074	0
$t\bar{t} \rightarrow t\bar{t}$	-3.335	-3.335	0	1.979	1.979	0

## 2.28 cQtQb1

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$\bar{b}\bar{b} \rightarrow t\bar{t}$	0.00231	0.00231	0	1.159	1.159	0

## 2.29 cQtQb1I

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$b\bar{b} \rightarrow t\bar{t}$	$-4.377 \cdot 10^{-18}$	$1.215 \cdot 10^{-18}$	1.278	0.5357	0.5357	0

## 2.30 cQtQb8

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$b\bar{b} \rightarrow t\bar{t}$	0.004464	0.004464	0	0.101	0.101	0

## 2.31 cQtQb8I

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$b\bar{b} \rightarrow t\bar{t}$	$7.257 \cdot 10^{-20}$	$2.424 \cdot 10^{-19}$	-2.339	0.09797	0.09797	0

## 2.32 cQtqd1

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$\bar{b}t \rightarrow \bar{d}u$	0	0	0	0.25	0.25	0
$t\bar{t} \rightarrow d\bar{d}$	0	0	0	0.5004	0.5004	0
$t\bar{t} \rightarrow s\bar{s}$	0	0	0	0.5004	0.5004	0

## 2.33 cQtqd1I

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$\bar{b}t \rightarrow \bar{d}u$	0	0	0	0.25	0.25	0
$t\bar{t} \rightarrow d\bar{d}$	0	0	0	0.5004	0.5004	0
$t\bar{t} \rightarrow s\bar{s}$	0	0	0	0.5004	0.5004	0

### 2.34 cQtqd1T

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$\bar{b}t \rightarrow \bar{d}u$	0	0	0	17.3	0.139	0.992
$t\bar{t} \rightarrow d\bar{d}$	0	0	0	13.4	4.373	0.6737
$t\bar{t} \rightarrow s\bar{s}$	0	0	0	9.549	6.785	0.2894

### 2.35 cQtqd1TI

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$\bar{b}t \rightarrow \bar{d}u$	0	0	0	17.06	0.1315	0.9923
$t\bar{t} \rightarrow d\bar{d}$	0	0	0	25.67	0.8566	0.9666
$t\bar{t} \rightarrow s\bar{s}$	0	0	0	37.47	0.6429	0.9828

### 2.36 cQtqd8

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$\bar{b}t \rightarrow \bar{d}u$	0	0	0	0.05556	0.05556	0
$t\bar{t} \rightarrow d\bar{d}$	0	0	0	0.1112	0.1112	0
$t\bar{t} \rightarrow s\bar{s}$	0	0	0	0.1112	0.1112	0

### 2.37 cQtqd8I

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$\bar{b}t \rightarrow \bar{d}u$	0	0	0	0.05556	0.05556	0
$t\bar{t} \rightarrow d\bar{d}$	0	0	0	0.1112	0.1112	0
$t\bar{t} \rightarrow s\bar{s}$	0	0	0	0.1112	0.1112	0

### 2.38 cQtqd8T

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$\bar{b}t \rightarrow \bar{d}u$	0	0	0	4.572	0.08541	0.9813
$t\bar{t} \rightarrow d\bar{d}$	0	0	0	3.68	0.6629	0.8198
$t\bar{t} \rightarrow s\bar{s}$	0	0	0	7.458	0.107	0.9857

### 2.39 cQtqd8TI

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$\bar{b}t \rightarrow \bar{d}u$	0	0	0	3.791	0.02922	0.9923
$t\bar{t} \rightarrow d\bar{d}$	0	0	0	5.705	0.1903	0.9666
$t\bar{t} \rightarrow s\bar{s}$	0	0	0	8.326	0.1429	0.9828

### 2.40 cQu1

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



$b\bar{b} \rightarrow u\bar{u}$	0.01633	0.01633	0	0.5611	0.5611	0
$t\bar{t} \rightarrow c\bar{c}$	0.007015	0.007015	$-4.277 \cdot 10^{-8}$	0.1299	0.1299	0

## 2.41 cQu8

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$b\bar{b} \rightarrow u\bar{u}$	0.0313	0.0313	0	0.01056	0.01056	0
$t\bar{t} \rightarrow c\bar{c}$	0.5407	0.5407	0	0.1759	0.1759	0

## 2.42 cbQqd1

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$\bar{b}t \rightarrow \bar{d}u$	0	0	0	0.25	0.25	$8 \cdot 10^{-8}$
$b\bar{b} \rightarrow d\bar{d}$	0	0	0	0.5	0.5	$4 \cdot 10^{-8}$

## 2.43 cbQqd1I

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$\bar{b}t \rightarrow \bar{d}u$	0	0	0	0.25	0.25	$8 \cdot 10^{-8}$
$b\bar{b} \rightarrow d\bar{d}$	0	0	0	0.5	0.5	$4 \cdot 10^{-8}$

## 2.44 cbQqd8

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

$\bar{b}t \rightarrow \bar{d}u$	0	0	0	0.05556	0.05556	$-1.26 \cdot 10^{-7}$
$b\bar{b} \rightarrow d\bar{d}$	0	0	0	0.1111	0.1111	$-9 \cdot 10^{-8}$

## 2.45 cbQqd8I

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$\bar{b}t \rightarrow \bar{d}u$	0	0	0	0.05556	0.05556	$-1.26 \cdot 10^{-7}$
$b\bar{b} \rightarrow d\bar{d}$	0	0	0	0.1111	0.1111	$-9 \cdot 10^{-8}$

## 2.46 cbW

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$HH \rightarrow W^+ \bar{t}b$	$-2.93 \cdot 10^{-7}$	$-2.93 \cdot 10^{-7}$	$-3.413 \cdot 10^{-8}$	$1.311 \cdot 10^{-5}$	$1.311 \cdot 10^{-5}$	0
$HH \rightarrow z \bar{b}b$	$6.328 \cdot 10^{-8}$	$6.328 \cdot 10^{-8}$	$3.161 \cdot 10^{-8}$	$1.947 \cdot 10^{-6}$	$1.947 \cdot 10^{-6}$	0
$HW^+ \rightarrow \gamma t \bar{b}$	$-2.96 \cdot 10^{-9}$	$-2.96 \cdot 10^{-9}$	$-3.378 \cdot 10^{-8}$	$2.688 \cdot 10^{-6}$	$2.688 \cdot 10^{-6}$	$-3.721 \cdot 10^{-8}$
$HW^- \rightarrow \bar{t}b$	0.008654	0.008654	$1.155 \cdot 10^{-8}$	1.439	1.439	0
$H\gamma \rightarrow b\bar{b}$	$-2.352 \cdot 10^{-6}$	$-2.352 \cdot 10^{-6}$	$-8.504 \cdot 10^{-8}$	0.4177	0.4177	$-7.182 \cdot 10^{-8}$
$H z \rightarrow b\bar{b}$	0.001424	0.001424	0	0.6216	0.6216	$1.609 \cdot 10^{-8}$
$W^+ W^- \rightarrow H b \bar{b}$	$-2.958 \cdot 10^{-8}$	$-2.958 \cdot 10^{-8}$	$6.762 \cdot 10^{-8}$	$3.682 \cdot 10^{-6}$	$3.682 \cdot 10^{-6}$	$2.716 \cdot 10^{-8}$
$W^+ W^- \rightarrow H t \bar{t}$	$1.291 \cdot 10^{-7}$	$1.291 \cdot 10^{-7}$	0	$1.315 \cdot 10^{-8}$	$1.315 \cdot 10^{-8}$	0
$\bar{b}t \rightarrow \bar{d}u$	0.0002167	0.0002167	$4.615 \cdot 10^{-8}$	0.01328	0.01328	0
$b\bar{b} \rightarrow \gamma\gamma$	$1.506 \cdot 10^{-5}$	$1.506 \cdot 10^{-5}$	$-6.638 \cdot 10^{-8}$	0.0006187	0.0006187	$-8.081 \cdot 10^{-8}$
$b\bar{b} \rightarrow \mu^+ \mu^-$	$4.457 \cdot 10^{-5}$	$4.457 \cdot 10^{-5}$	$2.244 \cdot 10^{-8}$	0.002109	0.002109	$4.742 \cdot 10^{-8}$
$b\bar{b} \rightarrow \nu_e \bar{\nu}_e$	$3.323 \cdot 10^{-5}$	$3.323 \cdot 10^{-5}$	$3.01 \cdot 10^{-8}$	0.00216	0.00216	$4.631 \cdot 10^{-8}$
$b\bar{b} \rightarrow b\bar{b}$	-0.02686	-0.02686	0	0.3545	0.3545	$2.821 \cdot 10^{-8}$
$b\bar{b} \rightarrow d\bar{d}$	0.0002073	0.0002073	0	0.002469	0.002469	0
$b\bar{b} \rightarrow t\bar{t}$	0.01087	0.01087	0	0.4082	0.4082	$2.45 \cdot 10^{-8}$

$b\bar{b} \rightarrow u\bar{u}$	0.0001609	0.0001609	$6.213 \cdot 10^{-8}$	0.005212	0.005212	$1.919 \cdot 10^{-8}$
$b\bar{t} \rightarrow e^-\bar{\nu}_e$	$2.459 \cdot 10^{-5}$	$2.459 \cdot 10^{-5}$	0	0.002423	0.002423	0

## 2.47 cbWI

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$HH \rightarrow W^+\bar{t}b$	$2.766 \cdot 10^{-7}$	$2.766 \cdot 10^{-7}$	0	$1.436 \cdot 10^{-5}$	$1.436 \cdot 10^{-5}$	0
$HH \rightarrow z\bar{b}b$	$2.108 \cdot 10^{-9}$	$2.108 \cdot 10^{-9}$	$1.898 \cdot 10^{-7}$	$4.028 \cdot 10^{-7}$	$4.028 \cdot 10^{-7}$	0
$HW^+ \rightarrow \gamma t\bar{b}$	$-1.061 \cdot 10^{-5}$	$-1.061 \cdot 10^{-5}$	$-9.428 \cdot 10^{-8}$	$4.934 \cdot 10^{-6}$	$4.934 \cdot 10^{-6}$	$-4.053 \cdot 10^{-8}$
$HW^- \rightarrow \bar{t}b$	$1 \cdot 10^{-6}$	$1 \cdot 10^{-6}$	0	2.178	2.178	0
$H\gamma \rightarrow b\bar{b}$	$-8.027 \cdot 10^{-20}$	$-8.032 \cdot 10^{-20}$	-0.0006596	0.6981	0.6981	$-5.73 \cdot 10^{-8}$
$H z \rightarrow b\bar{b}$	$1.251 \cdot 10^{-6}$	$1.251 \cdot 10^{-6}$	0	1.544	1.544	0
$W^+W^- \rightarrow Hb\bar{b}$	$-1.085 \cdot 10^{-7}$	$-1.085 \cdot 10^{-7}$	$9.22 \cdot 10^{-8}$	$2.034 \cdot 10^{-6}$	$2.034 \cdot 10^{-6}$	0
$W^+W^- \rightarrow Ht\bar{t}$	$3.637 \cdot 10^{-8}$	$3.637 \cdot 10^{-8}$	$-2.75 \cdot 10^{-8}$	$3.052 \cdot 10^{-8}$	$3.052 \cdot 10^{-8}$	0
$\bar{b}t \rightarrow \bar{d}u$	$-5.115 \cdot 10^{-19}$	$2.876 \cdot 10^{-19}$	1.562	0.01018	0.01018	0
$b\bar{b} \rightarrow \gamma\gamma$	$3.439 \cdot 10^{-23}$	$-2.307 \cdot 10^{-23}$	1.671	0.0006186	0.0006186	$-8.082 \cdot 10^{-8}$
$b\bar{b} \rightarrow \mu^+\mu^-$	$4.555 \cdot 10^{-16}$	$4.555 \cdot 10^{-16}$	$-3.895 \cdot 10^{-5}$	0.001047	0.001047	0
$b\bar{b} \rightarrow \nu_e\bar{\nu}_e$	$1.202 \cdot 10^{-19}$	$-7.779 \cdot 10^{-20}$	1.647	0.001424	0.001424	0
$b\bar{b} \rightarrow b\bar{b}$	$3 \cdot 10^{-18}$	$3.45 \cdot 10^{-18}$	-0.1501	0.06696	0.06696	$1.493 \cdot 10^{-8}$
$b\bar{b} \rightarrow d\bar{d}$	$1.11 \cdot 10^{-17}$	$1.118 \cdot 10^{-17}$	-0.006574	0.002262	0.002262	0
$b\bar{b} \rightarrow t\bar{t}$	$-9.723 \cdot 10^{-19}$	$7.195 \cdot 10^{-21}$	1.007	0.6078	0.6078	$1.645 \cdot 10^{-8}$
$b\bar{b} \rightarrow u\bar{u}$	$3.517 \cdot 10^{-18}$	$3.186 \cdot 10^{-18}$	0.09424	0.004395	0.004395	$2.276 \cdot 10^{-8}$
$b\bar{t} \rightarrow e^-\bar{\nu}_e$	$6.867 \cdot 10^{-21}$	$-2.049 \cdot 10^{-19}$	30.83	0.004432	0.004432	0

## 2.48 cblS1

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

$b\bar{t} \rightarrow e^- \bar{\nu}_e$	0	0	0	0.08333	0.08333	0
--	---	---	---	---------	---------	---

## 2.49 cblS2

			interference			square
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$b\bar{b} \rightarrow \mu^+ \mu^-$	0	0	0	0.1667	0.1667	0

## 2.50 cblSI1

			interference			square
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$b\bar{t} \rightarrow e^- \bar{\nu}_e$	0	0	0	0.08333	0.08333	0

## 2.51 cblSI2

			interference			square
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$b\bar{b} \rightarrow \mu^+ \mu^-$	0	0	0	0.1667	0.1667	0

## 2.52 cbtud1

			interference			square
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$\bar{b}t \rightarrow \bar{d}u$	0	0	0	0.2223	0.2223	$-4.498 \cdot 10^{-8}$

## 2.53 cbtud1I

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$\bar{b}t \rightarrow \bar{d}u$	0	0	0	0.2732	0.2732	$-3.661 \cdot 10^{-8}$

## 2.54 cbtud8

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$\bar{b}t \rightarrow \bar{d}u$	0	0	0	0.1459	0.1459	$-2.057 \cdot 10^{-7}$

## 2.55 cbtud8I

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$\bar{b}t \rightarrow \bar{d}u$	0	0	0	0.03181	0.03181	$-1.886 \cdot 10^{-7}$

## 2.56 cpQ3

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$HH \rightarrow W^+ \bar{t}b$	$-2.373 \cdot 10^{-6}$	$-2.373 \cdot 10^{-6}$	$2.95 \cdot 10^{-7}$	$1.562 \cdot 10^{-5}$	$1.562 \cdot 10^{-5}$	0
$HH \rightarrow z \bar{b}b$	0.0001217	0.0001217	0	0.0002384	0.0002384	0
$HW^+ \rightarrow \gamma t \bar{b}$	$-4.758 \cdot 10^{-6}$	$-4.758 \cdot 10^{-6}$	$-4.203 \cdot 10^{-8}$	$3.584 \cdot 10^{-6}$	$3.584 \cdot 10^{-6}$	$-2.79 \cdot 10^{-8}$
$HW^- \rightarrow \bar{t}b$	-2.443	-2.443	0	0.8598	0.8598	0
$H z \rightarrow b \bar{b}$	0.2798	0.2798	$3.574 \cdot 10^{-8}$	2.443	2.443	0
$W^+ W^- \rightarrow H b \bar{b}$	$-6.426 \cdot 10^{-7}$	$-6.426 \cdot 10^{-7}$	0	$1.558 \cdot 10^{-7}$	$1.558 \cdot 10^{-7}$	$6.42 \cdot 10^{-8}$
$W^+ W^- \rightarrow H t \bar{t}$	$8.011 \cdot 10^{-6}$	$8.011 \cdot 10^{-6}$	$1.248 \cdot 10^{-8}$	$1.739 \cdot 10^{-5}$	$1.739 \cdot 10^{-5}$	0
$\bar{b}t \rightarrow \bar{d}u$	0.0007768	0.0007768	$2.575 \cdot 10^{-8}$	$2.355 \cdot 10^{-5}$	$2.355 \cdot 10^{-5}$	0

$b\bar{b} \rightarrow \mu^+\mu^-$	0.0003229	0.0003229	$6.193 \cdot 10^{-8}$	$1.616 \cdot 10^{-5}$	$1.616 \cdot 10^{-5}$	$6.19 \cdot 10^{-8}$
$b\bar{b} \rightarrow \nu_e\bar{\nu}_e$	0.0003079	0.0003079	$3.248 \cdot 10^{-8}$	$2.211 \cdot 10^{-5}$	$2.211 \cdot 10^{-5}$	0
$b\bar{b} \rightarrow b\bar{b}$	-0.1108	-0.1108	0	0.00543	0.00543	$1.842 \cdot 10^{-8}$
$b\bar{b} \rightarrow d\bar{d}$	$5.402 \cdot 10^{-5}$	$5.402 \cdot 10^{-5}$	$-3.703 \cdot 10^{-8}$	$7.154 \cdot 10^{-6}$	$7.154 \cdot 10^{-6}$	$-8.387 \cdot 10^{-8}$
$b\bar{b} \rightarrow t\bar{t}$	0.9348	0.9348	$3.209 \cdot 10^{-8}$	0.07653	0.07653	$2.613 \cdot 10^{-8}$
$b\bar{b} \rightarrow u\bar{u}$	0.001081	0.001081	0	$6.306 \cdot 10^{-5}$	$6.306 \cdot 10^{-5}$	$4.758 \cdot 10^{-8}$
$b\bar{t} \rightarrow e^-\bar{\nu}_e$	0.001203	0.001203	$8.31 \cdot 10^{-8}$	$3.648 \cdot 10^{-5}$	$3.648 \cdot 10^{-5}$	$2.741 \cdot 10^{-8}$

## 2.57 cpQM

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$HH \rightarrow z\bar{b}b$	$1.903 \cdot 10^{-6}$	$1.903 \cdot 10^{-6}$	0	$3.826 \cdot 10^{-6}$	$3.826 \cdot 10^{-6}$	0
$HH \rightarrow zt\bar{t}$	$4.703 \cdot 10^{-5}$	$4.703 \cdot 10^{-5}$	$-2.126 \cdot 10^{-8}$	$4.516 \cdot 10^{-5}$	$4.516 \cdot 10^{-5}$	0
$H z \rightarrow b\bar{b}$	0.101	0.101	0	0.443	0.443	0
$H z \rightarrow t\bar{t}$	1.964	1.964	0	0.6501	0.6501	0
$W^+W^- \rightarrow Hb\bar{b}$	$2.389 \cdot 10^{-6}$	$2.389 \cdot 10^{-6}$	$4.186 \cdot 10^{-8}$	$3.669 \cdot 10^{-7}$	$3.669 \cdot 10^{-7}$	0
$W^+W^- \rightarrow Ht\bar{t}$	$7.751 \cdot 10^{-7}$	$7.751 \cdot 10^{-7}$	$1.29 \cdot 10^{-8}$	$1.77 \cdot 10^{-6}$	$1.77 \cdot 10^{-6}$	0
$b\bar{b} \rightarrow \mu^+\mu^-$	0.0001006	0.0001006	$9.943 \cdot 10^{-8}$	$3.086 \cdot 10^{-6}$	$3.086 \cdot 10^{-6}$	$3.24 \cdot 10^{-8}$
$b\bar{b} \rightarrow \nu_e\bar{\nu}_e$	0.0001583	0.0001583	0	$5.686 \cdot 10^{-6}$	$5.686 \cdot 10^{-6}$	0
$b\bar{b} \rightarrow b\bar{b}$	-0.0961	-0.0961	$-1.041 \cdot 10^{-8}$	0.008084	0.008084	$1.237 \cdot 10^{-8}$
$b\bar{b} \rightarrow d\bar{d}$	0.001237	0.001237	$8.087 \cdot 10^{-8}$	$3.998 \cdot 10^{-5}$	$3.998 \cdot 10^{-5}$	$2.501 \cdot 10^{-8}$
$b\bar{b} \rightarrow t\bar{t}$	-0.001144	-0.001144	0	$1.638 \cdot 10^{-6}$	$1.638 \cdot 10^{-6}$	$-1.221 \cdot 10^{-7}$
$b\bar{b} \rightarrow u\bar{u}$	0.0006157	0.0006157	$3.248 \cdot 10^{-8}$	$1.776 \cdot 10^{-5}$	$1.776 \cdot 10^{-5}$	$5.632 \cdot 10^{-8}$
$t\bar{t} \rightarrow \nu_\mu\bar{\nu}_\mu$	-0.0002618	-0.0002618	$3.82 \cdot 10^{-8}$	$1.184 \cdot 10^{-5}$	$1.184 \cdot 10^{-5}$	0
$t\bar{t} \rightarrow \tau^+\tau^-$	$-2.02 \cdot 10^{-5}$	$-2.02 \cdot 10^{-5}$	$2.475 \cdot 10^{-7}$	$3.177 \cdot 10^{-6}$	$3.177 \cdot 10^{-6}$	$-3.148 \cdot 10^{-8}$
$t\bar{t} \rightarrow c\bar{c}$	-0.0001773	-0.0001773	$5.64 \cdot 10^{-8}$	$8.179 \cdot 10^{-6}$	$8.179 \cdot 10^{-6}$	0
$t\bar{t} \rightarrow d\bar{d}$	-0.001071	-0.001071	0	$3.744 \cdot 10^{-5}$	$3.744 \cdot 10^{-5}$	0
$t\bar{t} \rightarrow s\bar{s}$	-0.001322	-0.001322	$7.563 \cdot 10^{-8}$	$4.608 \cdot 10^{-5}$	$4.608 \cdot 10^{-5}$	$2.17 \cdot 10^{-8}$

$t\bar{t} \rightarrow t\bar{t}$	0.4501	0.4501	0	0.01299	0.01299	0
---------------------------------	--------	--------	---	---------	---------	---

## 2.58 cpb

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$HH \rightarrow z\bar{b}b$	$-1.098 \cdot 10^{-7}$	$-1.098 \cdot 10^{-7}$	$-9.11 \cdot 10^{-8}$	$4.513 \cdot 10^{-7}$	$4.513 \cdot 10^{-7}$	0
$H z \rightarrow b\bar{b}$	-0.0233	-0.0233	$-4.292 \cdot 10^{-8}$	0.5817	0.5817	0
$W^+W^- \rightarrow Hb\bar{b}$	$-4.056 \cdot 10^{-8}$	$-4.056 \cdot 10^{-8}$	$-2.465 \cdot 10^{-8}$	$2.043 \cdot 10^{-7}$	$2.043 \cdot 10^{-7}$	0
$b\bar{b} \rightarrow \mu^+\mu^-$	$-3.121 \cdot 10^{-7}$	$-3.121 \cdot 10^{-7}$	$-6.633 \cdot 10^{-6}$	$3.103 \cdot 10^{-6}$	$3.103 \cdot 10^{-6}$	$3.223 \cdot 10^{-8}$
$b\bar{b} \rightarrow \nu_e\bar{\nu}_e$	$-5.513 \cdot 10^{-5}$	$-5.513 \cdot 10^{-5}$	$-3.628 \cdot 10^{-8}$	$1.073 \cdot 10^{-5}$	$1.073 \cdot 10^{-5}$	0
$b\bar{b} \rightarrow b\bar{b}$	0.0001522	0.0001522	$-6.569 \cdot 10^{-8}$	0.0002249	0.0002249	0
$b\bar{b} \rightarrow d\bar{d}$	$-3.378 \cdot 10^{-5}$	$-3.378 \cdot 10^{-5}$	$-5.92 \cdot 10^{-8}$	$1.201 \cdot 10^{-5}$	$1.201 \cdot 10^{-5}$	$8.326 \cdot 10^{-8}$
$b\bar{b} \rightarrow t\bar{t}$	$-4.484 \cdot 10^{-6}$	$-4.484 \cdot 10^{-6}$	$-4.237 \cdot 10^{-7}$	$1.209 \cdot 10^{-5}$	$1.209 \cdot 10^{-5}$	$8.269 \cdot 10^{-8}$
$b\bar{b} \rightarrow u\bar{u}$	$3.597 \cdot 10^{-5}$	$3.597 \cdot 10^{-5}$	$-2.78 \cdot 10^{-8}$	$1.912 \cdot 10^{-5}$	$1.912 \cdot 10^{-5}$	0

## 2.59 cpt

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$HH \rightarrow zt\bar{t}$	$-8.087 \cdot 10^{-5}$	$-8.087 \cdot 10^{-5}$	$1.237 \cdot 10^{-8}$	$4.714 \cdot 10^{-5}$	$4.714 \cdot 10^{-5}$	0
$H z \rightarrow t\bar{t}$	-2.103	-2.103	0	0.8523	0.8523	0
$W^+W^- \rightarrow Ht\bar{t}$	$1.067 \cdot 10^{-6}$	$1.067 \cdot 10^{-6}$	$9.376 \cdot 10^{-8}$	$8.031 \cdot 10^{-7}$	$8.031 \cdot 10^{-7}$	$1.245 \cdot 10^{-8}$
$b\bar{b} \rightarrow t\bar{t}$	-0.002005	-0.002005	0	$4.045 \cdot 10^{-5}$	$4.045 \cdot 10^{-5}$	$2.472 \cdot 10^{-8}$
$t\bar{t} \rightarrow \nu_\mu\bar{\nu}_\mu$	$2.05 \cdot 10^{-5}$	$2.05 \cdot 10^{-5}$	$-9.754 \cdot 10^{-8}$	$3.526 \cdot 10^{-6}$	$3.526 \cdot 10^{-6}$	0
$t\bar{t} \rightarrow \tau^+\tau^-$	$7.351 \cdot 10^{-5}$	$7.351 \cdot 10^{-5}$	$-1.496 \cdot 10^{-7}$	$3.174 \cdot 10^{-6}$	$3.174 \cdot 10^{-6}$	$-6.302 \cdot 10^{-8}$
$t\bar{t} \rightarrow c\bar{c}$	-0.000178	-0.000178	0	$2.992 \cdot 10^{-5}$	$2.992 \cdot 10^{-5}$	$6.684 \cdot 10^{-8}$
$t\bar{t} \rightarrow d\bar{d}$	$2.784 \cdot 10^{-5}$	$2.784 \cdot 10^{-5}$	$-3.233 \cdot 10^{-7}$	$1.804 \cdot 10^{-6}$	$1.804 \cdot 10^{-6}$	$-5.543 \cdot 10^{-8}$
$t\bar{t} \rightarrow s\bar{s}$	$2.947 \cdot 10^{-5}$	$2.947 \cdot 10^{-5}$	$-1.697 \cdot 10^{-7}$	$1.275 \cdot 10^{-5}$	$1.275 \cdot 10^{-5}$	0

$t\bar{t} \rightarrow t\bar{t}$	-0.03533	-0.03533	$-2.83 \cdot 10^{-8}$	0.008758	0.008758	0
---------------------------------	----------	----------	-----------------------	----------	----------	---

## 2.60 cptb

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$HH \rightarrow W^+ \bar{t}b$	$-6.048 \cdot 10^{-7}$	$-6.048 \cdot 10^{-7}$	0	$3.598 \cdot 10^{-6}$	$3.598 \cdot 10^{-6}$	0
$HW^+ \rightarrow \gamma t \bar{b}$	$-1.033 \cdot 10^{-7}$	$-1.033 \cdot 10^{-7}$	$-9.682 \cdot 10^{-8}$	$4.041 \cdot 10^{-7}$	$4.041 \cdot 10^{-7}$	$-4.949 \cdot 10^{-8}$
$HW^- \rightarrow \bar{t}b$	-0.05328	-0.05328	$1.877 \cdot 10^{-8}$	0.4891	0.4891	0
$W^+W^- \rightarrow Hb\bar{b}$	$-2.585 \cdot 10^{-7}$	$-2.585 \cdot 10^{-7}$	0	$8.809 \cdot 10^{-7}$	$8.809 \cdot 10^{-7}$	0
$W^+W^- \rightarrow Ht\bar{t}$	$1.033 \cdot 10^{-7}$	$1.033 \cdot 10^{-7}$	0	$2.399 \cdot 10^{-9}$	$2.399 \cdot 10^{-9}$	0
$\bar{b}t \rightarrow \bar{d}u$	$-2.193 \cdot 10^{-6}$	$-2.193 \cdot 10^{-6}$	$4.559 \cdot 10^{-8}$	$9.956 \cdot 10^{-6}$	$9.956 \cdot 10^{-6}$	$4.018 \cdot 10^{-8}$
$b\bar{b} \rightarrow t\bar{t}$	0.0001761	0.0001761	0	0.0007628	0.0007628	$1.311 \cdot 10^{-8}$
$b\bar{t} \rightarrow e^- \bar{\nu}_e$	$-7.312 \cdot 10^{-7}$	$-7.312 \cdot 10^{-7}$	$2.735 \cdot 10^{-8}$	$6.866 \cdot 10^{-6}$	$6.866 \cdot 10^{-6}$	$2.913 \cdot 10^{-8}$

## 2.61 cptbI

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$HH \rightarrow W^+ \bar{t}b$	$-3.977 \cdot 10^{-8}$	$-3.977 \cdot 10^{-8}$	0	$1.977 \cdot 10^{-6}$	$1.977 \cdot 10^{-6}$	0
$HW^+ \rightarrow \gamma t \bar{b}$	$6.867 \cdot 10^{-9}$	$6.867 \cdot 10^{-9}$	$-4.369 \cdot 10^{-8}$	$1.642 \cdot 10^{-7}$	$1.642 \cdot 10^{-7}$	0
$HW^- \rightarrow \bar{t}b$	$-8.636 \cdot 10^{-6}$	$-8.636 \cdot 10^{-6}$	$1.158 \cdot 10^{-8}$	0.367	0.367	0
$W^+W^- \rightarrow Hb\bar{b}$	$9.891 \cdot 10^{-8}$	$9.891 \cdot 10^{-8}$	$1.011 \cdot 10^{-8}$	$7.057 \cdot 10^{-7}$	$7.057 \cdot 10^{-7}$	0
$W^+W^- \rightarrow Ht\bar{t}$	$-1.757 \cdot 10^{-9}$	$-1.757 \cdot 10^{-9}$	$1.138 \cdot 10^{-7}$	$1.394 \cdot 10^{-9}$	$1.394 \cdot 10^{-9}$	0
$\bar{b}t \rightarrow \bar{d}u$	$1.561 \cdot 10^{-21}$	$-9.578 \cdot 10^{-22}$	1.613	$1.887 \cdot 10^{-5}$	$1.887 \cdot 10^{-5}$	$5.299 \cdot 10^{-8}$
$b\bar{b} \rightarrow t\bar{t}$	$-8.564 \cdot 10^{-22}$	$-1.649 \cdot 10^{-20}$	-18.26	0.0005773	0.0005773	$1.732 \cdot 10^{-8}$
$b\bar{t} \rightarrow e^- \bar{\nu}_e$	$6.384 \cdot 10^{-22}$	$-1.931 \cdot 10^{-21}$	4.025	$1.295 \cdot 10^{-6}$	$1.295 \cdot 10^{-6}$	$7.722 \cdot 10^{-8}$



## 2.62 ctG

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$b\bar{b} \rightarrow t\bar{t}$	-0.06231	-0.06231	$4.814 \cdot 10^{-8}$	0.02533	0.02533	0
$gg \rightarrow t\bar{t}$	0.6775	0.6775	0	0.1214	0.1214	0
$t\bar{t} \rightarrow c\bar{c}$	0.1977	0.1977	0	0.02459	0.02459	0
$t\bar{t} \rightarrow d\bar{d}$	0.1977	0.1977	0	0.01286	0.01286	0
$t\bar{t} \rightarrow s\bar{s}$	0.1977	0.1977	0	0.03194	0.03194	0
$t\bar{t} \rightarrow t\bar{t}$	2.248	2.248	0	10.4	10.4	0

## 2.63 ctGI

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$b\bar{b} \rightarrow t\bar{t}$	$4.244 \cdot 10^{-18}$	$1.564 \cdot 10^{-17}$	-2.685	0.02123	0.02123	0
$gg \rightarrow t\bar{t}$	$-3.161 \cdot 10^{-18}$	$-3.161 \cdot 10^{-18}$	0	0.0878	0.0878	0
$t\bar{t} \rightarrow c\bar{c}$	$-4.407 \cdot 10^{-24}$	$-2.936 \cdot 10^{-24}$	0.3337	0.03576	0.03576	0
$t\bar{t} \rightarrow d\bar{d}$	$-2.573 \cdot 10^{-24}$	$3.676 \cdot 10^{-25}$	1.143	0.01814	0.01814	0
$t\bar{t} \rightarrow s\bar{s}$	$-2.966 \cdot 10^{-29}$	$-2.39 \cdot 10^{-24}$	$-8.056 \cdot 10^4$	0.006098	0.006098	0
$t\bar{t} \rightarrow t\bar{t}$	$1.878 \cdot 10^{-16}$	$1.199 \cdot 10^{-16}$	0.3617	2.914	2.914	0

## 2.64 ctQqu1

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$\bar{b}t \rightarrow \bar{d}u$	0	0	0	0.25	0.25	$4 \cdot 10^{-8}$
$t\bar{t} \rightarrow c\bar{c}$	0	0	0	0.5004	0.5004	$5.995 \cdot 10^{-8}$

## 2.65 ctQqu1I

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$\bar{b}t \rightarrow \bar{d}u$	0	0	0	0.25	0.25	$4 \cdot 10^{-8}$
$t\bar{t} \rightarrow c\bar{c}$	0	0	0	0.5004	0.5004	$5.995 \cdot 10^{-8}$

## 2.66 ctQqu8

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$\bar{b}t \rightarrow \bar{d}u$	0	0	0	0.05556	0.05556	$-1.26 \cdot 10^{-7}$
$t\bar{t} \rightarrow c\bar{c}$	0	0	0	0.1112	0.1112	$-1.798 \cdot 10^{-7}$

## 2.67 ctQqu8I

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$\bar{b}t \rightarrow \bar{d}u$	0	0	0	0.05556	0.05556	$-1.26 \cdot 10^{-7}$
$t\bar{t} \rightarrow c\bar{c}$	0	0	0	0.1112	0.1112	$-1.798 \cdot 10^{-7}$

## 2.68 ctW

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$HH \rightarrow W^+ \bar{t}b$	$1.295 \cdot 10^{-5}$	$1.295 \cdot 10^{-5}$	0	$6.036 \cdot 10^{-6}$	$6.036 \cdot 10^{-6}$	0
$HH \rightarrow zt\bar{t}$	$-1.273 \cdot 10^{-12}$	0	1	$2.326 \cdot 10^{-17}$	0	1
$HW^+ \rightarrow \gamma t\bar{b}$	$-7.863 \cdot 10^{-6}$	$-7.863 \cdot 10^{-6}$	$9.539 \cdot 10^{-7}$	$1.869 \cdot 10^{-5}$	$1.869 \cdot 10^{-5}$	$1.177 \cdot 10^{-6}$

$HW^- \rightarrow \bar{t}b$	0.5769	0.5769	$1.733 \cdot 10^{-8}$	0.1137	0.1137	0
$H\gamma \rightarrow t\bar{t}$	-0.6605	-0.6605	$5.905 \cdot 10^{-7}$	14.45	14.45	$1.176 \cdot 10^{-6}$
$HZ \rightarrow t\bar{t}$	$2.675 \cdot 10^{-8}$	0	1	$1.524 \cdot 10^{-12}$	0	1
$W^+W^- \rightarrow Hb\bar{b}$	$-2.467 \cdot 10^{-7}$	$-2.467 \cdot 10^{-7}$	$-4.053 \cdot 10^{-8}$	$3.682 \cdot 10^{-6}$	$3.682 \cdot 10^{-6}$	0
$W^+W^- \rightarrow Ht\bar{t}$	$1.43 \cdot 10^{-5}$	$1.43 \cdot 10^{-5}$	0	$5.603 \cdot 10^{-5}$	$5.603 \cdot 10^{-5}$	$-1.785 \cdot 10^{-8}$
$\bar{b}t \rightarrow \bar{d}u$	0.007789	0.007789	$2.568 \cdot 10^{-8}$	0.0132	0.0132	0
$b\bar{b} \rightarrow t\bar{t}$	-0.3954	-0.3954	$5.059 \cdot 10^{-8}$	0.4537	0.4537	$4.408 \cdot 10^{-8}$
$b\bar{t} \rightarrow e^- \bar{\nu}_e$	0.0003773	0.0003773	$2.651 \cdot 10^{-8}$	0.0011	0.0011	0
$t\bar{t} \rightarrow \nu_\mu \bar{\nu}_\mu$	$-1.231 \cdot 10^{-9}$	0	1	$1.072 \cdot 10^{-15}$	0	1
$t\bar{t} \rightarrow \tau^+ \tau^-$	0.005148	0.005148	$4.857 \cdot 10^{-7}$	0.01509	0.01509	$1.126 \cdot 10^{-6}$
$t\bar{t} \rightarrow c\bar{c}$	0.004191	0.004191	$4.056 \cdot 10^{-7}$	0.009893	0.009893	$9.4 \cdot 10^{-7}$
$t\bar{t} \rightarrow d\bar{d}$	0.004068	0.004068	$-7.375 \cdot 10^{-8}$	0.006403	0.006403	$3.748 \cdot 10^{-7}$
$t\bar{t} \rightarrow s\bar{s}$	0.002763	0.002763	0	0.006554	0.006554	$3.814 \cdot 10^{-7}$
$t\bar{t} \rightarrow t\bar{t}$	-0.3846	-0.3846	$4.681 \cdot 10^{-7}$	0.6002	0.6002	$9.497 \cdot 10^{-7}$

## 2.69 ctWI

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$HH \rightarrow W^+ \bar{t}b$	$7.461 \cdot 10^{-7}$	$7.461 \cdot 10^{-7}$	$2.68 \cdot 10^{-8}$	$1.158 \cdot 10^{-5}$	$1.158 \cdot 10^{-5}$	0
$HH \rightarrow zt\bar{t}$	$-8.166 \cdot 10^{-13}$	0	1	$8.07 \cdot 10^{-18}$	0	1
$HW^+ \rightarrow \gamma t\bar{b}$	$1.68 \cdot 10^{-6}$	$1.68 \cdot 10^{-6}$	$7.739 \cdot 10^{-7}$	$5.1 \cdot 10^{-6}$	$5.1 \cdot 10^{-6}$	$1.137 \cdot 10^{-6}$
$HW^- \rightarrow \bar{t}b$	-0.0006926	-0.0006926	$1.444 \cdot 10^{-8}$	1.581	1.581	0
$H\gamma \rightarrow t\bar{t}$	$-7.494 \cdot 10^{-16}$	$4.58 \cdot 10^{-16}$	1.611	1.67	1.67	$1.197 \cdot 10^{-6}$
$HZ \rightarrow t\bar{t}$	$3.806 \cdot 10^{-10}$	0	1	$1.015 \cdot 10^{-12}$	0	1
$W^+W^- \rightarrow Hb\bar{b}$	$4.905 \cdot 10^{-6}$	$4.905 \cdot 10^{-6}$	$2.039 \cdot 10^{-8}$	$3.05 \cdot 10^{-6}$	$3.05 \cdot 10^{-6}$	0
$W^+W^- \rightarrow Ht\bar{t}$	$-2.053 \cdot 10^{-6}$	$-2.053 \cdot 10^{-6}$	$4.87 \cdot 10^{-8}$	$2.124 \cdot 10^{-5}$	$2.124 \cdot 10^{-5}$	0
$\bar{b}t \rightarrow \bar{d}u$	$2.461 \cdot 10^{-18}$	$-6.483 \cdot 10^{-18}$	3.634	0.01153	0.01153	0
$b\bar{b} \rightarrow t\bar{t}$	$1.311 \cdot 10^{-17}$	$-3.097 \cdot 10^{-17}$	3.363	0.008876	0.008876	$1.577 \cdot 10^{-7}$

$b\bar{t} \rightarrow e^-\bar{\nu}_e$	$1.882 \cdot 10^{-18}$	$7.82 \cdot 10^{-18}$	$-3.155$	0.003846	0.003846	$2.6 \cdot 10^{-8}$
$t\bar{t} \rightarrow \nu_\mu\bar{\nu}_\mu$	$-3.372 \cdot 10^{-24}$	0	1	$1.047 \cdot 10^{-15}$	0	1
$t\bar{t} \rightarrow \tau^+\tau^-$	$-1.297 \cdot 10^{-17}$	$-1.431 \cdot 10^{-17}$	$-0.103$	0.01452	0.01452	$1.102 \cdot 10^{-6}$
$t\bar{t} \rightarrow c\bar{c}$	$1.156 \cdot 10^{-10}$	$1.156 \cdot 10^{-10}$	$6.057 \cdot 10^{-7}$	0.004409	0.004409	$9.299 \cdot 10^{-7}$
$t\bar{t} \rightarrow d\bar{d}$	$1.36 \cdot 10^{-15}$	$1.36 \cdot 10^{-15}$	$-0.0002107$	0.0007788	0.0007788	$3.852 \cdot 10^{-7}$
$t\bar{t} \rightarrow s\bar{s}$	$5.663 \cdot 10^{-13}$	$5.663 \cdot 10^{-13}$	$5.881 \cdot 10^{-6}$	0.005325	0.005325	$3.756 \cdot 10^{-7}$
$t\bar{t} \rightarrow t\bar{t}$	$-3.131 \cdot 10^{-18}$	$-2.514 \cdot 10^{-18}$	0.1968	0.06355	0.06355	$9.441 \cdot 10^{-7}$

## 2.70 ctZ

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$HH \rightarrow zt\bar{t}$	$5.645 \cdot 10^{-6}$	$5.645 \cdot 10^{-6}$	$6.2 \cdot 10^{-7}$	$3.042 \cdot 10^{-5}$	$3.042 \cdot 10^{-5}$	$1.085 \cdot 10^{-6}$
$HW^+ \rightarrow \gamma t\bar{b}$	$4.136 \cdot 10^{-8}$	$4.136 \cdot 10^{-8}$	$6.287 \cdot 10^{-7}$	$5.23 \cdot 10^{-6}$	$5.23 \cdot 10^{-6}$	$1.128 \cdot 10^{-6}$
$H\gamma \rightarrow t\bar{t}$	4.341	4.341	$5.529 \cdot 10^{-7}$	1.28	1.28	$1.094 \cdot 10^{-6}$
$HZ \rightarrow t\bar{t}$	-0.08497	-0.08497	$6.238 \cdot 10^{-7}$	2.444	2.444	$1.064 \cdot 10^{-6}$
$W^+W^- \rightarrow Ht\bar{t}$	$2.346 \cdot 10^{-8}$	$2.346 \cdot 10^{-8}$	$2.558 \cdot 10^{-7}$	$1.517 \cdot 10^{-7}$	$1.517 \cdot 10^{-7}$	$1.054 \cdot 10^{-6}$
$b\bar{b} \rightarrow t\bar{t}$	0.004696	0.004696	$5.537 \cdot 10^{-7}$	0.002364	0.002364	$1.058 \cdot 10^{-6}$
$t\bar{t} \rightarrow \nu_\mu\bar{\nu}_\mu$	0.001323	0.001323	$6.045 \cdot 10^{-7}$	0.00314	0.00314	$1.051 \cdot 10^{-6}$
$t\bar{t} \rightarrow \tau^+\tau^-$	-0.006545	-0.006545	$5.042 \cdot 10^{-7}$	0.01514	0.01514	$1.057 \cdot 10^{-6}$
$t\bar{t} \rightarrow c\bar{c}$	-0.002778	-0.002778	$4.68 \cdot 10^{-7}$	0.006785	0.006785	$1.061 \cdot 10^{-6}$
$t\bar{t} \rightarrow d\bar{d}$	0.001287	0.001287	$6.216 \cdot 10^{-7}$	0.001749	0.001749	$1.086 \cdot 10^{-6}$
$t\bar{t} \rightarrow s\bar{s}$	0.0003239	0.0003239	$8.645 \cdot 10^{-7}$	0.0055	0.0055	$1.073 \cdot 10^{-6}$
$t\bar{t} \rightarrow t\bar{t}$	0.03977	0.03977	$5.531 \cdot 10^{-7}$	0.07601	0.07601	$1.066 \cdot 10^{-6}$

## 2.71 ctZI

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

$HH \rightarrow zt\bar{t}$	$-1.579 \cdot 10^{-6}$	$-1.579 \cdot 10^{-6}$	$6.332 \cdot 10^{-7}$	$2.864 \cdot 10^{-5}$	$2.864 \cdot 10^{-5}$	$1.082 \cdot 10^{-6}$
$HW^+ \rightarrow \gamma t\bar{b}$	$3.597 \cdot 10^{-6}$	$3.597 \cdot 10^{-6}$	$5.56 \cdot 10^{-7}$	$7.777 \cdot 10^{-6}$	$7.777 \cdot 10^{-6}$	$1.132 \cdot 10^{-6}$
$H\gamma \rightarrow t\bar{t}$	$4.337 \cdot 10^{-19}$	$4.201 \cdot 10^{-19}$	$0.03125$	11.01	11.01	$1.09 \cdot 10^{-6}$
$HZ \rightarrow t\bar{t}$	$-0.0004568$	$-0.0004568$	$5.254 \cdot 10^{-7}$	1.954	1.954	$1.023 \cdot 10^{-6}$
$W^+W^- \rightarrow Ht\bar{t}$	$-9.138 \cdot 10^{-9}$	$-9.138 \cdot 10^{-9}$	$5.253 \cdot 10^{-7}$	$8.533 \cdot 10^{-8}$	$8.533 \cdot 10^{-8}$	$1.066 \cdot 10^{-6}$
$b\bar{b} \rightarrow t\bar{t}$	$-1.928 \cdot 10^{-18}$	$-1.029 \cdot 10^{-18}$	$0.4664$	0.002485	0.002485	$1.046 \cdot 10^{-6}$
$t\bar{t} \rightarrow \nu_\mu \bar{\nu}_\mu$	$-6.098 \cdot 10^{-18}$	$-4.513 \cdot 10^{-18}$	$0.2599$	0.002221	0.002221	$1.036 \cdot 10^{-6}$
$t\bar{t} \rightarrow \tau^+ \tau^-$	$1.153 \cdot 10^{-17}$	$4.756 \cdot 10^{-18}$	$0.5877$	0.01183	0.01183	$1.099 \cdot 10^{-6}$
$t\bar{t} \rightarrow c\bar{c}$	$-1.012 \cdot 10^{-10}$	$-1.012 \cdot 10^{-10}$	$5.931 \cdot 10^{-7}$	0.01409	0.01409	$1.064 \cdot 10^{-6}$
$t\bar{t} \rightarrow d\bar{d}$	$-1.171 \cdot 10^{-15}$	$-1.168 \cdot 10^{-15}$	$0.002076$	0.002123	0.002123	$1.036 \cdot 10^{-6}$
$t\bar{t} \rightarrow s\bar{s}$	$-4.953 \cdot 10^{-13}$	$-4.953 \cdot 10^{-13}$	$1.009 \cdot 10^{-6}$	0.0007139	0.0007139	$1.065 \cdot 10^{-6}$
$t\bar{t} \rightarrow t\bar{t}$	$-9.034 \cdot 10^{-16}$	$1.822 \cdot 10^{-16}$	$1.202$	1.396	1.396	$1.074 \cdot 10^{-6}$

## 2.72 ctb1

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$b\bar{b} \rightarrow t\bar{t}$	-0.03652	-0.03652	$-5.477 \cdot 10^{-8}$	0.6327	0.6327	0

## 2.73 ctb8

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$b\bar{b} \rightarrow t\bar{t}$	0.1368	0.1368	0	0.03961	0.03961	0

## 2.74 ctd1

interference	square
--------------	--------

	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$t\bar{t} \rightarrow d\bar{d}$	-0.02266	-0.02266	$-4.413 \cdot 10^{-8}$	0.3897	0.3897	0
$t\bar{t} \rightarrow s\bar{s}$	-0.01157	-0.01157	$-8.644 \cdot 10^{-8}$	0.1954	0.1954	0

## 2.75 ctd8

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$t\bar{t} \rightarrow d\bar{d}$	0.2761	0.2761	0	0.08659	0.08659	0
$t\bar{t} \rightarrow s\bar{s}$	0.1481	0.1481	0	0.04341	0.04341	0

## 2.76 cte3

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$t\bar{t} \rightarrow \tau^+\tau^-$	-0.02546	-0.02546	$-7.855 \cdot 10^{-8}$	0.1462	0.1462	0

## 2.77 ctl2

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$t\bar{t} \rightarrow \nu_\mu\bar{\nu}_\mu$	-0.002445	-0.002445	$-1.227 \cdot 10^{-7}$	0.05016	0.05016	0

## 2.78 ctl3

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$t\bar{t} \rightarrow \tau^+\tau^-$	-0.003466	-0.003466	0	0.01378	0.01378	0

## 2.79 ctIS1

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$b\bar{t} \rightarrow e^- \bar{\nu}_e$	0	0	0	0.08333	0.08333	0

## 2.80 ctIS3

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$t\bar{t} \rightarrow \tau^+ \tau^-$	0.003321	0.003321	0	0.1668	0.1668	0

## 2.81 ctISI1

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$b\bar{t} \rightarrow e^- \bar{\nu}_e$	0	0	0	0.08333	0.08333	0

## 2.82 ctISI3

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$t\bar{t} \rightarrow \tau^+ \tau^-$	$-1.123 \cdot 10^{-21}$	$1.453 \cdot 10^{-21}$	2.293	0.1668	0.1668	0

## 2.83 ctIT1

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

$b\bar{t} \rightarrow e^- \bar{\nu}_e$	0	0	0	0.2535	0.2535	0
--	---	---	---	--------	--------	---

## 2.84 ctIT3

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$t\bar{t} \rightarrow \tau^+ \tau^-$	0.005798	0.005798	0	0.5858	0.5858	0

## 2.85 ctITI1

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$b\bar{t} \rightarrow e^- \bar{\nu}_e$	0	0	0	0.8146	0.8146	0

## 2.86 ctITI3

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$t\bar{t} \rightarrow \tau^+ \tau^-$	$8.72 \cdot 10^{-19}$	$1.56 \cdot 10^{-18}$	$-0.7891$	0.5857	0.5857	0

## 2.87 ctp

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$HH \rightarrow Ht\bar{t}$	$1.321 \cdot 10^{-5}$	$1.321 \cdot 10^{-5}$	0	$1.12 \cdot 10^{-5}$	$1.12 \cdot 10^{-5}$	0
$HH \rightarrow W^+ t\bar{b}$	$1.781 \cdot 10^{-6}$	$1.781 \cdot 10^{-6}$	$5.616 \cdot 10^{-8}$	$5.574 \cdot 10^{-7}$	$5.574 \cdot 10^{-7}$	$1.794 \cdot 10^{-8}$
$HH \rightarrow zt\bar{t}$	$-1.501 \cdot 10^{-5}$	$-1.501 \cdot 10^{-5}$	0	$6.856 \cdot 10^{-6}$	$6.856 \cdot 10^{-6}$	$1.459 \cdot 10^{-8}$
$HW^+ \rightarrow \gamma t\bar{b}$	$1.077 \cdot 10^{-8}$	$1.077 \cdot 10^{-8}$	0	$2.097 \cdot 10^{-8}$	$2.097 \cdot 10^{-8}$	$-4.769 \cdot 10^{-8}$



$HW^- \rightarrow t\bar{b}$	0.04852	0.04852	0	0.05044	0.05044	0
$H\gamma \rightarrow t\bar{t}$	-0.5085	-0.5085	$-3.933 \cdot 10^{-8}$	0.0156	0.0156	$-6.409 \cdot 10^{-8}$
$HZ \rightarrow t\bar{t}$	-0.02413	-0.02413	$4.144 \cdot 10^{-8}$	0.06519	0.06519	0
$W^+W^- \rightarrow Hb\bar{b}$	$2.111 \cdot 10^{-6}$	$2.111 \cdot 10^{-6}$	0	$4.158 \cdot 10^{-8}$	$4.158 \cdot 10^{-8}$	0
$W^+W^- \rightarrow Ht\bar{t}$	$-3.37 \cdot 10^{-7}$	$-3.37 \cdot 10^{-7}$	$2.968 \cdot 10^{-8}$	$4.944 \cdot 10^{-8}$	$4.944 \cdot 10^{-8}$	0
$b\bar{b} \rightarrow t\bar{t}$	$-1.317 \cdot 10^{-5}$	$-1.317 \cdot 10^{-5}$	0	$6.089 \cdot 10^{-7}$	$6.089 \cdot 10^{-7}$	0
$t\bar{t} \rightarrow \tau^+\tau^-$	$-1.006 \cdot 10^{-6}$	$-1.006 \cdot 10^{-6}$	0	$3.101 \cdot 10^{-8}$	$3.101 \cdot 10^{-8}$	0
$t\bar{t} \rightarrow t\bar{t}$	0.0423	0.0423	0	0.008405	0.008405	0

## 2.88 ctpI

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$HH \rightarrow Ht\bar{t}$	$2.56 \cdot 10^{-5}$	$2.56 \cdot 10^{-5}$	0	$4.033 \cdot 10^{-5}$	$4.033 \cdot 10^{-5}$	0
$HH \rightarrow W^+t\bar{b}$	$5.892 \cdot 10^{-7}$	$5.892 \cdot 10^{-7}$	$1.697 \cdot 10^{-8}$	$5.345 \cdot 10^{-6}$	$5.345 \cdot 10^{-6}$	0
$HH \rightarrow Zt\bar{t}$	$-3.141 \cdot 10^{-6}$	$-3.141 \cdot 10^{-6}$	0	$1.12 \cdot 10^{-5}$	$1.12 \cdot 10^{-5}$	0
$HW^+ \rightarrow \gamma t\bar{b}$	$-1.069 \cdot 10^{-8}$	$-1.069 \cdot 10^{-8}$	$9.353 \cdot 10^{-8}$	$1.723 \cdot 10^{-7}$	$1.723 \cdot 10^{-7}$	0
$HW^- \rightarrow t\bar{b}$	-0.002784	-0.002784	0	0.05371	0.05371	0
$H\gamma \rightarrow t\bar{t}$	$5.763 \cdot 10^{-18}$	$9.926 \cdot 10^{-19}$	0.8278	0.004026	0.004026	$-4.968 \cdot 10^{-8}$
$HZ \rightarrow t\bar{t}$	$6.48 \cdot 10^{-5}$	$6.48 \cdot 10^{-5}$	$7.716 \cdot 10^{-8}$	0.06906	0.06906	0
$W^+W^- \rightarrow Hb\bar{b}$	$3.229 \cdot 10^{-8}$	$3.229 \cdot 10^{-8}$	0	$2.498 \cdot 10^{-9}$	$2.498 \cdot 10^{-9}$	0
$W^+W^- \rightarrow Ht\bar{t}$	$1.876 \cdot 10^{-7}$	$1.876 \cdot 10^{-7}$	$5.33 \cdot 10^{-8}$	$9.123 \cdot 10^{-7}$	$9.123 \cdot 10^{-7}$	0
$b\bar{b} \rightarrow t\bar{t}$	$1.37 \cdot 10^{-21}$	$8.705 \cdot 10^{-22}$	0.3648	$6.906 \cdot 10^{-7}$	$6.906 \cdot 10^{-7}$	0
$t\bar{t} \rightarrow \tau^+\tau^-$	$-4.136 \cdot 10^{-25}$	$3.676 \cdot 10^{-25}$	1.889	$3.49 \cdot 10^{-8}$	$3.49 \cdot 10^{-8}$	0
$t\bar{t} \rightarrow t\bar{t}$	$7.706 \cdot 10^{-18}$	$1.557 \cdot 10^{-17}$	-1.021	0.005143	0.005143	0

## 2.89 ctq1

interference

square

	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$t\bar{t} \rightarrow c\bar{c}$	0.03149	0.03149	$-6.352 \cdot 10^{-8}$	0.8937	0.8937	0
$t\bar{t} \rightarrow d\bar{d}$	-0.001266	-0.001266	$3.158 \cdot 10^{-7}$	0.1643	0.1643	0
$t\bar{t} \rightarrow s\bar{s}$	0.003998	0.003998	$-1.751 \cdot 10^{-7}$	0.3453	0.3453	0

## 2.90 ctq8

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$t\bar{t} \rightarrow c\bar{c}$	0.4274	0.4274	0	0.1377	0.1377	0
$t\bar{t} \rightarrow d\bar{d}$	0.3437	0.3437	0	0.1094	0.1094	0
$t\bar{t} \rightarrow s\bar{s}$	0.1318	0.1318	0	0.03789	0.03789	0

## 2.91 ctt1

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$t\bar{t} \rightarrow t\bar{t}$	-90.83	-90.83	$-1.101 \cdot 10^{-8}$	33.7	33.7	0

## 2.92 ctu1

	interference			square		
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
$t\bar{t} \rightarrow c\bar{c}$	0.01982	0.01982	$-5.047 \cdot 10^{-8}$	0.1663	0.1663	0

## 2.93 ctu8

interference	square
--------------	--------

	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$t\bar{t} \rightarrow c\bar{c}$	0.03236	0.03236	0	0.004347	0.004347	0

## 2.94 sm

	interference			square		
	mod1	mod2	1 - mod2/mod1	mod1	mod2	1 - mod2/mod1
$HH \rightarrow HH$	0	0	0	0.1158	0.1158	0
$HH \rightarrow HHH$	0	0	0	$1.755 \cdot 10^{-7}$	$1.755 \cdot 10^{-7}$	0
$HH \rightarrow H\tau^+\tau^-$	0	0	0	$8.084 \cdot 10^{-12}$	$8.084 \cdot 10^{-12}$	0
$HH \rightarrow Hb\bar{b}$	0	0	0	$2.135 \cdot 10^{-9}$	$2.135 \cdot 10^{-9}$	0
$HH \rightarrow Ht\bar{t}$	0	0	0	$1.41 \cdot 10^{-5}$	$1.41 \cdot 10^{-5}$	0
$HH \rightarrow Hzz$	0	0	0	$7.934 \cdot 10^{-6}$	$7.934 \cdot 10^{-6}$	0
$HH \rightarrow W^+W^-$	0	0	0	0.1343	0.1343	$7.445 \cdot 10^{-8}$
$HH \rightarrow W^+W^-\gamma$	0	0	0	$1.94 \cdot 10^{-7}$	$1.94 \cdot 10^{-7}$	$-2.062 \cdot 10^{-7}$
$HH \rightarrow W^+\bar{t}b$	0	0	0	$1.656 \cdot 10^{-5}$	$1.656 \cdot 10^{-5}$	0
$HH \rightarrow W^+e^-\bar{\nu}_e$	0	0	0	$1.571 \cdot 10^{-7}$	$1.571 \cdot 10^{-7}$	0
$HH \rightarrow W^-u\bar{d}$	0	0	0	$1.206 \cdot 10^{-6}$	$1.206 \cdot 10^{-6}$	$8.291 \cdot 10^{-8}$
$HH \rightarrow z\bar{b}b$	0	0	0	$1.608 \cdot 10^{-5}$	$1.608 \cdot 10^{-5}$	0
$HH \rightarrow z\nu_e\bar{\nu}_e$	0	0	0	$1.037 \cdot 10^{-7}$	$1.037 \cdot 10^{-7}$	0
$HH \rightarrow zc\bar{c}$	0	0	0	$3.842 \cdot 10^{-7}$	$3.842 \cdot 10^{-7}$	$2.603 \cdot 10^{-8}$
$HH \rightarrow zd\bar{d}$	0	0	0	$1.307 \cdot 10^{-6}$	$1.307 \cdot 10^{-6}$	0
$HH \rightarrow ze^+e^-$	0	0	0	$9.792 \cdot 10^{-8}$	$9.792 \cdot 10^{-8}$	0
$HH \rightarrow zt\bar{t}$	0	0	0	0.0002436	0.0002436	0
$HH \rightarrow zz$	0	0	0	0.1559	0.1559	0
$HW^+ \rightarrow \gamma t\bar{b}$	0	0	0	$5.886 \cdot 10^{-6}$	$5.886 \cdot 10^{-6}$	$-3.398 \cdot 10^{-8}$
$HW^+ \rightarrow \gamma u\bar{d}$	0	0	0	$2.803 \cdot 10^{-8}$	$2.803 \cdot 10^{-8}$	0
$HW^+ \rightarrow u\bar{d}$	0	0	0	0.01408	0.01408	0
$HW^- \rightarrow \bar{t}b$	0	0	0	3.345	3.345	0

$HW^- \rightarrow \gamma e^- \bar{\nu}_e$	0	0	0	$7.079 \cdot 10^{-9}$	$7.079 \cdot 10^{-9}$	$-1.413 \cdot 10^{-8}$
$HW^- \rightarrow \mu^- \bar{\nu}_\mu$	0	0	0	0.003286	0.003286	$3.044 \cdot 10^{-8}$
$H\gamma \rightarrow b\bar{b}$	0	0	0	0.0001239	0.0001239	0
$H\gamma \rightarrow t\bar{t}$	0	0	0	0.8784	0.8784	$-4.554 \cdot 10^{-8}$
$H z \rightarrow \mu^+ \mu^-$	0	0	0	0.0004103	0.0004103	0
$H z \rightarrow \nu_\tau \bar{\nu}_\tau$	0	0	0	0.00522	0.00522	0
$H z \rightarrow b\bar{b}$	0	0	0	0.008586	0.008586	$1.165 \cdot 10^{-8}$
$H z \rightarrow s\bar{s}$	0	0	0	0.005797	0.005797	$1.725 \cdot 10^{-8}$
$H z \rightarrow t\bar{t}$	0	0	0	1.804	1.804	0
$H z \rightarrow u\bar{u}$	0	0	0	0.008114	0.008114	$2.465 \cdot 10^{-8}$
$W^+ W^- \rightarrow H b\bar{b}$	0	0	0	$1.277 \cdot 10^{-6}$	$1.277 \cdot 10^{-6}$	$7.828 \cdot 10^{-8}$
$W^+ W^- \rightarrow H c\bar{c}$	0	0	0	$1.145 \cdot 10^{-5}$	$1.145 \cdot 10^{-5}$	$8.733 \cdot 10^{-8}$
$W^+ W^- \rightarrow H d\bar{d}$	0	0	0	$7.785 \cdot 10^{-7}$	$7.785 \cdot 10^{-7}$	$2.569 \cdot 10^{-8}$
$W^+ W^- \rightarrow H t\bar{t}$	0	0	0	$3.568 \cdot 10^{-6}$	$3.568 \cdot 10^{-6}$	0
$W^+ W^- \rightarrow W^+ W^-$	0	0	0	90.71	90.71	$3.307 \cdot 10^{-8}$
$W^+ W^- \rightarrow \gamma\gamma$	0	0	0	0.09023	0.09023	$-7.758 \cdot 10^{-8}$
$W^+ W^- \rightarrow \gamma\gamma\gamma$	0	0	0	$4.165 \cdot 10^{-7}$	$4.165 \cdot 10^{-7}$	$-9.604 \cdot 10^{-8}$
$\bar{b}t \rightarrow \bar{d}u$	0	0	0	0.006407	0.006407	$4.683 \cdot 10^{-8}$
$\gamma W^+ \rightarrow z W^+$	0	0	0	0.3812	0.3812	0
$\mu^+ \mu^- \rightarrow \tau^+ \tau^-$	0	0	0	0.00684	0.00684	$-7.31 \cdot 10^{-8}$
$\nu_\tau \bar{\nu}_\tau \rightarrow \nu_\tau \bar{\nu}_\tau$	0	0	0	0.0003202	0.0003202	0
$\nu_e \bar{\nu}_e \rightarrow \nu_\mu \bar{\nu}_\mu$	0	0	0	0.005542	0.005542	0
$b\bar{b} \rightarrow \gamma\gamma$	0	0	0	$8.34 \cdot 10^{-5}$	$8.34 \cdot 10^{-5}$	$-7.194 \cdot 10^{-8}$
$b\bar{b} \rightarrow \mu^+ \mu^-$	0	0	0	0.002039	0.002039	0
$b\bar{b} \rightarrow \nu_e \bar{\nu}_e$	0	0	0	0.001113	0.001113	0
$b\bar{b} \rightarrow b\bar{b}$	0	0	0	23.31	23.31	0
$b\bar{b} \rightarrow d\bar{d}$	0	0	0	0.8248	0.8248	0
$b\bar{b} \rightarrow t\bar{t}$	0	0	0	3.337	3.337	$2.996 \cdot 10^{-8}$
$b\bar{b} \rightarrow u\bar{u}$	0	0	0	0.5504	0.5504	0

$b\bar{t} \rightarrow e^- \bar{\nu}_e$	0	0	0	0.009925	0.009925	$3.023 \cdot 10^{-8}$
$c\bar{c} \rightarrow \mu^+ \mu^-$	0	0	0	0.002946	0.002946	$-3.394 \cdot 10^{-8}$
$c\bar{s} \rightarrow \tau^+ \nu_\tau$	0	0	0	0.01281	0.01281	0
$d\bar{d} \rightarrow c\bar{c}$	0	0	0	0.4941	0.4941	0
$d\bar{d} \rightarrow e^+ e^-$	0	0	0	0.0003053	0.0003053	$-9.827 \cdot 10^{-8}$
$d\bar{d} \rightarrow s\bar{s}$	0	0	0	0.5468	0.5468	0
$e^+ \nu_\mu \rightarrow e^+ \nu_\mu$	0	0	0	14.4	14.4	0
$e^+ \nu_e \rightarrow \mu^+ \nu_\mu$	0	0	0	0.02038	0.02038	0
$e^+ \nu_e \rightarrow e^+ \nu_e$	0	0	0	0.2107	0.2107	0
$e^+ \tau^- \rightarrow e^+ \tau^-$	0	0	0	0.3763	0.3763	$-7.973 \cdot 10^{-8}$
$e^+ e^- \rightarrow \mu^+ \mu^-$	0	0	0	0.01424	0.01424	$-7.021 \cdot 10^{-8}$
$e^+ e^- \rightarrow e^+ e^-$	0	0	0	0.0165	0.0165	$-6.059 \cdot 10^{-8}$
$gg \rightarrow gg$	0	0	0	431.9	431.9	0
$gg \rightarrow ggg$	0	0	0	0.0435	0.0435	0
$gg \rightarrow t\bar{t}$	0	0	0	1.116	1.116	0
$gg \rightarrow u\bar{u}$	0	0	0	0.4095	0.4095	0
$s\bar{s} \rightarrow \nu_\tau \bar{\nu}_\tau$	0	0	0	0.002067	0.002067	0
$s\bar{s} \rightarrow s\bar{s}$	0	0	0	4.637	4.637	0
$t\bar{t} \rightarrow \nu_\mu \bar{\nu}_\mu$	0	0	0	0.0008623	0.0008623	$2.319 \cdot 10^{-8}$
$t\bar{t} \rightarrow \tau^+ \tau^-$	0	0	0	0.004607	0.004607	$-2.171 \cdot 10^{-8}$
$t\bar{t} \rightarrow c\bar{c}$	0	0	0	0.8047	0.8047	0
$t\bar{t} \rightarrow d\bar{d}$	0	0	0	0.7349	0.7349	0
$t\bar{t} \rightarrow s\bar{s}$	0	0	0	0.5781	0.5781	0
$t\bar{t} \rightarrow t\bar{t}$	0	0	0	77.07	77.07	0
$u\bar{d} \rightarrow \mu^+ \nu_\mu$	0	0	0	0.01291	0.01291	0
$u\bar{d} \rightarrow c\bar{s}$	0	0	0	0.00712	0.00712	$2.809 \cdot 10^{-8}$
$u\bar{d} \rightarrow u\bar{d}$	0	0	0	6.715	6.715	0
$u\bar{u} \rightarrow \nu_e \bar{\nu}_e$	0	0	0	0.0006499	0.0006499	0
$u\bar{u} \rightarrow c\bar{c}$	0	0	0	0.9546	0.9546	0

$u\bar{u} \rightarrow u\bar{u}$	0	0	0	165.1	165.1	0
$zz \rightarrow W^+W^-$	0	0	0	33.53	33.53	$5.965 \cdot 10^{-8}$
$zz \rightarrow zz$	0	0	0	0.07904	0.07904	0