1 By process

1.1 $HH \rightarrow HH$

1.2 $HH \rightarrow HHH$

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

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

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

interference square mod2 1 - mod2/mod1mod2 1 - mod2/mod1mod1mod1 $2.803 \cdot 10^{-6}$ $-2.468 \cdot 10^{-6}$ 1.881 $2.188 \cdot 10^{-6}$ $2.083 \cdot 10^{-6}$ 0.04779 ctp $3.485 \cdot 10^{-5}$ $1.517 \cdot 10^{-5}$ ctpI $4.472 \cdot 10^{-6}$ $1.407 \cdot 10^{-6}$ 0.68550.5648 $1.957 \cdot 10^{-5}$ $1.957 \cdot 10^{-5}$ 0 0 0 0 sm

1.6 $HH \rightarrow Hzz$

1.7 $HH \to W^+W^-$

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

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

cbW	$8.118 \cdot 10^{-7}$	$8.118 \cdot 10^{-7}$	0	$1.101 \cdot 10^{-5}$	$1.101 \cdot 10^{-5}$	0
cbWI	$-7.488 \cdot 10^{-7}$	$-7.488 \cdot 10^{-7}$	$1.335 \cdot 10^{-8}$	$1.846 \cdot 10^{-5}$	$1.846 \cdot 10^{-5}$	0
cpQ3	$1.183 \cdot 10^{-5}$	$2.721 \cdot 10^{-5}$	-1.299	$1.065 \cdot 10^{-5}$	$3.547 \cdot 10^{-5}$	-2.329
cptb	$-8.638 \cdot 10^{-7}$	$-8.489 \cdot 10^{-7}$	0.01734	$6.643 \cdot 10^{-6}$	$4.907 \cdot 10^{-6}$	0.2614
cptbI	$-1.567 \cdot 10^{-6}$	$-4.381 \cdot 10^{-7}$	0.7204	$2.664 \cdot 10^{-6}$	$8.863 \cdot 10^{-6}$	-2.327
ctW	$-7.531 \cdot 10^{-6}$	$-7.531 \cdot 10^{-6}$	0	$1.374 \cdot 10^{-5}$	$1.374 \cdot 10^{-5}$	0
ctWI	$2.113 \cdot 10^{-6}$	$2.113 \cdot 10^{-6}$	0	$1.102 \cdot 10^{-5}$	$1.102 \cdot 10^{-5}$	0
ctp	$4.416 \cdot 10^{-6}$	$4.416 \cdot 10^{-6}$	$2.265 \cdot 10^{-8}$	$5.305 \cdot 10^{-6}$	$5.305 \cdot 10^{-6}$	$1.885 \cdot 10^{-8}$
ctpI	$1.27 \cdot 10^{-6}$	$1.27 \cdot 10^{-6}$	$-7.873 \cdot 10^{-8}$	$8.485 \cdot 10^{-6}$	$8.485 \cdot 10^{-6}$	0
sm	0	0	0	$3.962 \cdot 10^{-6}$	$3.962 \cdot 10^{-6}$	0

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

			interference		square	
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$
sm	0	0	0	$1.576 \cdot 10^{-6}$	$1.576 \cdot 10^{-6}$	$6.347 \cdot 10^{-8}$

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

			interference		square	
	mod1	mod2	$1 - \mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$
\mathtt{sm}	0	0	0	$6.988 \cdot 10^{-7}$	$6.988 \cdot 10^{-7}$	$1.431 \cdot 10^{-8}$

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

		interfe	rence		square			
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$		
cbW	$6.257 \cdot 10^{-8}$	$6.257 \cdot 10^{-8}$	$1.598 \cdot 10^{-8}$	$4.155 \cdot 10^{-7}$	$4.155 \cdot 10^{-7}$	$2.407 \cdot 10^{-8}$		

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-3.187 \cdot 10^{-9} -3.187 \cdot 10^{-9}
                                                       3.138 \cdot 10^{-8}
                                                                                       1.186 \cdot 10^{-6} 1.186 \cdot 10^{-6}
                                                                                                                                0
cbWI
             4.965 \cdot 10^{-6}
                                6.375 \cdot 10^{-6}
                                                      -0.2839
                                                                                       1.966 \cdot 10^{-5} 8.297 \cdot 10^{-5}
cpQ3
                                                                                                                               -3.221
             1.576 \cdot 10^{-6}
                               1.749 \cdot 10^{-6}
                                                      -0.1094
                                                                                       2.376 \cdot 10^{-6} 6.977 \cdot 10^{-6}
                                                                                                                                -1.937
cpQM
                                                                                       6.942 \cdot 10^{-6} \quad 3.471 \cdot 10^{-5}
cpb
             -8.942 \cdot 10^{-7} \quad -1.705 \cdot 10^{-6}
                                                          -0.907
                                                                                                                                  -4
                                                                                       9.294 \cdot 10^{-7} 9.294 \cdot 10^{-7}
                                                                                                                             1.076 \cdot 10^{-8}
               0
                                        0
                                                              0
sm
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1.13 $HH \rightarrow z\nu_e\bar{\nu}_e$

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

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

1.16 $HH \rightarrow ze^{+}e^{-}$

 ${\rm sm} \qquad \qquad 0 \qquad \qquad 0 \qquad \qquad 1.448 \cdot 10^{-7} \quad 1.448 \cdot 10^{-7} \qquad \qquad 0$

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

		interfere	ence		square			
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$		
cpQM	$1.959 \cdot 10^{-6}$	$-1.686 \cdot 10^{-5}$	9.607	$4.067 \cdot 10^{-6}$	0.0001002	-23.63		
cpt	$-1.986 \cdot 10^{-5}$	$4.091 \cdot 10^{-6}$	1.206	$2.589 \cdot 10^{-5}$	$5.968 \cdot 10^{-5}$	-1.305		
ctW	$2.217 \cdot 10^{-12}$	0	1	$3.623 \cdot 10^{-17}$	0	1		
ctWI	$-8.834 \cdot 10^{-13}$	0	1	$1.487 \cdot 10^{-17}$	0	1		
ctZ	$1.468 \cdot 10^{-6}$	$1.468 \cdot 10^{-6}$	$6.132 \cdot 10^{-7}$	$4.418 \cdot 10^{-5}$	$4.418 \cdot 10^{-5}$	$1.109 \cdot 10^{-6}$		
ctZI	$6.733 \cdot 10^{-8}$	$6.733 \cdot 10^{-8}$	$4.307 \cdot 10^{-7}$	$1.669 \cdot 10^{-5}$	$1.669 \cdot 10^{-5}$	$1.078 \cdot 10^{-6}$		
ctp	$1.32 \cdot 10^{-6}$	$1.32 \cdot 10^{-6}$	0	$1.76 \cdot 10^{-6}$	$1.76 \cdot 10^{-6}$	0		
ctpI	$-1.569 \cdot 10^{-7}$	$-1.569 \cdot 10^{-7}$	$-6.373 \cdot 10^{-8}$	$1.546 \cdot 10^{-6}$	$1.546 \cdot 10^{-6}$	0		
sm	0	0	0	$7.747 \cdot 10^{-5}$	$7.747 \cdot 10^{-5}$	0		

1.18 $HH \rightarrow zz$

			interference		square		
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	
\mathtt{sm}	0	0	0	0.08187	0.08187	0	

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

		interfer	rence	square			
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	
cbW	$5.341 \cdot 10^{-8}$	$3.405 \cdot 10^{-7}$	-5.376	$2.425 \cdot 10^{-5}$	$3.304 \cdot 10^{-5}$	-0.3623	
cbWI	$-2.511 \cdot 10^{-8}$	$-9.553 \cdot 10^{-8}$	-2.805	$8.644 \cdot 10^{-7}$	$9.25 \cdot 10^{-6}$	-9.701	

cpQ3	$-3.686 \cdot 10^{-5}$	$-3.686 \cdot 10^{-5}$	0	$4.098 \cdot 10^{-5}$	$4.098 \cdot 10^{-5}$	$-2.44 \cdot 10^{-8}$
cptb	$7.289 \cdot 10^{-10}$	$7.289 \cdot 10^{-10}$	$-1.372 \cdot 10^{-8}$	$5.873 \cdot 10^{-9}$	$5.873 \cdot 10^{-9}$	$-1.703 \cdot 10^{-8}$
cptbI	$-3.572 \cdot 10^{-9}$	$-3.572 \cdot 10^{-9}$	$-2.799 \cdot 10^{-8}$	$1.024 \cdot 10^{-5}$	$1.024 \cdot 10^{-5}$	0
ctW	$1.707 \cdot 10^{-5}$	$1.422 \cdot 10^{-5}$	0.1671	0.0001333	0.000118	0.1146
ctWI	$-4.107 \cdot 10^{-7}$	$-1.975 \cdot 10^{-6}$	-3.81	$3.154 \cdot 10^{-5}$	$3.726 \cdot 10^{-5}$	-0.181
ctZ	$3.874 \cdot 10^{-6}$	$3.874 \cdot 10^{-6}$	$5.42\cdot 10^{-7}$	$1.885 \cdot 10^{-6}$	$1.885 \cdot 10^{-6}$	$1.167 \cdot 10^{-6}$
ctZI	$5.272 \cdot 10^{-6}$	$5.272 \cdot 10^{-6}$	$5.501 \cdot 10^{-7}$	$3.243 \cdot 10^{-5}$	$3.243 \cdot 10^{-5}$	$1.11 \cdot 10^{-6}$
ctp	$3.988 \cdot 10^{-7}$	$3.988 \cdot 10^{-7}$	0	$1.056 \cdot 10^{-6}$	$1.056 \cdot 10^{-6}$	0
ctpI	$5.43 \cdot 10^{-8}$	$5.43 \cdot 10^{-8}$	$-1.842 \cdot 10^{-8}$	$1.167 \cdot 10^{-6}$	$1.167 \cdot 10^{-6}$	0
sm	0	0	0	$2.475 \cdot 10^{-6}$	$2.475 \cdot 10^{-6}$	$-4.041 \cdot 10^{-8}$

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

			interference		square	
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$
sm	0	0	0	$2.405 \cdot 10^{-8}$	$2.405 \cdot 10^{-8}$	0

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

			interference		square			
	mod1	mod2	$1 - \mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$		
sm	0	0	0	0.01937	0.01937	0		

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

		erence		square			
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1 - \mathtt{mod}2/\mathtt{mod}1$	
cbW	0.005107	0.005107	0	2.151	2.151	0	
cbWI	$2.229 \cdot 10^{-6}$	$2.229 \cdot 10^{-6}$	0	1.792	1.792	0	

cpQ3	-1.734	-1.734	0	1.906	1.906	0
cptb	-0.0409	-0.0409	0	0.1329	0.1329	0
cptbI	$-8.71 \cdot 10^{-6}$	$-8.71 \cdot 10^{-6}$	0	0.4766	0.4766	0
ctW	0.107	0.107	0	0.5023	0.5023	0
ctWI	-0.0002011	-0.0002011	0	2.151	2.151	0
ctp	0.08109	0.08109	0	0.05133	0.05133	0
ctpI	-0.00134	-0.00134	0	0.05763	0.05763	0
sm	0	0	0	5.4	5.4	0

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

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

	interference				square			
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$		
sm	0	0	0	0.007567	0.007567	$1.321 \cdot 10^{-8}$		

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

		interfere	ence		square			
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	1 - mod2/mod1		
cbW	$-5.696 \cdot 10^{-5}$	$-5.696 \cdot 10^{-5}$	$-1.756 \cdot 10^{-8}$	0.0179	0.0179	$-5.588 \cdot 10^{-8}$		
cbWI	$-3.116 \cdot 10^{-20}$	$-3.171 \cdot 10^{-20}$	-0.01762	0.2874	0.2874	$-3.479 \cdot 10^{-8}$		
sm	0	0	0	0.0001156	0.0001156	0		

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

		interfere	ence	square
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	$\verb mod1 & \verb mod2 & 1-\verb mod2/mod1 $
ctW	-0.6278	-0.6278	$5.893 \cdot 10^{-7}$	$15.08 15.08 1.193 \cdot 10^{-6}$
ctWI	$1.862 \cdot 10^{-17}$	$-4.039 \cdot 10^{-17}$	3.169	$14.36 14.36 1.184 \cdot 10^{-6}$
ctZ	0.5826	0.5826	$5.493 \cdot 10^{-7}$	11 11 $1.091 \cdot 10^{-6}$
ctZI	$-6.595 \cdot 10^{-17}$	$-9.199 \cdot 10^{-17}$	-0.395	7.532 7.532 $1.115 \cdot 10^{-6}$
ctp	-0.05458	-0.05458	$-1.832 \cdot 10^{-8}$	$0.001675 0.001675 \qquad 0$
\mathtt{ctpI}	$-2.606 \cdot 10^{-18}$	$-3.69 \cdot 10^{-18}$	-0.4161	0.00211 0.00211 0
\mathtt{sm}	0	0	0	$0.4186 \qquad 0.4186 \qquad 0$

1.27 $Hz \to \mu^+ \mu^-$

			interference		square			
	mod1	mod2	$1-{\tt mod2/mod1}$	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$		
sm	0	0	0	0.003181	0.003181	0		

1.28 $Hz \rightarrow \nu_{\tau} \bar{\nu}_{\tau}$

1.29 $Hz \rightarrow b\bar{b}$

cbW	0.001421	0.001421	0	0.4418	0.4418	$2.264 \cdot 10^{-8}$
cbWI	$3.186 \cdot 10^{-6}$	$3.186 \cdot 10^{-6}$	0	1.318	1.318	0
cpQ3	0.1494	0.1494	0	1.318	1.318	0
cpQM	0.2028	0.2028	0	0.8821	0.8821	0
cpb	-0.04312	-0.04312	$-2.319 \cdot 10^{-8}$	1.045	1.045	0
sm	0	0	0	0.01438	0.01438	0

1.30 $Hz \rightarrow s\bar{s}$

			interference		square			
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	1 - mod2/mod1		
\mathtt{sm}	0	0	0	0.0145	0.0145	0		

1.31 $Hz \rightarrow t\bar{t}$

		interfe	erence		square			
	mod1	mod2	$1-{\tt mod2/mod1}$	mod1	mod2	$1-{\tt mod2/mod1}$		
cpQM	2.067	2.067	0	1.165	1.165	0		
cpt	-1.315	-1.315	0	0.2317	0.2317	0		
ctW	$2.434 \cdot 10^{-8}$	0	1	$1.706 \cdot 10^{-12}$	0	1		
ctWI	$-3.833 \cdot 10^{-9}$	0	1	$4.082 \cdot 10^{-13}$	0	1		
ctZ	-0.3392	-0.3392	$5.602 \cdot 10^{-7}$	0.9477	0.9477	$1.097 \cdot 10^{-6}$		
ctZI	0.0004607	0.0004607	$5.426 \cdot 10^{-7}$	3.065	3.065	$1.109 \cdot 10^{-6}$		
ctp	-0.1731	-0.1731	0	0.04309	0.04309	0		
\mathtt{ctpI}	-0.001892	-0.001892	0	0.04266	0.04266	0		
sm	0	0	0	1.745	1.745	0		

1.32 $Hz \rightarrow u\bar{u}$

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

		interfer	ence	square			
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	
cbW	$-6.736 \cdot 10^{-8}$	$-1.827 \cdot 10^{-6}$	-26.13	$4.15 \cdot 10^{-6}$	0.0001446	-33.86	
cbWI	$3.352 \cdot 10^{-8}$	$2.19 \cdot 10^{-6}$	-64.34	$3.451 \cdot 10^{-6}$	0.001297	-374.9	
cpQ3	$-2.437 \cdot 10^{-6}$	$-2.437 \cdot 10^{-6}$	0	$1.276 \cdot 10^{-6}$	$1.276 \cdot 10^{-6}$	0	
cpQM	$2.917 \cdot 10^{-6}$	$2.917 \cdot 10^{-6}$	0	$2.979 \cdot 10^{-7}$	$2.979 \cdot 10^{-7}$	0	
cpb	$-2.379 \cdot 10^{-8}$	$-2.379 \cdot 10^{-8}$	0	$2.738 \cdot 10^{-7}$	$2.738 \cdot 10^{-7}$	0	
cptb	$-4.965 \cdot 10^{-8}$	$-4.965 \cdot 10^{-8}$	0	$4.117 \cdot 10^{-7}$	$4.117 \cdot 10^{-7}$	0	
cptbI	$5.143 \cdot 10^{-8}$	$5.143 \cdot 10^{-8}$	0	$1.141 \cdot 10^{-6}$	$1.141 \cdot 10^{-6}$	0	
ctW	$-1.523 \cdot 10^{-7}$	$-1.523 \cdot 10^{-7}$	0	$2.79 \cdot 10^{-6}$	$2.79 \cdot 10^{-6}$	0	
ctWI	$1.883 \cdot 10^{-6}$	$1.883 \cdot 10^{-6}$	0	$6.25 \cdot 10^{-6}$	$6.25 \cdot 10^{-6}$	0	
ctp	$6.301 \cdot 10^{-7}$	$6.301 \cdot 10^{-7}$	$1.587 \cdot 10^{-8}$	$4.992 \cdot 10^{-8}$	$4.992 \cdot 10^{-8}$	0	
ctpI	$2.514 \cdot 10^{-7}$	$2.514 \cdot 10^{-7}$	0	$1.309 \cdot 10^{-8}$	$1.309 \cdot 10^{-8}$	0	
sm	0	0	0	$3.719 \cdot 10^{-6}$	$3.719 \cdot 10^{-6}$	$2.689 \cdot 10^{-8}$	

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

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

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

		interfer	ence		square			
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1-{\tt mod2/mod1}$		
cbW	$-3.463 \cdot 10^{-7}$	$-3.463 \cdot 10^{-7}$	0	$1.848 \cdot 10^{-8}$	$1.848 \cdot 10^{-8}$	0		
cbWI	$1.215 \cdot 10^{-8}$	$1.215 \cdot 10^{-8}$	0	$1.442 \cdot 10^{-8}$	$1.442 \cdot 10^{-8}$	0		
cpQ3	$-3.659 \cdot 10^{-7}$	$-3.659 \cdot 10^{-7}$	$1.366 \cdot 10^{-7}$	$8.867 \cdot 10^{-6}$	$8.867 \cdot 10^{-6}$	0		
cpQM	$1.214 \cdot 10^{-6}$	$1.214 \cdot 10^{-6}$	0	$1.684 \cdot 10^{-6}$	$1.684 \cdot 10^{-6}$	0		
cpt	$3.208 \cdot 10^{-6}$	$3.208 \cdot 10^{-6}$	0	$9.777 \cdot 10^{-7}$	$9.777 \cdot 10^{-7}$	0		
cptb	$-8.914 \cdot 10^{-7}$	$-8.914 \cdot 10^{-7}$	$1.122 \cdot 10^{-8}$	$1.034 \cdot 10^{-8}$	$1.034 \cdot 10^{-8}$	0		
cptbI	$3.452 \cdot 10^{-9}$	$3.452 \cdot 10^{-9}$	$-2.897 \cdot 10^{-8}$	$3.379 \cdot 10^{-9}$	$3.379 \cdot 10^{-9}$	0		
ctW	$-9.128 \cdot 10^{-6}$	$-9.549 \cdot 10^{-5}$	-9.462	$6.138 \cdot 10^{-5}$	0.002895	-46.17		
ctWI	$-2.795 \cdot 10^{-6}$	$2.142 \cdot 10^{-5}$	8.664	$3.148 \cdot 10^{-5}$	0.00255	-80		
ctZ	$-4.19 \cdot 10^{-7}$	$-4.19 \cdot 10^{-7}$	$5.489 \cdot 10^{-7}$	$1.252 \cdot 10^{-7}$	$1.252 \cdot 10^{-7}$	$1.038 \cdot 10^{-6}$		
ctZI	$9.417 \cdot 10^{-8}$	$9.417 \cdot 10^{-8}$	$5.522 \cdot 10^{-7}$	$4.219 \cdot 10^{-8}$	$4.219 \cdot 10^{-8}$	$1.09 \cdot 10^{-6}$		
ctp	$1.685 \cdot 10^{-9}$	$1.685 \cdot 10^{-9}$	$3.918 \cdot 10^{-6}$	$2.245 \cdot 10^{-7}$	$2.245 \cdot 10^{-7}$	0		
ctpI	$-4.627 \cdot 10^{-7}$	$-4.627 \cdot 10^{-7}$	0	$5.628 \cdot 10^{-7}$	$5.628 \cdot 10^{-7}$	0		
sm	0	0	0	$6.095 \cdot 10^{-5}$	$6.095 \cdot 10^{-5}$	0		

1.37 $W^+W^- \to W^+W^-$

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

	interference				square			
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1 - \mathtt{mod}2/\mathtt{mod}1$		
sm	0	0	0	0.08753	0.08753	$-3.427 \cdot 10^{-8}$		

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

			interference		square	
	mod1	mod2	$1 - \mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$
sm	0	0	0	$6.125 \cdot 10^{-7}$	$6.125 \cdot 10^{-7}$	$-4.898 \cdot 10^{-8}$

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

	interference			square			
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1-{\tt mod2/mod1}$	
cQbqu1	0	0	0	0.25	0.25	$3.04 \cdot 10^{-6}$	
cQbqu1I	0	0	0	0.25	0.25	$3.08 \cdot 10^{-6}$	
cQbqu8	0	0	0	0.05556	0.05556	$3.06 \cdot 10^{-6}$	
cQbqu8I	0	0	0	0.05556	0.05556	$3.06 \cdot 10^{-6}$	
cQq13	0.2787	0.2787	0	1.318	1.318	0	
cQq83	$2.106 \cdot 10^{-17}$	$8.726 \cdot 10^{-18}$	0.5857	0.6938	0.6938	0	
cQtqd1	0	0	0	0.25	0.25	$3.08 \cdot 10^{-6}$	
cQtqd1I	0	0	0	0.25	0.25	$3.04 \cdot 10^{-6}$	
cQtqd8	0	0	0	0.05556	0.05556	$3.06 \cdot 10^{-6}$	
cQtqd8I	0	0	0	0.05556	0.05556	$3.06 \cdot 10^{-6}$	
cbQqd1	0	0	0	0.25	0.25	$3.08 \cdot 10^{-6}$	
cbQqd1I	0	0	0	0.25	0.25	$3.08 \cdot 10^{-6}$	
cbQqd8	0	0	0	0.05556	0.05556	$2.934 \cdot 10^{-6}$	

cbQqd8I	0	0	0	0.05556	0.05556	$2.934 \cdot 10^{-6}$
cbW	0.0001493	0.0001493	$6.696 \cdot 10^{-8}$	0.01177	0.01177	0
cbWI	$4.225 \cdot 10^{-19}$	$1.108 \cdot 10^{-18}$	-1.622	0.01296	0.01296	0
cbtud1	0	0	0	0.3294	0.3294	$6.072 \cdot 10^{-6}$
cbtud1I	0	0	0	0.7806	0.7806	$6.085 \cdot 10^{-6}$
cbtud8	0	0	0	0.1851	0.1851	$5.89 \cdot 10^{-6}$
cbtud8I	0	0	0	0.02277	0.02277	$5.928 \cdot 10^{-6}$
cpQ3	0.0005561	0.0005561	$1.798 \cdot 10^{-8}$	$1.686 \cdot 10^{-5}$	$1.686 \cdot 10^{-5}$	0
cptb	$-2.193 \cdot 10^{-6}$	$-2.193 \cdot 10^{-6}$	0	$7.02 \cdot 10^{-7}$	$7.02 \cdot 10^{-7}$	$1.424 \cdot 10^{-8}$
cptbI	$2.841 \cdot 10^{-21}$	$6.232 \cdot 10^{-21}$	-1.194	$1.984 \cdot 10^{-5}$	$1.984 \cdot 10^{-5}$	0
ctQqu1	0	0	0	0.25	0.25	$3.12 \cdot 10^{-6}$
ctQqu1I	0	0	0	0.25	0.25	$3.08 \cdot 10^{-6}$
ctQqu8	0	0	0	0.05556	0.05556	$2.916 \cdot 10^{-6}$
ctQqu8I	0	0	0	0.05556	0.05556	$2.934 \cdot 10^{-6}$
ctW	0.01458	0.01458	0	0.006571	0.006571	$1.522 \cdot 10^{-8}$
ctWI	$-8.574 \cdot 10^{-18}$	$3.133 \cdot 10^{-17}$	4.655	0.01119	0.01119	0
sm	0	0	0	0.03494	0.03494	$2.862 \cdot 10^{-8}$

$\textbf{1.41} \quad \gamma W^+ \to z W^+$

1.42 $\mu^{+}\mu^{-} \rightarrow \tau^{+}\tau^{-}$

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

	interference				square			
	mod1	mod2	$1-{\tt mod2/mod1}$	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$		
sm	0	0	0	2.986	2.986	0		

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

	interference				square			
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	1 - mod2/mod1		
sm	0	0	0	0.006267	0.006267	0		

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

		interfer	rence	square			
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	$\verb mod1 \qquad \verb mod2 \qquad 1-\verb mod2/mod1 $			
cbW	$4.926 \cdot 10^{-6}$	$4.926 \cdot 10^{-6}$	$-2.03 \cdot 10^{-8}$	$0.0006187 0.0006187 -3.233 \cdot 10^{-8}$			
cbWI	$-1.436 \cdot 10^{-22}$	$1.588 \cdot 10^{-22}$	2.106	$0.0006186 0.0006186 -3.233 \cdot 10^{-8}$			
sm	0	0	0	0.0001264 0.0001264 0			

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

		interfe	erence		square			
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$		
cbW	$2.111 \cdot 10^{-5}$	$2.111 \cdot 10^{-5}$	0	0.0008635	0.0008635	$1.158 \cdot 10^{-8}$		
cbWI	$4.555 \cdot 10^{-16}$	$4.555 \cdot 10^{-16}$	-0.0001117	0.002105	0.002105	0		
cpQ3	$9.689 \cdot 10^{-5}$	$9.689 \cdot 10^{-5}$	$-3.096 \cdot 10^{-8}$	$1.643 \cdot 10^{-5}$	$1.643 \cdot 10^{-5}$	0		
cpQM	$7.14 \cdot 10^{-5}$	$7.14 \cdot 10^{-5}$	$1.4 \cdot 10^{-8}$	$2.892 \cdot 10^{-6}$	$2.892 \cdot 10^{-6}$	$-3.457 \cdot 10^{-8}$		

cpb	$4.752 \cdot 10^{-5}$	$4.752 \cdot 10^{-5}$	0	$5.228 \cdot 10^{-6}$	$5.228 \cdot 10^{-6}$	$3.826 \cdot 10^{-8}$
sm	0	0	0	0.0002917	0.0002917	$-3.428 \cdot 10^{-8}$

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

		interfer	ence	square			
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	
cbW	$6.577 \cdot 10^{-6}$	$6.577 \cdot 10^{-6}$	$6.082 \cdot 10^{-8}$	0.001495	0.001495	0	
cbWI	$-2.532 \cdot 10^{-20}$	$1.734 \cdot 10^{-20}$	1.685	0.001655	0.001655	0	
cpQ3	$6.46 \cdot 10^{-5}$	$6.46 \cdot 10^{-5}$	0	$4.639 \cdot 10^{-6}$	$4.639 \cdot 10^{-6}$	0	
cpQM	0.000359	0.000359	0	$1.289 \cdot 10^{-5}$	$1.289 \cdot 10^{-5}$	0	
cpb	$-1.391 \cdot 10^{-5}$	$-1.391 \cdot 10^{-5}$	0	$2.708 \cdot 10^{-6}$	$2.708 \cdot 10^{-6}$	0	
sm	0	0	0	0.001998	0.001998	0	

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

		interfe	erence	square
	mod1	mod2	$1-{\tt mod2/mod1}$	$\verb mod1 \qquad \verb mod2 \qquad 1-\verb mod2/mod1 $
cQQ1	-0.03001	-0.03001	0	$0.1575 \qquad 0.1575 \qquad 0$
cQQ8	-1.177	-1.177	0	$0.1817 \qquad 0.1817 \qquad 0$
cQb1	0.1172	0.1172	$-8.529 \cdot 10^{-8}$	2.094 2.094 0
cQb8	-4.262	-4.262	0	$0.4846 \qquad 0.4846 \qquad 0$
cbW	-0.01101	-0.01101	0	$0.2076 0.2076 4.818 \cdot 10^{-8}$
cbWI	$2.379 \cdot 10^{-18}$	$4.728 \cdot 10^{-19}$	0.8013	$0.03382 \qquad 0.03382 \qquad 0$
cpQ3	-0.1387	-0.1387	0	$0.008853 \qquad 0.008853 \qquad 1.13 \cdot 10^{-8}$
cpQM	-0.002585	-0.002585	0	$2.926 \cdot 10^{-5}$ $2.926 \cdot 10^{-5}$ 0
cpb	0.00883	0.00883	$-2.265 \cdot 10^{-8}$	$0.001074 \qquad 0.001074 \qquad 0$
sm	0	0	0	17.24 17.24 0

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

		interfere	ence	square			
	mod1	mod2	$1-{\tt mod2/mod1}$	$\verb mod1 \qquad \verb mod2 \qquad 1-\verb mod2/mod1 $			
cQd1	$-4.39 \cdot 10^{-7}$	$-4.39 \cdot 10^{-7}$	$-2.278 \cdot 10^{-8}$	$7.352 \cdot 10^{-5} 7.352 \cdot 10^{-5}$			
cQd8	0.2527	0.2527	0	$0.08528 \qquad 0.08528 \qquad 0$			
cQq11	0.09968	0.09968	0	0.4552 0.4552 0			
cQq13	0.09968	0.09968	0	0.4552 0.4552 0			
cQq81	0.6473	0.6473	0	$0.2184 \qquad 0.2184 \qquad 0$			
cQq83	0.6473	0.6473	0	$0.2184 \qquad 0.2184 \qquad 0$			
cbQqd1	-0.01371	0	1	$0.5 0.5 3.1 \cdot 10^{-6}$			
cbQqd1I	$3.299 \cdot 10^{-20}$	0	1	$0.5 0.5 3.1 \cdot 10^{-6}$			
cbQqd8	$6.094 \cdot 10^{-10}$	0	1	$0.1111 0.1111 2.97 \cdot 10^{-6}$			
cbQqd8I	$-6.397 \cdot 10^{-21}$	0	1	$0.1111 0.1111 2.97 \cdot 10^{-6}$			
cbW	$7.941 \cdot 10^{-5}$	$7.941 \cdot 10^{-5}$	0	$0.006094 \qquad 0.006094 \qquad 0$			
cbWI	$1.063 \cdot 10^{-17}$	$1.065 \cdot 10^{-17}$	-0.002714	$0.005673 \qquad 0.005673 \qquad 1.763 \cdot 10^{-8}$			
cpQ3	0.0004635	0.0004635	0	$3.164 \cdot 10^{-5} 3.164 \cdot 10^{-5} $			
\mathtt{cpQM}	0.0007076	0.0007076	0	$2.299 \cdot 10^{-5}$ $2.299 \cdot 10^{-5}$ $4.35 \cdot 10^{-8}$			
cpb	$-3.663 \cdot 10^{-5}$	$-3.663 \cdot 10^{-5}$	$-2.73 \cdot 10^{-8}$	$1.681 \cdot 10^{-6}$ $1.681 \cdot 10^{-6}$ $-5.948 \cdot 10^{-8}$			
sm	0	0	0	$0.9711 \qquad 0.9711 \qquad 0$			

$1.50 \quad b\bar{b} \to t\bar{t}$

	interference			square			
	mod1	mod2	$1-{\tt mod2/mod1}$	mod1	mod2	$1-{\tt mod2/mod1}$	
cQQ1	-0.0293	-0.0293	0	0.04519	0.04519	0	
cQQ8	0.006401	0.006401	0	0.0002502	0.0002502	0	
cQb1	-0.01502	-0.01502	0	0.9335	0.9335	0	
cQb8	0.03422	0.03422	0	0.004988	0.004988	0	

cQt1	-0.3055	-0.3055	0	0.9335	0.9335	0
cQt8	-0.08655	-0.08655	0	0.004988	0.004988	0
cQtQb1	-0.004055	-0.004055	0	0.8231	0.8231	0
cQtQb1I	$5.721 \cdot 10^{-21}$	$2.195 \cdot 10^{-19}$	-37.36	0.5214	0.5214	0
cQtQb8	0.009179	0.009179	0	0.09807	0.09807	0
cQtQb8I	$3.491 \cdot 10^{-18}$	$1.512 \cdot 10^{-19}$	0.9567	0.1172	0.1172	0
cbW	0.002687	0.002687	0	0.003868	0.003868	0
cbWI	$3.228 \cdot 10^{-18}$	$-1.236 \cdot 10^{-17}$	4.829	0.02577	0.02577	0
cpQ3	-0.02027	-0.02027	0	0.003614	0.003614	0
cpQM	-0.0006971	-0.0006971	$-1.435 \cdot 10^{-8}$	$5.566 \cdot 10^{-6}$	$5.566 \cdot 10^{-6}$	$-5.39 \cdot 10^{-8}$
cpb	-0.0001111	-0.0001111	$-9.003 \cdot 10^{-8}$	$5.44 \cdot 10^{-6}$	$5.44 \cdot 10^{-6}$	$-3.676 \cdot 10^{-8}$
cpt	-0.002147	-0.002147	$4.657 \cdot 10^{-8}$	$4.743 \cdot 10^{-5}$	$4.743 \cdot 10^{-5}$	0
cptb	0.001557	0.001557	0	0.006093	0.006093	0
cptbI	$3.06 \cdot 10^{-21}$	$-7.737 \cdot 10^{-20}$	26.29	0.0005575	0.0005575	0
ctG	0.1191	0.1191	0	0.03144	0.03144	0
ctGI	$-2.072 \cdot 10^{-17}$	$6.584 \cdot 10^{-18}$	1.318	0.022	0.022	0
ctW	-0.5342	-0.5342	$3.744 \cdot 10^{-8}$	0.5721	0.5721	$1.748 \cdot 10^{-8}$
ctWI	$1.237 \cdot 10^{-17}$	$-9.844 \cdot 10^{-17}$	8.956	0.0003213	0.0003213	$1.867 \cdot 10^{-7}$
ctZ	0.004321	0.004321	$5.554 \cdot 10^{-7}$	0.001159	0.001159	$1.122 \cdot 10^{-6}$
ctZI	$1.86 \cdot 10^{-18}$	$-1.556 \cdot 10^{-19}$	1.084	0.002575	0.002575	$1.087 \cdot 10^{-6}$
ctb1	-0.0004917	-0.0004917	$-2.034 \cdot 10^{-8}$	0.001126	0.001126	0
ctb8	0.4951	0.4951	0	0.1605	0.1605	0
ctp	$-1.32 \cdot 10^{-5}$	$-1.32 \cdot 10^{-5}$	0	$6.089 \cdot 10^{-7}$	$6.089 \cdot 10^{-7}$	0
ctpI	$-4.382 \cdot 10^{-22}$	$9.617 \cdot 10^{-22}$	3.195	$6.906 \cdot 10^{-7}$	$6.906 \cdot 10^{-7}$	0
sm	0	0	0	1.683	1.683	0

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

interference square

	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$
cQbqu1	-0.01371	0	1	0.5	0.5	$3.06 \cdot 10^{-6}$
cQbqu1I	$-1.349 \cdot 10^{-18}$	0	1	0.5	0.5	$3.06 \cdot 10^{-6}$
cQbqu8	$-1.154 \cdot 10^{-20}$	0	1	0.1111	0.1111	$3.06 \cdot 10^{-6}$
cQbqu8I	$6.478 \cdot 10^{-20}$	0	1	0.1111	0.1111	$3.06 \cdot 10^{-6}$
cQq11	-0.1249	-0.1249	0	0.6108	0.6108	0
cQq13	0.1249	0.1249	0	0.6108	0.6108	0
cQq81	0.2667	0.2667	0	0.09001	0.09001	0
cQq83	-0.2667	-0.2667	0	0.09001	0.09001	0
cQu1	0.003846	0.003846	$-2.6 \cdot 10^{-8}$	0.1322	0.1322	0
cQu8	0.03145	0.03145	0	0.01061	0.01061	0
cbW	$9.274 \cdot 10^{-5}$	$9.274 \cdot 10^{-5}$	$1.078 \cdot 10^{-8}$	0.006093	0.006093	$1.641 \cdot 10^{-8}$
cbWI	$4.172 \cdot 10^{-18}$	$4.255 \cdot 10^{-18}$	-0.01986	0.004402	0.004402	0
cpQ3	0.0004038	0.0004038	$2.476 \cdot 10^{-8}$	$2.993 \cdot 10^{-5}$	$2.993 \cdot 10^{-5}$	0
cpQM	0.0007243	0.0007243	$1.381 \cdot 10^{-8}$	$2.068 \cdot 10^{-5}$	$2.068 \cdot 10^{-5}$	0
cpb	$-4.971 \cdot 10^{-5}$	$-4.971 \cdot 10^{-5}$	$-6.035 \cdot 10^{-8}$	$7.17 \cdot 10^{-6}$	$7.17 \cdot 10^{-6}$	$-1.395 \cdot 10^{-8}$
sm	0	0	0	0.5288	0.5288	0

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

		interfere	ence	square			
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	
cbW	$4.226 \cdot 10^{-5}$	$4.226 \cdot 10^{-5}$	$2.366 \cdot 10^{-8}$	0.00358	0.00358	$2.793 \cdot 10^{-8}$	
cbWI	$2.698 \cdot 10^{-21}$	$5.621 \cdot 10^{-21}$	-1.083	0.004384	0.004384	0	
cpQ3	0.0001313	0.0001313	0	$3.98 \cdot 10^{-6}$	$3.98 \cdot 10^{-6}$	0	
cptb	$-7.312 \cdot 10^{-7}$	$-7.312 \cdot 10^{-7}$	$1.368 \cdot 10^{-8}$	$1.351 \cdot 10^{-5}$	$1.351 \cdot 10^{-5}$	0	
cptbI	$1.051 \cdot 10^{-22}$	$-1.6 \cdot 10^{-22}$	2.522	$7.611 \cdot 10^{-6}$	$7.611 \cdot 10^{-6}$	$1.314 \cdot 10^{-8}$	
ctW	$3.976 \cdot 10^{-5}$	$3.976 \cdot 10^{-5}$	0	0.0001233	0.0001233	0	
ctWI	$-6.294 \cdot 10^{-19}$	$-1.517 \cdot 10^{-19}$	0.759	0.003335	0.003335	0	

 $\mathtt{sm} \qquad \qquad 0 \qquad \qquad 0$

 $3.935 \cdot 10^{-6}$ $3.935 \cdot 10^{-6}$ $2.541 \cdot 10^{-8}$

1.53 $c\bar{c} \to \mu^{+}\mu^{-}$

 $\begin{array}{ccc} & & \text{interference} \\ & \text{mod1} & \text{mod2} & 1 - \text{mod2/mod1} \\ \text{sm} & 0 & 0 & 0 \end{array}$

 $\begin{array}{ccc} & square \\ \bmod 1 & \bmod 2 & 1-\bmod 2/\bmod 1 \\ 0.0007154 & 0.0007154 & -4.193 \cdot 10^{-8} \end{array}$

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

 $\begin{array}{cccc} & & & & & interference \\ & & \bmod{1} & \bmod{2} & 1 - \bmod{2}/\bmod{1} \\ & & \odot & O & O & O \end{array}$

 $\begin{array}{ccc} square \\ \bmod{1} & \bmod{2} & 1-\bmod{2}/\bmod{1} \\ 0.00142 & 0.00142 & 7.041 \cdot 10^{-8} \end{array}$

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

 $\begin{array}{cccc} & & & & & & interference \\ & \text{mod1} & \text{mod2} & 1 - \text{mod2/mod1} \\ \text{sm} & 0 & 0 & 0 \end{array}$

 $\begin{array}{ccc} \mathrm{square} \\ \mathrm{mod1} & \mathrm{mod2} & 1-\mathrm{mod2/mod1} \\ 0.7471 & 0.7471 & 0 \end{array}$

1.56 $d\bar{d} \to e^+e^-$

 $\begin{array}{cccc} & & & & & & interference \\ & \text{mod1} & \text{mod2} & 1 - \text{mod2/mod1} \\ \text{sm} & 0 & 0 & 0 \end{array}$

 $\begin{array}{ccc} & square \\ {\tt mod1} & {\tt mod2} & 1-{\tt mod2/mod1} \\ 0.0005879 & 0.0005879 & 0 \end{array}$

1.57 $e^+\nu_{\mu} \to e^+\nu_{\mu}$

interference square $\verb|mod1| \verb|mod2| 1 - \verb|mod2| mod1|$ mod2 1 - mod2/mod1mod1 $0.06326 \quad -1.581 \cdot 10^{-8}$ 0 0 0.06326sm1.58 $e^+\nu_e \to \mu^+\nu_\mu$ interference square $mod1 \quad mod2 \quad 1 - mod2/mod1$ mod1mod2 1 - mod2/mod1 $2.496 \cdot 10^{-8}$ 0 0 0 $0.004007 \quad 0.004007$ sm**1.59** $e^+\nu_e \to e^+\nu_e$ interference square mod2 1 - mod2/mod1 $mod1 \quad mod2 \quad 1 - mod2/mod1$ mod10 0 0 0.01343 0.01343 sm**1.60** $e^+\tau^- \to e^+\tau^$ interference square $\bmod 1 \mod 2 \quad 1 - \bmod 2/\bmod 1$ $mod1 \quad mod2 \quad 1 - mod2/mod1$ 0 0 0 $0.134 \quad 0.134$ sm**1.61** $e^+e^- \to \mu^+\mu^$ interference square $mod1 \quad mod2 \quad 1 - mod2/mod1$ mod1mod2 1 - mod2/mod10 $0.007508 \quad 0.007508 \quad -5.328 \cdot 10^{-8}$ 0 0

sm

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

1.63 $gg \rightarrow gg$

1.64 $gg \rightarrow ggg$

1.65 $gg \rightarrow t\bar{t}$

interference square $1 - \mathtt{mod}2/\mathtt{mod}1$ mod2 1 - mod2/mod1mod1mod2 mod10 ctG 0.12710.12710.085840.085840 $-1.028 \cdot 10^{-18} \quad -1.499 \cdot 10^{-18}$ ctGI -0.458 $0.08033 \quad 0.08033$ 0 0 0 0 2.288 2.288

1.66 $gg \rightarrow u\bar{u}$

```
interference
                                                                                                square
                             mod1 \quad mod2 \quad 1 - mod2/mod1
                                                                                mod1 \quad mod2 \quad 1 - mod2/mod1
                               0
                                        0
                                                        0
                                                                                1.942 1.942
                                                                                                            0
                   sm
1.67 s\bar{s} \rightarrow \nu_{\tau}\bar{\nu}_{\tau}
                                            interference
                                                                                                square
                          mod1 \quad mod2 \quad 1 - mod2/mod1
                                                                               mod1
                                                                                           mod2
                                                                                                      1 - \text{mod}2/\text{mod}1
                                     0
                            0
                                                     0
                                                                             0.00139 \quad 0.00139
                                                                                                               0
                sm
1.68
          s\bar{s} \to s\bar{s}
                                               interference
                                                                                               square
                             mod1 \quad mod2 \quad 1 - mod2/mod1
                                                                                mod1 \quad mod2 \quad 1 - mod2/mod1
                               0
                                        0
                                                       0
                                                                                2.895 \quad 2.895
                   sm
1.69
         t\bar{t} \rightarrow \nu_{\mu}\bar{\nu}_{\mu}
                                            interference
                                                                                                                square
                                         mod2
                                                        1 - mod2/mod1
                                                                                                                             1 - mod2/mod1
                    mod1
                                                                                             mod1
                                                                                                               mod2
               -5.202 \cdot 10^{-5}
                                    -5.202 \cdot 10^{-5}
                                                        1.922 \cdot 10^{-8}
                                                                                         2.604 \cdot 10^{-6}
                                                                                                           2.604 \cdot 10^{-6}
 cpQM
                                                                                                                                     0
                                      0.0001542
                                                         -6.486 \cdot 10^{-8}
                                                                                         1.653 \cdot 10^{-5}
                                                                                                           1.653 \cdot 10^{-5}
                 0.0001542
 cpt
                                                                                                                                     0
              -2.432 \cdot 10^{-10}
                                                                                         1.43 \cdot 10^{-15}
                                                                                                                 0
                                           0
 ctW
               9.783 \cdot 10^{-25}
                                                                                         6.548 \cdot 10^{-16}
                                           0
                                                                1
                                                                                                                 0
 ctWI
                                                          4.994 \cdot 10^{-7}
                                                                                                                               1.127 \cdot 10^{-6}
 ctZ
                -0.0005407
                                    -0.0005407
                                                                                           0.00213
                                                                                                              0.00213
                                   -5.071 \cdot 10^{-18}
```

-0.4634

0

0.002283

0.0006629

0.002283

0.0006629

 $1.095 \cdot 10^{-6}$

0

 $-3.465 \cdot 10^{-18}$

0

0

ctZI

sm

1.70 $t\bar{t} \rightarrow \tau^+\tau^-$

		interfere	ence		square			
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1 - \mathtt{mod}2/\mathtt{mod}1$		
cpQM	$-3.322 \cdot 10^{-5}$	$-3.322 \cdot 10^{-5}$	$6.021 \cdot 10^{-8}$	$3.12 \cdot 10^{-6}$	$3.12 \cdot 10^{-6}$	$-3.206 \cdot 10^{-8}$		
cpt	$8.281 \cdot 10^{-5}$	$8.281 \cdot 10^{-5}$	$-4.83 \cdot 10^{-8}$	$3.225 \cdot 10^{-6}$	$3.225 \cdot 10^{-6}$	$-3.1 \cdot 10^{-8}$		
ctW	0.006505	0.006505	$5.381 \cdot 10^{-7}$	0.01959	0.01959	$1.123 \cdot 10^{-6}$		
ctWI	$4.291 \cdot 10^{-18}$	$-1.442 \cdot 10^{-20}$	1.003	0.01401	0.01401	$1.142 \cdot 10^{-6}$		
ctZ	-0.006687	-0.006687	$5.384 \cdot 10^{-7}$	0.01472	0.01472	$1.087 \cdot 10^{-6}$		
ctZI	$1.503 \cdot 10^{-18}$	$2.182 \cdot 10^{-18}$	-0.4515	0.01239	0.01239	$1.13 \cdot 10^{-6}$		
ctp	$-1.005 \cdot 10^{-6}$	$-1.005 \cdot 10^{-6}$	0	$3.101 \cdot 10^{-8}$	$3.101 \cdot 10^{-8}$	0		
ctpI	$-1.563 \cdot 10^{-23}$	$-4.596 \cdot 10^{-23}$	-1.941	$3.49 \cdot 10^{-8}$	$3.49 \cdot 10^{-8}$	0		
sm	0	0	0	0.00173	0.00173	$-5.779 \cdot 10^{-8}$		

1.71 $t\bar{t} \rightarrow c\bar{c}$

	interference				square		
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	
cQq11	0.1025	0.1025	0	0.4654	0.4654	0	
cQq13	0.1025	0.1025	0	0.4654	0.4654	0	
cQq81	0.02873	0.02873	0	0.003122	0.003122	0	
cQq83	0.02873	0.02873	0	0.003122	0.003122	0	
cQu1	0.02662	0.02662	$-3.757 \cdot 10^{-8}$	0.83	0.83	0	
cQu8	0.09895	0.09895	0	0.02682	0.02682	0	
\mathtt{cpQM}	-0.0005738	-0.0005738	$1.743 \cdot 10^{-8}$	$1.633 \cdot 10^{-5}$	$1.633 \cdot 10^{-5}$	0	
cpt	-0.000149	-0.000149	0	$2.527 \cdot 10^{-5}$	$2.527 \cdot 10^{-5}$	0	
ctG	0.1977	0.1977	0	0.04257	0.04257	0	
ctGI	0	$4.412 \cdot 10^{-24}$	∞	0.03312	0.03312	0	
ctQqu1	-0.4725	0	1	0.5004	0.5004	$3.097 \cdot 10^{-6}$	

ctQqu1I	$-3.336 \cdot 10^{-17}$	0	1	0.5004	0.5004	$3.097 \cdot 10^{-6}$
ctQqu8	$2.1\cdot 10^{-8}$	0	1	0.1112	0.1112	$2.967 \cdot 10^{-6}$
ctQqu8I	$2.608 \cdot 10^{-18}$	0	1	0.1112	0.1112	$2.967 \cdot 10^{-6}$
ctW	0.004683	0.004683	$4.271 \cdot 10^{-7}$	0.01247	0.01247	$9.626 \cdot 10^{-7}$
ctWI	$1.156 \cdot 10^{-10}$	$1.156 \cdot 10^{-10}$	$6.057 \cdot 10^{-7}$	0.01004	0.01004	$9.959 \cdot 10^{-7}$
ctZ	-0.003401	-0.003401	$5.292 \cdot 10^{-7}$	0.0107	0.0107	$1.122 \cdot 10^{-6}$
ctZI	$-1.012 \cdot 10^{-10}$	$-1.012 \cdot 10^{-10}$	$5.931 \cdot 10^{-7}$	0.01305	0.01305	$1.073 \cdot 10^{-6}$
ctq1	0.0297	0.0297	$-3.367 \cdot 10^{-8}$	0.83	0.83	0
ctq8	0.4292	0.4292	0	0.1383	0.1383	0
ctu1	0.05397	0.05397	$-3.706 \cdot 10^{-8}$	0.4654	0.4654	0
ctu8	0.3259	0.3259	0	0.1034	0.1034	0
sm	0	0	0	0.8819	0.8819	0

1.72 $t\bar{t} \rightarrow d\bar{d}$

		interfere	ence		square		
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	
cQd1	-0.005363	-0.005363	$-1.865 \cdot 10^{-8}$	0.2624	0.2624	0	
cQd8	0.5318	0.5318	0	0.1729	0.1729	0	
cQq11	-0.04173	-0.04173	0	0.2084	0.2084	0	
cQq13	0.04173	0.04173	0	0.2084	0.2084	0	
cQq81	0.1957	0.1957	0	0.05947	0.05947	0	
cQq83	-0.1957	-0.1957	0	0.05947	0.05947	0	
cQtqd1	-0.4725	0	1	0.5004	0.5004	$3.057 \cdot 10^{-6}$	
cQtqd1I	$-3.701 \cdot 10^{-17}$	0	1	0.5004	0.5004	$3.057 \cdot 10^{-6}$	
cQtqd8	$-8.976 \cdot 10^{-18}$	0	1	0.1112	0.1112	$3.057 \cdot 10^{-6}$	
cQtqd8I	$1.916 \cdot 10^{-18}$	0	1	0.1112	0.1112	$3.057 \cdot 10^{-6}$	
cpQM	-0.0002872	-0.0002872	$3.482 \cdot 10^{-8}$	$1.1\cdot 10^{-5}$	$1.1\cdot 10^{-5}$	0	
cpt	0.0001196	0.0001196	$-8.361 \cdot 10^{-8}$	$3.902 \cdot 10^{-5}$	$3.902 \cdot 10^{-5}$	$2.563 \cdot 10^{-8}$	

ctG	0.1977	0.1977	0	0.0465	0.0465	0
ctGI	$6.617 \cdot 10^{-24}$	$-5.882 \cdot 10^{-24}$	1.889	0.03705	0.03705	0
ctW	0.003302	0.003302	$-6.057 \cdot 10^{-8}$	0.006674	0.006674	$3.746 \cdot 10^{-7}$
ctWI	$1.273 \cdot 10^{-15}$	$1.275 \cdot 10^{-15}$	-0.00154	0.002278	0.002278	$3.951 \cdot 10^{-7}$
ctZ	-0.0005477	-0.0005477	$5.112 \cdot 10^{-7}$	0.002986	0.002986	$1.105 \cdot 10^{-6}$
ctZI	$-1.169 \cdot 10^{-15}$	$-1.168 \cdot 10^{-15}$	0.001244	0.004338	0.004338	$1.107 \cdot 10^{-6}$
ctd1	-0.01569	-0.01569	0	0.2676	0.2676	0
ctd8	0.1957	0.1957	0	0.05947	0.05947	0
ctq1	0.001588	0.001588	$-1.259 \cdot 10^{-7}$	0.2624	0.2624	0
ctq8	0.468	0.468	0	0.1514	0.1514	0
sm	0	0	0	0.5778	0.5778	0

1.73 $t\bar{t} \rightarrow s\bar{s}$

	interference			square		
	mod1	mod2	$1-{\tt mod2/mod1}$	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$
cQd1	-0.01319	-0.01319	0	0.8212	0.8212	0
cQd8	0.6028	0.6028	0	0.1969	0.1969	0
cQq11	-0.1954	-0.1954	0	0.9601	0.9601	0
cQq13	0.1954	0.1954	0	0.9601	0.9601	0
cQq81	0.0295	0.0295	0	0.003382	0.003382	0
cQq83	-0.0295	-0.0295	0	0.003382	0.003382	0
cQtqd1	-0.4725	0	1	0.5004	0.5004	$3.057 \cdot 10^{-6}$
cQtqd1I	$-3.662 \cdot 10^{-17}$	0	1	0.5004	0.5004	$3.057 \cdot 10^{-6}$
cQtqd8	$-2.908 \cdot 10^{-18}$	0	1	0.1112	0.1112	$3.057 \cdot 10^{-6}$
cQtqd8I	$7.068 \cdot 10^{-19}$	0	1	0.1112	0.1112	$3.057 \cdot 10^{-6}$
\mathtt{cpQM}	-0.001381	-0.001381	0	$4.811 \cdot 10^{-5}$	$4.811 \cdot 10^{-5}$	0
cpt	0.0001408	0.0001408	$-7.104 \cdot 10^{-8}$	$4.44 \cdot 10^{-5}$	$4.44\cdot10^{-5}$	0
ctG	0.1977	0.1977	0	0.0125	0.0125	0

ctGI	$-4.19 \cdot 10^{-29}$	$-4.596 \cdot 10^{-25}$	$-1.097 \cdot 10^4$	0.003056	0.003056	0
ctW	0.0004811	0.0004811	$8.522 \cdot 10^{-7}$	0.003203	0.003203	$4.058 \cdot 10^{-7}$
ctWI	$5.664 \cdot 10^{-13}$	$5.664 \cdot 10^{-13}$	$-1.342 \cdot 10^{-6}$	0.001215	0.001215	$4.116 \cdot 10^{-7}$
ctZ	-0.0006807	-0.0006807	$5.142 \cdot 10^{-7}$	0.002108	0.002108	$1.091 \cdot 10^{-6}$
ctZI	$-4.953 \cdot 10^{-13}$	$-4.953 \cdot 10^{-13}$	$2.019 \cdot 10^{-7}$	0.0003578	0.0003578	$1.09 \cdot 10^{-6}$
ctd1	-0.001283	-0.001283	0	0.01522	0.01522	0
ctd8	0.0295	0.0295	0	0.003382	0.003382	0
ctq1	0.01785	0.01785	$-5.603 \cdot 10^{-8}$	0.8212	0.8212	0
ctq8	0.3575	0.3575	0	0.1141	0.1141	0
sm	0	0	0	0.874	0.874	0

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

	interference				square		
	mod1	mod2	$1-{\tt mod2/mod1}$	mod1	mod2	$1-{\tt mod2/mod1}$	
cQQ1	-0.3116	-0.3116	0	1.452	1.452	0	
cQQ8	-0.173	-0.173	0	0.2121	0.2121	0	
cQt1	-0.1324	-0.1324	$-7.554 \cdot 10^{-8}$	9.477	9.477	0	
cQt8	-5.205	-5.205	0	1.784	1.784	0	
cpQM	0.06416	0.06416	0	0.008524	0.008524	0	
cpt	-0.06683	-0.06683	0	0.008986	0.008986	0	
ctG	0.1649	0.1649	0	0.4297	0.4297	0	
ctGI	$-1.26 \cdot 10^{-17}$	$-1.787 \cdot 10^{-17}$	-0.4186	0.3608	0.3608	0	
ctW	-0.776	-0.776	$4.768 \cdot 10^{-7}$	0.8741	0.8741	$9.609 \cdot 10^{-7}$	
ctWI	$4.864 \cdot 10^{-17}$	$5.296 \cdot 10^{-17}$	-0.08881	0.4505	0.4505	$9.545 \cdot 10^{-7}$	
ctZ	0.2043	0.2043	$5.384 \cdot 10^{-7}$	0.3426	0.3426	$1.109 \cdot 10^{-6}$	
ctZI	$2.684 \cdot 10^{-17}$	$4.399 \cdot 10^{-17}$	-0.6391	0.2577	0.2577	$1.086 \cdot 10^{-6}$	
ctp	0.06775	0.06775	0	0.008638	0.008638	0	
ctpI	$4.024 \cdot 10^{-18}$	$2.746 \cdot 10^{-18}$	0.3176	0.004832	0.004832	0	

-0.5699-0.56995.808ctt1 5.8080 7.939 7.939 sm1.75 $u\bar{d} \rightarrow \mu^+\nu_\mu$ interference square $mod1 \quad mod2 \quad 1 - mod2/mod1$ 1 - mod2/mod1mod1mod2 0 0 0 0.0049380 0.004938sm1.76 $u\bar{d} \rightarrow c\bar{s}$ interference square $\verb|mod1| \verb|mod2| 1 - \verb|mod2| mod1|$ 1 - mod2/mod1mod1mod2 0 0 $0.03507 \quad 0.03507$ 0 sm1.77 $u\bar{d} \rightarrow u\bar{d}$ interference square $mod1 \quad mod2 \quad 1 - mod2/mod1$ $mod1 \quad mod2 \quad 1 - mod2/mod1$ 0 0 595.8 595.8 0 \mathtt{sm} 1.78 $u\bar{u} \rightarrow \nu_e \bar{\nu}_e$ interference square $mod1 \quad mod2 \quad 1 - mod2/mod1$ $1-{\tt mod2/mod1}$ mod1mod2

0

sm

0

0

0.001784 0.001784

0

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

1.80 $zz \to W^+W^-$

1.81 $zz \rightarrow zz$

2 By parameter point

2.1 cQQ1

		inte	erference		square		
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1 - \mathtt{mod}2/\mathtt{mod}1$	
$b\bar{b} \to b\bar{b}$	-0.03001	-0.03001	0	0.1575	0.1575	0	
$b\bar{b} \to t\bar{t}$	-0.0293	-0.0293	0	0.04519	0.04519	0	
$t\bar{t} \to t\bar{t}$	-0.3116	-0.3116	0	1.452	1.452	0	

2.2 cQQ8

		int	erference	square	square			
	mod1	mod2	$1-{\tt mod2/mod1}$	$\mathtt{mod1} \hspace{1cm} \mathtt{mod2} \hspace{1cm} 1-\mathtt{mod2/n}$	mod1			
$b\bar{b} o b\bar{b}$	-1.177	-1.177	0	$0.1817 \qquad 0.1817 \qquad 0$				
$b\bar{b} \to t\bar{t}$	0.006401	0.006401	0	$0.0002502 0.0002502 \qquad 0$				
$t\bar{t} \to t\bar{t}$	-0.173	-0.173	0	$0.2121 \qquad 0.2121 \qquad 0$				

2.3 cQb1

		erference		square		
	mod1	mod2	$1 - \mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1 - \mathtt{mod}2/\mathtt{mod}1$
$b\bar{b} o b\bar{b}$	0.1172	0.1172	$-8.529 \cdot 10^{-8}$	2.094	2.094	0
$b\bar{b} \to t\bar{t}$	-0.01502	-0.01502	0	0.9335	0.9335	0

2.4 cQb8

		ir	nterference		square			
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$		
$b\bar{b} o b\bar{b}$	-4.262	-4.262	0	0.4846	0.4846	0		
$b\bar{b} \to t\bar{t}$	0.03422	0.03422	0	0.004988	0.004988	0		

2.5 cQbqu1

		nterference		square		
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	1 - mod2/mod1
$\bar{b}t \to \bar{d}u$	0	0	0	0.25	0.25	$3.04 \cdot 10^{-6}$
$b\bar{b} \to u\bar{u}$	-0.01371	0	1	0.5	0.5	$3.06 \cdot 10^{-6}$

2.6 cQbqu1I

		erference		square		
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	1 - mod2/mod1
$\bar{b}t \to \bar{d}u$	0	0	0	0.25	0.25	$3.08 \cdot 10^{-6}$
$b\bar{b} \to u\bar{u}$	$-1.349 \cdot 10^{-18}$	0	1	0.5	0.5	$3.06 \cdot 10^{-6}$

2.7 cQbqu8

		$int\epsilon$	erference	square
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	$\verb mod1 & \verb mod2 & 1-\verb mod2 \\ \verb mod1 & \\$
$\bar{b}t \to \bar{d}u$	0	0	0	$0.05556 0.05556 3.06 \cdot 10^{-6}$
$b\bar{b} \to u\bar{u}$	$-1.154 \cdot 10^{-20}$	0	1	$0.1111 0.1111 3.06 \cdot 10^{-6}$

2.8 cQbqu8I

		int	erference	square
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	$\mathtt{mod1} \mathtt{mod2} 1 - \mathtt{mod2}/\mathtt{mod1}$
$\bar{b}t \to \bar{d}u$	0	0	0	$0.05556 0.05556 3.06 \cdot 10^{-6}$
$b\bar{b} \to u\bar{u}$	$6.478 \cdot 10^{-20}$	0	1	$0.1111 0.1111 3.06 \cdot 10^{-6}$

2.9 cQd1

		interfe	erence		square			
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$		
$b\bar{b} \to d\bar{d}$	$-4.39 \cdot 10^{-7}$	$-4.39 \cdot 10^{-7}$	$-2.278 \cdot 10^{-8}$	$7.352 \cdot 10^{-5}$	$7.352 \cdot 10^{-5}$	0		
$t\bar{t} \to d\bar{d}$	-0.005363	-0.005363	$-1.865 \cdot 10^{-8}$	0.2624	0.2624	0		
$t \bar t o s \bar s$	-0.01319	-0.01319	0	0.8212	0.8212	0		

2.10 cQd8

		-	interference		square		
	mod1	mod2	$1-{\tt mod2/mod1}$	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	
$b\bar{b} o d\bar{d}$	0.2527	0.2527	0	0.08528	0.08528	0	
$t\bar{t} \to d\bar{d}$	0.5318	0.5318	0	0.1729	0.1729	0	
$t\bar{t} \to s\bar{s}$	0.6028	0.6028	0	0.1969	0.1969	0	

$2.11 \quad \mathrm{cQq}11$

		interior	erference		square		
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	
$b\bar{b} \to d\bar{d}$	0.09968	0.09968	0	0.4552	0.4552	0	
$b\bar{b} \to u\bar{u}$	-0.1249	-0.1249	0	0.6108	0.6108	0	
$t\bar{t} \to c\bar{c}$	0.1025	0.1025	0	0.4654	0.4654	0	
$t\bar{t} \to d\bar{d}$	-0.04173	-0.04173	0	0.2084	0.2084	0	
$t\bar{t} \to s\bar{s}$	-0.1954	-0.1954	0	0.9601	0.9601	0	

$2.12 \quad \mathrm{cQq} 13$

		ir	nterference		square			
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$		
$\bar{b}t \to \bar{d}u$	0.2787	0.2787	0	1.318	1.318	0		
$b\bar{b} \to d\bar{d}$	0.09968	0.09968	0	0.4552	0.4552	0		
$b\bar{b} \to u\bar{u}$	0.1249	0.1249	0	0.6108	0.6108	0		
$t\bar{t} \to c\bar{c}$	0.1025	0.1025	0	0.4654	0.4654	0		
$t\bar{t} \to d\bar{d}$	0.04173	0.04173	0	0.2084	0.2084	0		
$t\bar{t} \to s\bar{s}$	0.1954	0.1954	0	0.9601	0.9601	0		

$2.13 \quad \text{cQq81}$

	interference				square			
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$		
$b\bar{b} \to d\bar{d}$	0.6473	0.6473	0	0.2184	0.2184	0		
$b\bar{b} \to u\bar{u}$	0.2667	0.2667	0	0.09001	0.09001	0		
$t\bar{t} \to c\bar{c}$	0.02873	0.02873	0	0.003122	0.003122	0		
$t\bar{t} \to d\bar{d}$	0.1957	0.1957	0	0.05947	0.05947	0		
$t\bar{t} \to s\bar{s}$	0.0295	0.0295	0	0.003382	0.003382	0		

$2.14 \quad \text{cQq83}$

		interfe	erence	square			
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	
$\bar{b}t \to \bar{d}u$	$2.106 \cdot 10^{-17}$	$8.726 \cdot 10^{-18}$	0.5857	0.6938	0.6938	0	
$b\bar{b} \to d\bar{d}$	0.6473	0.6473	0	0.2184	0.2184	0	
$b\bar{b} \to u\bar{u}$	-0.2667	-0.2667	0	0.09001	0.09001	0	
$t\bar{t} \to c\bar{c}$	0.02873	0.02873	0	0.003122	0.003122	0	
$t\bar{t} \to d\bar{d}$	-0.1957	-0.1957	0	0.05947	0.05947	0	
$t\bar{t} \to s\bar{s}$	-0.0295	-0.0295	0	0.003382	0.003382	0	

2.15 cQt1

		in	terference		square		
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	
$b\bar{b} \to t\bar{t}$	-0.3055	-0.3055	0	0.9335	0.9335	0	
$t\bar{t} \to t\bar{t}$	-0.1324	-0.1324	$-7.554 \cdot 10^{-8}$	9.477	9.477	0	

2.16 cQt8

		inte	erference		square			
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$		
$b\bar{b} \to t\bar{t}$	-0.08655	-0.08655	0	0.004988	0.004988	0		
$t\bar{t} \to t\bar{t}$	-5.205	-5.205	0	1.784	1.784	0		

2.17 cQtQb1

2.18 cQtQb1I

2.19 cQtQb8

2.20 cQtQb8I

interference square

	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	1 - mod2/mod1
$b\bar{b} o t\bar{t}$	$3.491 \cdot 10^{-18}$	$1.512 \cdot 10^{-19}$	0.9567	0.1172	0.1172	0

$2.21 \quad \text{cQtqd1}$

		j	interference		square			
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	1 - mod2/mod1		
$\bar{b}t \to \bar{d}u$	0	0	0	0.25	0.25	$3.08 \cdot 10^{-6}$		
$t\bar{t} \to d\bar{d}$	-0.4725	0	1	0.5004	0.5004	$3.057 \cdot 10^{-6}$		
$t\bar{t} \to s\bar{s}$	-0.4725	0	1	0.5004	0.5004	$3.057 \cdot 10^{-6}$		

$2.22 \quad \text{cQtqd1I}$

		$\mathrm{int}\epsilon$	erference		square		
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	
$\bar{b}t \to \bar{d}u$	0	0	0	0.25	0.25	$3.04 \cdot 10^{-6}$	
$t\bar{t} \to d\bar{d}$	$-3.701 \cdot 10^{-17}$	0	1	0.5004	0.5004	$3.057 \cdot 10^{-6}$	
$t\bar{t} \to s\bar{s}$	$-3.662 \cdot 10^{-17}$	0	1	0.5004	0.5004	$3.057 \cdot 10^{-6}$	

2.23 cQtqd8

		inte	erference		square		
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1 - \mathtt{mod}2/\mathtt{mod}1$	
$\bar{b}t \to \bar{d}u$	0	0	0	0.05556	0.05556	$3.06 \cdot 10^{-6}$	
$t\bar{t} \to d\bar{d}$	$-8.976 \cdot 10^{-18}$	0	1	0.1112	0.1112	$3.057 \cdot 10^{-6}$	
$t\bar{t} \to s\bar{s}$	$-2.908 \cdot 10^{-18}$	0	1	0.1112	0.1112	$3.057 \cdot 10^{-6}$	

2.24 cQtqd8I

		int	erference		square		
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1 - \mathtt{mod}2/\mathtt{mod}1$	
$\bar{b}t \to \bar{d}u$	0	0	0	0.05556	0.05556	$3.06 \cdot 10^{-6}$	
$t\bar{t} \to d\bar{d}$	$1.916 \cdot 10^{-18}$	0	1	0.1112	0.1112	$3.057 \cdot 10^{-6}$	
$t\bar{t} \to s\bar{s}$	$7.068 \cdot 10^{-19}$	0	1	0.1112	0.1112	$3.057 \cdot 10^{-6}$	

2.25 cQu1

		int	erference		square		
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	
$b\bar{b} \to u\bar{u}$	0.003846	0.003846	$-2.6 \cdot 10^{-8}$	0.1322	0.1322	0	
$t\bar{t} \to c\bar{c}$	0.02662	0.02662	$-3.757 \cdot 10^{-8}$	0.83	0.83	0	

2.26 cQu8

	interference				square		
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1 - \mathtt{mod}2/\mathtt{mod}1$	
$b\bar{b} \to u\bar{u}$	0.03145	0.03145	0	0.01061	0.01061	0	
$t\bar{t} \to c\bar{c}$	0.09895	0.09895	0	0.02682	0.02682	0	

$2.27 \quad cbQqd1 \\$

		nterference		square		
	mod1	mod2	$1 - \mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	1 - mod2/mod1
$\bar{b}t \to \bar{d}u$	0	0	0	0.25	0.25	$3.08 \cdot 10^{-6}$
$b\bar{b} \to d\bar{d}$	-0.01371	0	1	0.5	0.5	$3.1\cdot 10^{-6}$

$2.28 \quad cbQqd1I$

		int	erference		square		
	mod1	mod2	$1 - \mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	1 - mod2/mod1	
$\bar{b}t \to \bar{d}u$	0	0	0	0.25	0.25	$3.08 \cdot 10^{-6}$	
$b\bar{b} \to d\bar{d}$	$3.299 \cdot 10^{-20}$	0	1	0.5	0.5	$3.1 \cdot 10^{-6}$	

$2.29 \quad \mathrm{cbQqd8}$

		int	erference	square
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	$\mathtt{mod1} \mathtt{mod2} 1 - \mathtt{mod2}/\mathtt{mod1}$
$\bar{b}t \to \bar{d}u$	0	0	0	$0.05556 0.05556 2.934 \cdot 10^{-6}$
$b\bar{b} \to d\bar{d}$	$6.094 \cdot 10^{-10}$	0	1	$0.1111 0.1111 2.97 \cdot 10^{-6}$

2.30 cbQqd8I

		$\mathrm{int}\epsilon$	erference	square
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	$\mathtt{mod1} \mathtt{mod2} 1 - \mathtt{mod2}/\mathtt{mod1}$
$\bar{b}t \to \bar{d}u$	0	0	0	$0.05556 0.05556 2.934 \cdot 10^{-6}$
$b\bar{b} \to d\bar{d}$	$-6.397 \cdot 10^{-21}$	0	1	$0.1111 0.1111 2.97 \cdot 10^{-6}$

2.31 cbW

	interference				square		
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1 - \mathtt{mod}2/\mathtt{mod}1$	
$HH \to W^+ \bar{t} b$	$8.118 \cdot 10^{-7}$	$8.118 \cdot 10^{-7}$	0	$1.101 \cdot 10^{-5}$	$1.101 \cdot 10^{-5}$	0	
$HH o z \bar{b} b$	$6.257 \cdot 10^{-8}$	$6.257 \cdot 10^{-8}$	$1.598 \cdot 10^{-8}$	$4.155 \cdot 10^{-7}$	$4.155 \cdot 10^{-7}$	$2.407 \cdot 10^{-8}$	
$HW^+ \to \gamma t \bar{b}$	$5.341 \cdot 10^{-8}$	$3.405 \cdot 10^{-7}$	-5.376	$2.425 \cdot 10^{-5}$	$3.304 \cdot 10^{-5}$	-0.3623	

$HW^- \to \bar{t}b$	0.005107	0.005107	0	2.151	2.151	0
$H\gamma \to b\bar{b}$	$-5.696 \cdot 10^{-5}$	$-5.696 \cdot 10^{-5}$	$-1.756 \cdot 10^{-8}$	0.0179	0.0179	$-5.588 \cdot 10^{-8}$
$Hz o b ar{b}$	0.001421	0.001421	0	0.4418	0.4418	$2.264 \cdot 10^{-8}$
$W^+W^- o Hb\bar{b}$	$-6.736 \cdot 10^{-8}$	$-1.827 \cdot 10^{-6}$	-26.13	$4.15 \cdot 10^{-6}$	0.0001446	-33.86
$W^+W^- \to H t \bar t$	$-3.463 \cdot 10^{-7}$	$-3.463 \cdot 10^{-7}$	0	$1.848 \cdot 10^{-8}$	$1.848 \cdot 10^{-8}$	0
$\bar{b}t \to \bar{d}u$	0.0001493	0.0001493	$6.696 \cdot 10^{-8}$	0.01177	0.01177	0
$b\bar{b} o \gamma \gamma$	$4.926 \cdot 10^{-6}$	$4.926 \cdot 10^{-6}$	$-2.03 \cdot 10^{-8}$	0.0006187	0.0006187	$-3.233 \cdot 10^{-8}$
$b\bar{b} o \mu^+\mu^-$	$2.111 \cdot 10^{-5}$	$2.111 \cdot 10^{-5}$	0	0.0008635	0.0008635	$1.158 \cdot 10^{-8}$
$b\bar{b} o u_e \bar{ u}_e$	$6.577 \cdot 10^{-6}$	$6.577 \cdot 10^{-6}$	$6.082 \cdot 10^{-8}$	0.001495	0.001495	0
$b\bar{b} o b\bar{b}$	-0.01101	-0.01101	0	0.2076	0.2076	$4.818 \cdot 10^{-8}$
$b\bar{b} o d\bar{d}$	$7.941 \cdot 10^{-5}$	$7.941 \cdot 10^{-5}$	0	0.006094	0.006094	0
$b\bar{b} o t\bar{t}$	0.002687	0.002687	0	0.003868	0.003868	0
$b\bar{b} \to u\bar{u}$	$9.274 \cdot 10^{-5}$	$9.274 \cdot 10^{-5}$	$1.078 \cdot 10^{-8}$	0.006093	0.006093	$1.641 \cdot 10^{-8}$
$b\bar{t} \to e^- \bar{\nu}_e$	$4.226 \cdot 10^{-5}$	$4.226 \cdot 10^{-5}$	$2.366 \cdot 10^{-8}$	0.00358	0.00358	$2.793 \cdot 10^{-8}$

2.32 cbWI

		interfere	ence		square			
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$		
$HH o W^+ \bar t b$	$-7.488 \cdot 10^{-7}$	$-7.488 \cdot 10^{-7}$	$1.335 \cdot 10^{-8}$	$1.846 \cdot 10^{-5}$	$1.846 \cdot 10^{-5}$	0		
$HH o z \bar{b} b$	$-3.187 \cdot 10^{-9}$	$-3.187 \cdot 10^{-9}$	$3.138 \cdot 10^{-8}$	$1.186 \cdot 10^{-6}$	$1.186 \cdot 10^{-6}$	0		
$HW^+ \to \gamma t \bar{b}$	$-2.511 \cdot 10^{-8}$	$-9.553 \cdot 10^{-8}$	-2.805	$8.644 \cdot 10^{-7}$	$9.25 \cdot 10^{-6}$	-9.701		
$HW^- ightarrow ar{t}b$	$2.229 \cdot 10^{-6}$	$2.229 \cdot 10^{-6}$	0	1.792	1.792	0		
$H\gamma \to b\bar{b}$	$-3.116 \cdot 10^{-20}$	$-3.171 \cdot 10^{-20}$	-0.01762	0.2874	0.2874	$-3.479 \cdot 10^{-8}$		
$Hz \to b\bar{b}$	$3.186 \cdot 10^{-6}$	$3.186 \cdot 10^{-6}$	0	1.318	1.318	0		
$W^+W^- o Hb\bar{b}$	$3.352 \cdot 10^{-8}$	$2.19 \cdot 10^{-6}$	-64.34	$3.451 \cdot 10^{-6}$	0.001297	-374.9		
$W^+W^- o H t \bar t$	$1.215 \cdot 10^{-8}$	$1.215 \cdot 10^{-8}$	0	$1.442 \cdot 10^{-8}$	$1.442 \cdot 10^{-8}$	0		
$\bar{b}t \to \bar{d}u$	$4.225 \cdot 10^{-19}$	$1.108 \cdot 10^{-18}$	-1.622	0.01296	0.01296	0		
$b\bar{b} o \gamma \gamma$	$-1.436 \cdot 10^{-22}$	$1.588 \cdot 10^{-22}$	2.106	0.0006186	0.0006186	$-3.233 \cdot 10^{-8}$		

$b\bar{b} \to \mu^+ \mu^-$	$4.555 \cdot 10^{-16}$	$4.555 \cdot 10^{-16}$	-0.0001117	0.002105	0.002105	0
$b\bar{b} o u_e \bar{ u}_e$	$-2.532 \cdot 10^{-20}$	$1.734 \cdot 10^{-20}$	1.685	0.001655	0.001655	0
$b \bar b o b \bar b$	$2.379 \cdot 10^{-18}$	$4.728 \cdot 10^{-19}$	0.8013	0.03382	0.03382	0
$b\bar{b} o d\bar{d}$	$1.063 \cdot 10^{-17}$	$1.065 \cdot 10^{-17}$	-0.002714	0.005673	0.005673	$1.763 \cdot 10^{-8}$
b ar b o t ar t	$3.228 \cdot 10^{-18}$	$-1.236 \cdot 10^{-17}$	4.829	0.02577	0.02577	0
$b\bar{b} \to u\bar{u}$	$4.172 \cdot 10^{-18}$	$4.255 \cdot 10^{-18}$	-0.01986	0.004402	0.004402	0
$b\bar{t} \to e^-\bar{\nu}_e$	$2.698 \cdot 10^{-21}$	$5.621 \cdot 10^{-21}$	-1.083	0.004384	0.004384	0

2.33 cbtud1

			interference		square			
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	1 - mod2/mod1		
$\bar{b}t \to \bar{d}u$	0	0	0	0.3294	0.3294	$6.072 \cdot 10^{-6}$		

2.34 cbtud1I

	interference			square			
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	1 - mod2/mod1	
$\bar{b}t \to \bar{d}u$	0	0	0	0.7806	0.7806	$6.085 \cdot 10^{-6}$	

2.35 cbtud8

2.36 cbtud8I

	interference				square			
	mod1	$\verb mod1 \verb mod2 1 - \verb mod2 \verb mod1 $		mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$		
$\bar{b}t \to \bar{d}u$	0	0	0	0.02277	0.02277	$5.928 \cdot 10^{-6}$		

$2.37 \quad cpQ3$

	interference				square			
	mod1	mod2	$1-{\tt mod2/mod1}$	mod1	mod2	$1-{\tt mod2/mod1}$		
$HH \to W^+ \bar{t} b$	$1.183 \cdot 10^{-5}$	$2.721 \cdot 10^{-5}$	-1.299	$1.065 \cdot 10^{-5}$	$3.547 \cdot 10^{-5}$	-2.329		
$HH o z \bar{b} b$	$4.965 \cdot 10^{-6}$	$6.375 \cdot 10^{-6}$	-0.2839	$1.966 \cdot 10^{-5}$	$8.297 \cdot 10^{-5}$	-3.221		
$HW^+ \to \gamma t \bar{b}$	$-3.686 \cdot 10^{-5}$	$-3.686 \cdot 10^{-5}$	0	$4.098 \cdot 10^{-5}$	$4.098 \cdot 10^{-5}$	$-2.44 \cdot 10^{-8}$		
$HW^- \to \bar{t}b$	-1.734	-1.734	0	1.906	1.906	0		
$Hz \to b\bar{b}$	0.1494	0.1494	0	1.318	1.318	0		
$W^+W^- \to Hb\bar{b}$	$-2.437 \cdot 10^{-6}$	$-2.437 \cdot 10^{-6}$	0	$1.276 \cdot 10^{-6}$	$1.276 \cdot 10^{-6}$	0		
$W^+W^- o H t \bar t$	$-3.659 \cdot 10^{-7}$	$-3.659 \cdot 10^{-7}$	$1.366 \cdot 10^{-7}$	$8.867 \cdot 10^{-6}$	$8.867 \cdot 10^{-6}$	0		
$\bar{b}t \to \bar{d}u$	0.0005561	0.0005561	$1.798 \cdot 10^{-8}$	$1.686 \cdot 10^{-5}$	$1.686 \cdot 10^{-5}$	0		
$b\bar{b} o \mu^+\mu^-$	$9.689 \cdot 10^{-5}$	$9.689 \cdot 10^{-5}$	$-3.096 \cdot 10^{-8}$	$1.643 \cdot 10^{-5}$	$1.643 \cdot 10^{-5}$	0		
$b\bar{b} o u_e \bar{ u}_e$	$6.46 \cdot 10^{-5}$	$6.46 \cdot 10^{-5}$	0	$4.639 \cdot 10^{-6}$	$4.639 \cdot 10^{-6}$	0		
$b\bar{b} o b\bar{b}$	-0.1387	-0.1387	0	0.008853	0.008853	$1.13 \cdot 10^{-8}$		
$b\bar{b} o d\bar{d}$	0.0004635	0.0004635	0	$3.164 \cdot 10^{-5}$	$3.164 \cdot 10^{-5}$	0		
$b\bar{b} o t\bar{t}$	-0.02027	-0.02027	0	0.003614	0.003614	0		
$b\bar{b} \to u\bar{u}$	0.0004038	0.0004038	$2.476 \cdot 10^{-8}$	$2.993 \cdot 10^{-5}$	$2.993 \cdot 10^{-5}$	0		
$b\bar{t} \to e^- \bar{\nu}_e$	0.0001313	0.0001313	0	$3.98 \cdot 10^{-6}$	$3.98 \cdot 10^{-6}$	0		

2.38 cpQM

HH o zt ar t	$1.959 \cdot 10^{-6}$	$-1.686 \cdot 10^{-5}$	9.607	$4.067 \cdot 10^{-6}$	0.0001002	-23.63
$Hz o b ar{b}$	0.2028	0.2028	0	0.8821	0.8821	0
$Hz \to t\bar{t}$	2.067	2.067	0	1.165	1.165	0
$W^+W^- o Hb\bar{b}$	$2.917 \cdot 10^{-6}$	$2.917 \cdot 10^{-6}$	0	$2.979 \cdot 10^{-7}$	$2.979 \cdot 10^{-7}$	0
$W^+W^- \to H t \bar t$	$1.214 \cdot 10^{-6}$	$1.214 \cdot 10^{-6}$	0	$1.684 \cdot 10^{-6}$	$1.684 \cdot 10^{-6}$	0
$b\bar{b} \to \mu^+ \mu^-$	$7.14 \cdot 10^{-5}$	$7.14 \cdot 10^{-5}$	$1.4 \cdot 10^{-8}$	$2.892 \cdot 10^{-6}$	$2.892 \cdot 10^{-6}$	$-3.457 \cdot 10^{-8}$
$b\bar{b} o u_e \bar{ u}_e$	0.000359	0.000359	0	$1.289 \cdot 10^{-5}$	$1.289 \cdot 10^{-5}$	0
$b\bar{b} o b\bar{b}$	-0.002585	-0.002585	0	$2.926 \cdot 10^{-5}$	$2.926 \cdot 10^{-5}$	0
$b\bar{b} o d\bar{d}$	0.0007076	0.0007076	0	$2.299 \cdot 10^{-5}$	$2.299 \cdot 10^{-5}$	$4.35 \cdot 10^{-8}$
$b\bar{b} o t\bar{t}$	-0.0006971	-0.0006971	$-1.435 \cdot 10^{-8}$	$5.566 \cdot 10^{-6}$	$5.566 \cdot 10^{-6}$	$-5.39 \cdot 10^{-8}$
$b\bar{b} \to u\bar{u}$	0.0007243	0.0007243	$1.381 \cdot 10^{-8}$	$2.068 \cdot 10^{-5}$	$2.068 \cdot 10^{-5}$	0
$t\bar{t} o u_{\mu} \bar{ u}_{\mu}$	$-5.202 \cdot 10^{-5}$	$-5.202 \cdot 10^{-5}$	$1.922 \cdot 10^{-8}$	$2.604 \cdot 10^{-6}$	$2.604 \cdot 10^{-6}$	0
$t\bar{t} \to \tau^+ \tau^-$	$-3.322 \cdot 10^{-5}$	$-3.322 \cdot 10^{-5}$	$6.021 \cdot 10^{-8}$	$3.12 \cdot 10^{-6}$	$3.12 \cdot 10^{-6}$	$-3.206 \cdot 10^{-8}$
$t\bar{t} \to c\bar{c}$	-0.0005738	-0.0005738	$1.743 \cdot 10^{-8}$	$1.633 \cdot 10^{-5}$	$1.633 \cdot 10^{-5}$	0
$t\bar{t} o d\bar{d}$	-0.0002872	-0.0002872	$3.482 \cdot 10^{-8}$	$1.1 \cdot 10^{-5}$	$1.1\cdot 10^{-5}$	0
$t\bar{t} \to s\bar{s}$	-0.001381	-0.001381	0	$4.811 \cdot 10^{-5}$	$4.811 \cdot 10^{-5}$	0
$t\bar{t} \to t\bar{t}$	0.06416	0.06416	0	0.008524	0.008524	0

2.39 cpb

		interfer	ence		square			
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$		
$HH \to z\bar{b}b$	$-8.942 \cdot 10^{-7}$	$-1.705 \cdot 10^{-6}$	-0.907	$6.942 \cdot 10^{-6}$	$3.471 \cdot 10^{-5}$	-4		
$Hz \to b\bar{b}$	-0.04312	-0.04312	$-2.319 \cdot 10^{-8}$	1.045	1.045	0		
$W^+W^- o Hb\bar{b}$	$-2.379 \cdot 10^{-8}$	$-2.379 \cdot 10^{-8}$	0	$2.738 \cdot 10^{-7}$	$2.738 \cdot 10^{-7}$	0		
$b\bar{b} \to \mu^+ \mu^-$	$4.752 \cdot 10^{-5}$	$4.752 \cdot 10^{-5}$	0	$5.228 \cdot 10^{-6}$	$5.228 \cdot 10^{-6}$	$3.826 \cdot 10^{-8}$		
$b\bar{b} o u_e \bar{ u}_e$	$-1.391 \cdot 10^{-5}$	$-1.391 \cdot 10^{-5}$	0	$2.708 \cdot 10^{-6}$	$2.708 \cdot 10^{-6}$	0		
$b\bar{b} o b\bar{b}$	0.00883	0.00883	$-2.265 \cdot 10^{-8}$	0.001074	0.001074	0		
$b\bar{b} o d\bar{d}$	$-3.663 \cdot 10^{-5}$	$-3.663 \cdot 10^{-5}$	$-2.73 \cdot 10^{-8}$	$1.681 \cdot 10^{-6}$	$1.681 \cdot 10^{-6}$	$-5.948 \cdot 10^{-8}$		

2.40 cpt

		interfe	rence		square			
	mod1	mod2	$1-{\tt mod2/mod1}$	mod1	mod2	$1-{\tt mod2/mod1}$		
$HH \to z t \bar{t}$	$-1.986 \cdot 10^{-5}$	$4.091 \cdot 10^{-6}$	1.206	$2.589 \cdot 10^{-5}$	$5.968 \cdot 10^{-5}$	-1.305		
$Hz \to t\bar{t}$	-1.315	-1.315	0	0.2317	0.2317	0		
$W^+W^- \to H t \bar t$	$3.208 \cdot 10^{-6}$	$3.208 \cdot 10^{-6}$	0	$9.777 \cdot 10^{-7}$	$9.777 \cdot 10^{-7}$	0		
b ar b o t ar t	-0.002147	-0.002147	$4.657 \cdot 10^{-8}$	$4.743 \cdot 10^{-5}$	$4.743 \cdot 10^{-5}$	0		
$t\bar{t} o u_{\mu} \bar{ u}_{\mu}$	0.0001542	0.0001542	$-6.486 \cdot 10^{-8}$	$1.653 \cdot 10^{-5}$	$1.653 \cdot 10^{-5}$	0		
$t\bar{t} \to \tau^+ \tau^-$	$8.281 \cdot 10^{-5}$	$8.281 \cdot 10^{-5}$	$-4.83 \cdot 10^{-8}$	$3.225 \cdot 10^{-6}$	$3.225 \cdot 10^{-6}$	$-3.1 \cdot 10^{-8}$		
$t\bar{t} \to c\bar{c}$	-0.000149	-0.000149	0	$2.527 \cdot 10^{-5}$	$2.527 \cdot 10^{-5}$	0		
$t\bar{t} \to d\bar{d}$	0.0001196	0.0001196	$-8.361 \cdot 10^{-8}$	$3.902 \cdot 10^{-5}$	$3.902 \cdot 10^{-5}$	$2.563 \cdot 10^{-8}$		
$t\bar{t} \to s\bar{s}$	0.0001408	0.0001408	$-7.104 \cdot 10^{-8}$	$4.44 \cdot 10^{-5}$	$4.44\cdot10^{-5}$	0		
$t\bar{t} \to t\bar{t}$	-0.06683	-0.06683	0	0.008986	0.008986	0		

2.41 cptb

		interfer	ence		square			
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$		
$HH o W^+ \bar t b$	$-8.638 \cdot 10^{-7}$	$-8.489 \cdot 10^{-7}$	0.01734	$6.643 \cdot 10^{-6}$	$4.907 \cdot 10^{-6}$	0.2614		
$HW^+ \to \gamma t \bar{b}$	$7.289 \cdot 10^{-10}$	$7.289 \cdot 10^{-10}$	$-1.372 \cdot 10^{-8}$	$5.873 \cdot 10^{-9}$	$5.873 \cdot 10^{-9}$	$-1.703 \cdot 10^{-8}$		
$HW^- o \bar{t}b$	-0.0409	-0.0409	0	0.1329	0.1329	0		
$W^+W^- o Hb\bar{b}$	$-4.965 \cdot 10^{-8}$	$-4.965 \cdot 10^{-8}$	0	$4.117 \cdot 10^{-7}$	$4.117 \cdot 10^{-7}$	0		
$W^+W^- o H t \bar t$	$-8.914 \cdot 10^{-7}$	$-8.914 \cdot 10^{-7}$	$1.122 \cdot 10^{-8}$	$1.034 \cdot 10^{-8}$	$1.034 \cdot 10^{-8}$	0		
$\bar{b}t \to \bar{d}u$	$-2.193 \cdot 10^{-6}$	$-2.193 \cdot 10^{-6}$	0	$7.02 \cdot 10^{-7}$	$7.02 \cdot 10^{-7}$	$1.424 \cdot 10^{-8}$		
$b\bar{b} o t\bar{t}$	0.001557	0.001557	0	0.006093	0.006093	0		

 $b\bar{t} \to e^- \bar{\nu}_e$ $-7.312 \cdot 10^{-7}$ $-7.312 \cdot 10^{-7}$ $1.368 \cdot 10^{-8}$ $1.351 \cdot 10^{-5}$ $1.351 \cdot 10^{-5}$ 0

2.42 cptbI

		interfere	ence		square			
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$		
$HH o W^+ \bar t b$	$-1.567 \cdot 10^{-6}$	$-4.381 \cdot 10^{-7}$	0.7204	$2.664 \cdot 10^{-6}$	$8.863 \cdot 10^{-6}$	-2.327		
$HW^+ \to \gamma t \bar{b}$	$-3.572 \cdot 10^{-9}$	$-3.572 \cdot 10^{-9}$	$-2.799 \cdot 10^{-8}$	$1.024 \cdot 10^{-5}$	$1.024 \cdot 10^{-5}$	0		
$HW^- \to \bar{t}b$	$-8.71 \cdot 10^{-6}$	$-8.71 \cdot 10^{-6}$	0	0.4766	0.4766	0		
$W^+W^- o Hb\bar{b}$	$5.143 \cdot 10^{-8}$	$5.143 \cdot 10^{-8}$	0	$1.141 \cdot 10^{-6}$	$1.141 \cdot 10^{-6}$	0		
$W^+W^- o H t \bar t$	$3.452 \cdot 10^{-9}$	$3.452 \cdot 10^{-9}$	$-2.897 \cdot 10^{-8}$	$3.379 \cdot 10^{-9}$	$3.379 \cdot 10^{-9}$	0		
$\bar{b}t \to \bar{d}u$	$2.841 \cdot 10^{-21}$	$6.232 \cdot 10^{-21}$	-1.194	$1.984 \cdot 10^{-5}$	$1.984 \cdot 10^{-5}$	0		
$b\bar{b} o t\bar{t}$	$3.06 \cdot 10^{-21}$	$-7.737 \cdot 10^{-20}$	26.29	0.0005575	0.0005575	0		
$b\bar{t} \to e^- \bar{\nu}_e$	$1.051 \cdot 10^{-22}$	$-1.6 \cdot 10^{-22}$	2.522	$7.611 \cdot 10^{-6}$	$7.611 \cdot 10^{-6}$	$1.314 \cdot 10^{-8}$		

2.43 ctG

	interference				square			
	mod1	mod2	$1-{\tt mod2/mod1}$	mod1	mod2	$1-{\tt mod2/mod1}$		
$b\bar{b} \to t\bar{t}$	0.1191	0.1191	0	0.03144	0.03144	0		
$gg \to t \bar t$	0.1271	0.1271	0	0.08584	0.08584	0		
$t\bar{t} \to c\bar{c}$	0.1977	0.1977	0	0.04257	0.04257	0		
$t\bar{t} \to d\bar{d}$	0.1977	0.1977	0	0.0465	0.0465	0		
$t \bar t o s \bar s$	0.1977	0.1977	0	0.0125	0.0125	0		
$t\bar{t} \to t\bar{t}$	0.1649	0.1649	0	0.4297	0.4297	0		

2.44 ctGI

interference square

	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1 - \mathtt{mod}2/\mathtt{mod}1$
$b\bar{b} \to t\bar{t}$	$-2.072 \cdot 10^{-17}$	$6.584 \cdot 10^{-18}$	1.318	0.022	0.022	0
gg o t ar t	$-1.028 \cdot 10^{-18}$	$-1.499 \cdot 10^{-18}$	-0.458	0.08033	0.08033	0
$t\bar{t} \to c\bar{c}$	0	$4.412 \cdot 10^{-24}$	∞	0.03312	0.03312	0
$t\bar{t} \to d\bar{d}$	$6.617 \cdot 10^{-24}$	$-5.882 \cdot 10^{-24}$	1.889	0.03705	0.03705	0
$t\bar{t} \to s\bar{s}$	$-4.19 \cdot 10^{-29}$	$-4.596 \cdot 10^{-25}$	$-1.097\cdot10^4$	0.003056	0.003056	0
$t\bar{t} \to t\bar{t}$	$-1.26 \cdot 10^{-17}$	$-1.787 \cdot 10^{-17}$	-0.4186	0.3608	0.3608	0

2.45 ctQqu1

		interference			square		
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	1 - mod2/mod1	
$\bar{b}t \to \bar{d}u$	0	0	0	0.25	0.25	$3.12 \cdot 10^{-6}$	
$t\bar{t} \to c\bar{c}$	-0.4725	0	1	0.5004	0.5004	$3.097 \cdot 10^{-6}$	

$2.46 \quad ctQqu1I$

		erference		square		
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	1 - mod2/mod1
$\bar{b}t \to \bar{d}u$	0	0	0	0.25	0.25	$3.08 \cdot 10^{-6}$
$t\bar{t} \to c\bar{c}$	$-3.336 \cdot 10^{-17}$	0	1	0.5004	0.5004	$3.097 \cdot 10^{-6}$

2.47 ctQqu8

		interference			square			
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1 - \mathtt{mod}2/\mathtt{mod}1$		
$\bar{b}t \to \bar{d}u$	0	0	0	0.05556	0.05556	$2.916 \cdot 10^{-6}$		
$t\bar{t} \to c\bar{c}$	$2.1 \cdot 10^{-8}$	0	1	0.1112	0.1112	$2.967 \cdot 10^{-6}$		

$2.48 \quad ctQqu8I$

		int	erference	square		
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	$\mathtt{mod1} \mathtt{mod2} 1-\mathtt{mod2}/\mathtt{mod1}$		
$\bar{b}t \to \bar{d}u$	0	0	0	$0.05556 0.05556 2.934 \cdot 10^{-6}$		
$t\bar{t} \to c\bar{c}$	$2.608 \cdot 10^{-18}$	0	1	$0.1112 0.1112 2.967 \cdot 10^{-6}$		

2.49 ctW

		interfere	ence	square
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	$\verb mod1 \qquad \verb mod2 \qquad 1-\verb mod2/mod1 $
$HH o W^+ \bar t b$	$-7.531 \cdot 10^{-6}$	$-7.531 \cdot 10^{-6}$	0	$1.374 \cdot 10^{-5}$ $1.374 \cdot 10^{-5}$ 0
$HH \to z t \bar{t}$	$2.217 \cdot 10^{-12}$	0	1	$3.623 \cdot 10^{-17}$ 0 1
$HW^+ o \gamma t \bar{b}$	$1.707 \cdot 10^{-5}$	$1.422 \cdot 10^{-5}$	0.1671	$0.0001333 \qquad 0.000118 \qquad 0.1146$
$HW^- \to \bar{t}b$	0.107	0.107	0	0.5023 0.5023 0
$H\gamma \to t\bar{t}$	-0.6278	-0.6278	$5.893 \cdot 10^{-7}$	$15.08 15.08 1.193 \cdot 10^{-6}$
$Hz \to t\bar{t}$	$2.434 \cdot 10^{-8}$	0	1	$1.706 \cdot 10^{-12}$ 0 1
$W^+W^- \to H b \bar b$	$-1.523 \cdot 10^{-7}$	$-1.523 \cdot 10^{-7}$	0	$2.79 \cdot 10^{-6}$ $2.79 \cdot 10^{-6}$ 0
$W^+W^- o H t \bar t$	$-9.128 \cdot 10^{-6}$	$-9.549 \cdot 10^{-5}$	-9.462	$6.138 \cdot 10^{-5}$ 0.002895 -46.17
$\bar{b}t \to \bar{d}u$	0.01458	0.01458	0	$0.006571 \qquad 0.006571 \qquad 1.522 \cdot 10^{-8}$
$b\bar{b} o t\bar{t}$	-0.5342	-0.5342	$3.744 \cdot 10^{-8}$	0.5721 0.5721 $1.748 \cdot 10^{-8}$
$b\bar{t} \to e^-\bar{\nu}_e$	$3.976 \cdot 10^{-5}$	$3.976 \cdot 10^{-5}$	0	$0.0001233 \qquad 0.0001233 \qquad 0$
$t\bar{t} o u_{\mu} \bar{ u}_{\mu}$	$-2.432 \cdot 10^{-10}$	0	1	$1.43 \cdot 10^{-15}$ 0 1
$t\bar{t} \to \tau^+ \tau^-$	0.006505	0.006505	$5.381 \cdot 10^{-7}$	$0.01959 \qquad 0.01959 \qquad 1.123 \cdot 10^{-6}$
$t\bar{t} \to c\bar{c}$	0.004683	0.004683	$4.271 \cdot 10^{-7}$	0.01247 0.01247 $9.626 \cdot 10^{-7}$
$t\bar{t} \to d\bar{d}$	0.003302	0.003302	$-6.057 \cdot 10^{-8}$	$0.006674 \qquad 0.006674 \qquad 3.746 \cdot 10^{-7}$
$t\bar{t} \to s\bar{s}$	0.0004811	0.0004811	$8.522 \cdot 10^{-7}$	$0.003203 \qquad 0.003203 \qquad 4.058 \cdot 10^{-7}$
$t\bar{t} \to t\bar{t}$	-0.776	-0.776	$4.768 \cdot 10^{-7}$	0.8741 0.8741 $9.609 \cdot 10^{-7}$

2.50 ctWI

		interfere	ence		square			
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$		
$HH o W^+ \bar t b$	$2.113 \cdot 10^{-6}$	$2.113 \cdot 10^{-6}$	0	$1.102 \cdot 10^{-5}$	$1.102 \cdot 10^{-5}$	0		
$HH o zt\bar{t}$	$-8.834 \cdot 10^{-13}$	0	1	$1.487 \cdot 10^{-17}$	0	1		
$HW^+ o \gamma t \bar{b}$	$-4.107 \cdot 10^{-7}$	$-1.975 \cdot 10^{-6}$	-3.81	$3.154 \cdot 10^{-5}$	$3.726 \cdot 10^{-5}$	-0.181		
$HW^- o \bar{t}b$	-0.0002011	-0.0002011	0	2.151	2.151	0		
$H\gamma \to t\bar{t}$	$1.862 \cdot 10^{-17}$	$-4.039 \cdot 10^{-17}$	3.169	14.36	14.36	$1.184 \cdot 10^{-6}$		
$Hz \to t\bar{t}$	$-3.833 \cdot 10^{-9}$	0	1	$4.082 \cdot 10^{-13}$	0	1		
$W^+W^- o Hb\bar{b}$	$1.883 \cdot 10^{-6}$	$1.883 \cdot 10^{-6}$	0	$6.25 \cdot 10^{-6}$	$6.25\cdot10^{-6}$	0		
$W^+W^- \to H t \bar t$	$-2.795 \cdot 10^{-6}$	$2.142 \cdot 10^{-5}$	8.664	$3.148 \cdot 10^{-5}$	0.00255	-80		
$\bar{b}t \to \bar{d}u$	$-8.574 \cdot 10^{-18}$	$3.133 \cdot 10^{-17}$	4.655	0.01119	0.01119	0		
$b\bar{b} o t\bar{t}$	$1.237 \cdot 10^{-17}$	$-9.844 \cdot 10^{-17}$	8.956	0.0003213	0.0003213	$1.867 \cdot 10^{-7}$		
$b \bar t o e^- \bar u_e$	$-6.294 \cdot 10^{-19}$	$-1.517 \cdot 10^{-19}$	0.759	0.003335	0.003335	0		
$t\bar{t} o u_{\mu} \bar{ u}_{\mu}$	$9.783 \cdot 10^{-25}$	0	1	$6.548 \cdot 10^{-16}$	0	1		
$t\bar{t} \to \tau^+ \tau^-$	$4.291 \cdot 10^{-18}$	$-1.442 \cdot 10^{-20}$	1.003	0.01401	0.01401	$1.142 \cdot 10^{-6}$		
$t\bar{t} \to c\bar{c}$	$1.156 \cdot 10^{-10}$	$1.156 \cdot 10^{-10}$	$6.057 \cdot 10^{-7}$	0.01004	0.01004	$9.959 \cdot 10^{-7}$		
$t\bar{t} \to d\bar{d}$	$1.273 \cdot 10^{-15}$	$1.275 \cdot 10^{-15}$	-0.00154	0.002278	0.002278	$3.951 \cdot 10^{-7}$		
$t\bar{t} \to s\bar{s}$	$5.664 \cdot 10^{-13}$	$5.664 \cdot 10^{-13}$	$-1.342 \cdot 10^{-6}$	0.001215	0.001215	$4.116 \cdot 10^{-7}$		
$t\bar{t} \to t\bar{t}$	$4.864 \cdot 10^{-17}$	$5.296 \cdot 10^{-17}$	-0.08881	0.4505	0.4505	$9.545 \cdot 10^{-7}$		

2.51 ctZ

		interfe	erence		square			
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$		
$HH o zt \bar t$	$1.468 \cdot 10^{-6}$	$1.468 \cdot 10^{-6}$	$6.132 \cdot 10^{-7}$	$4.418 \cdot 10^{-5}$	$4.418 \cdot 10^{-5}$	$1.109 \cdot 10^{-6}$		
$HW^+ o \gamma t \bar{b}$	$3.874 \cdot 10^{-6}$	$3.874 \cdot 10^{-6}$	$5.42 \cdot 10^{-7}$	$1.885 \cdot 10^{-6}$	$1.885 \cdot 10^{-6}$	$1.167 \cdot 10^{-6}$		
$H\gamma \to t\bar{t}$	0.5826	0.5826	$5.493 \cdot 10^{-7}$	11	11	$1.091 \cdot 10^{-6}$		

$Hz \to t\bar{t}$	-0.3392	-0.3392	$5.602 \cdot 10^{-7}$	0.9477	0.9477	$1.097 \cdot 10^{-6}$
$W^+W^- o H t \bar t$	$-4.19\cdot10^{-7}$	$-4.19\cdot10^{-7}$	$5.489 \cdot 10^{-7}$	$1.252 \cdot 10^{-7}$	$1.252 \cdot 10^{-7}$	$1.038 \cdot 10^{-6}$
$b\bar{b} \to t\bar{t}$	0.004321	0.004321	$5.554 \cdot 10^{-7}$	0.001159	0.001159	$1.122 \cdot 10^{-6}$
$t\bar{t} o u_{\mu} \bar{ u}_{\mu}$	-0.0005407	-0.0005407	$4.994 \cdot 10^{-7}$	0.00213	0.00213	$1.127 \cdot 10^{-6}$
$t\bar{t} \to \tau^+ \tau^-$	-0.006687	-0.006687	$5.384 \cdot 10^{-7}$	0.01472	0.01472	$1.087 \cdot 10^{-6}$
$t\bar{t} \to c\bar{c}$	-0.003401	-0.003401	$5.292 \cdot 10^{-7}$	0.0107	0.0107	$1.122 \cdot 10^{-6}$
$t\bar{t} \to d\bar{d}$	-0.0005477	-0.0005477	$5.112 \cdot 10^{-7}$	0.002986	0.002986	$1.105 \cdot 10^{-6}$
$t\bar{t} \to s\bar{s}$	-0.0006807	-0.0006807	$5.142 \cdot 10^{-7}$	0.002108	0.002108	$1.091 \cdot 10^{-6}$
$t\bar{t} o t\bar{t}$	0.2043	0.2043	$5.384 \cdot 10^{-7}$	0.3426	0.3426	$1.109 \cdot 10^{-6}$

2.52 ctZI

		interfere	ence		square			
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$		
$HH \to z t \bar{t}$	$6.733 \cdot 10^{-8}$	$6.733 \cdot 10^{-8}$	$4.307 \cdot 10^{-7}$	$1.669 \cdot 10^{-5}$	$1.669 \cdot 10^{-5}$	$1.078 \cdot 10^{-6}$		
$HW^+ o \gamma t \bar{b}$	$5.272 \cdot 10^{-6}$	$5.272 \cdot 10^{-6}$	$5.501 \cdot 10^{-7}$	$3.243 \cdot 10^{-5}$	$3.243 \cdot 10^{-5}$	$1.11 \cdot 10^{-6}$		
$H\gamma o t\bar{t}$	$-6.595 \cdot 10^{-17}$	$-9.199 \cdot 10^{-17}$	-0.395	7.532	7.532	$1.115 \cdot 10^{-6}$		
$Hz \to t\bar{t}$	0.0004607	0.0004607	$5.426 \cdot 10^{-7}$	3.065	3.065	$1.109 \cdot 10^{-6}$		
$W^+W^- o H t \bar t$	$9.417 \cdot 10^{-8}$	$9.417 \cdot 10^{-8}$	$5.522 \cdot 10^{-7}$	$4.219 \cdot 10^{-8}$	$4.219 \cdot 10^{-8}$	$1.09 \cdot 10^{-6}$		
$b\bar{b} \to t\bar{t}$	$1.86 \cdot 10^{-18}$	$-1.556 \cdot 10^{-19}$	1.084	0.002575	0.002575	$1.087 \cdot 10^{-6}$		
$t\bar{t} \to \nu_{\mu}\bar{\nu}_{\mu}$	$-3.465 \cdot 10^{-18}$	$-5.071 \cdot 10^{-18}$	-0.4634	0.002283	0.002283	$1.095 \cdot 10^{-6}$		
$t\bar{t} \to \tau^+ \tau^-$	$1.503 \cdot 10^{-18}$	$2.182 \cdot 10^{-18}$	-0.4515	0.01239	0.01239	$1.13 \cdot 10^{-6}$		
$t\bar{t} \to c\bar{c}$	$-1.012 \cdot 10^{-10}$	$-1.012 \cdot 10^{-10}$	$5.931 \cdot 10^{-7}$	0.01305	0.01305	$1.073 \cdot 10^{-6}$		
$t\bar{t} \to d\bar{d}$	$-1.169 \cdot 10^{-15}$	$-1.168 \cdot 10^{-15}$	0.001244	0.004338	0.004338	$1.107 \cdot 10^{-6}$		
$t\bar{t} \to s\bar{s}$	$-4.953 \cdot 10^{-13}$	$-4.953 \cdot 10^{-13}$	$2.019 \cdot 10^{-7}$	0.0003578	0.0003578	$1.09 \cdot 10^{-6}$		
$t\bar{t} \to t\bar{t}$	$2.684 \cdot 10^{-17}$	$4.399 \cdot 10^{-17}$	-0.6391	0.2577	0.2577	$1.086 \cdot 10^{-6}$		

2.53 ctb1

interference

square mod1 $1 - \mathtt{mod}2/\mathtt{mod}1$ mod1mod2 mod2 1 - mod2/mod1 $b\bar{b} \to t\bar{t}$ -0.0004917 -0.0004917 $-2.034 \cdot 10^{-8}$ $0.001126 \quad 0.001126$

2.54 ctb8

interference square $mod2 \quad 1 - mod2/mod1$ $mod2 \quad 1 - mod2/mod1$ mod1mod1 $b\bar{b} \to t\bar{t}$ $0.4951 \quad 0.4951$ 0 $0.1605 \quad 0.1605$ 0

2.55 ctd1

interference square mod1mod2 1 - mod2/mod1mod2 1 - mod2/mod1mod1 $t\bar{t} \to d\bar{d}$ -0.01569-0.015690.26760.26760 $t\bar{t} \to s\bar{s}$ $-0.001283 \quad -0.001283$ $0.01522 \quad 0.01522$

2.56 ctd8

interference square $mod2 \quad 1 - mod2/mod1$ mod1mod1mod2 1 - mod2/mod1 $t\bar{t} \to d\bar{d}$ 0.19570.19570 0.059470.059470 $t\bar{t} \to s\bar{s}$ $0.0295 \quad 0.0295$ 0 0.0033820.0033820

2.57 ctp

interference square $1-\mathtt{mod}2/\mathtt{mod}1$ mod1mod2 1 - mod2/mod1mod1 mod2

$HH o Htar{t}$	$2.803 \cdot 10^{-6}$	$-2.468 \cdot 10^{-6}$	1.881	$2.188 \cdot 10^{-6}$	$2.083 \cdot 10^{-6}$	0.04779
$HH o W^+ \bar t b$	$4.416 \cdot 10^{-6}$	$4.416 \cdot 10^{-6}$	$2.265 \cdot 10^{-8}$	$5.305 \cdot 10^{-6}$	$5.305 \cdot 10^{-6}$	$1.885 \cdot 10^{-8}$
$HH \to z t \bar{t}$	$1.32 \cdot 10^{-6}$	$1.32 \cdot 10^{-6}$	0	$1.76 \cdot 10^{-6}$	$1.76 \cdot 10^{-6}$	0
$HW^+ o \gamma t \bar{b}$	$3.988 \cdot 10^{-7}$	$3.988 \cdot 10^{-7}$	0	$1.056 \cdot 10^{-6}$	$1.056 \cdot 10^{-6}$	0
$HW^- \to \bar{t}b$	0.08109	0.08109	0	0.05133	0.05133	0
$H\gamma \to t\bar{t}$	-0.05458	-0.05458	$-1.832 \cdot 10^{-8}$	0.001675	0.001675	0
$Hz \to t\bar{t}$	-0.1731	-0.1731	0	0.04309	0.04309	0
$W^+W^- o Hb\bar b$	$6.301 \cdot 10^{-7}$	$6.301 \cdot 10^{-7}$	$1.587 \cdot 10^{-8}$	$4.992 \cdot 10^{-8}$	$4.992 \cdot 10^{-8}$	0
$W^+W^- \to H t \bar t$	$1.685 \cdot 10^{-9}$	$1.685 \cdot 10^{-9}$	$3.918 \cdot 10^{-6}$	$2.245 \cdot 10^{-7}$	$2.245 \cdot 10^{-7}$	0
$b\bar{b} o t\bar{t}$	$-1.32 \cdot 10^{-5}$	$-1.32 \cdot 10^{-5}$	0	$6.089 \cdot 10^{-7}$	$6.089 \cdot 10^{-7}$	0
$t\bar{t} \to \tau^+ \tau^-$	$-1.005 \cdot 10^{-6}$	$-1.005 \cdot 10^{-6}$	0	$3.101 \cdot 10^{-8}$	$3.101 \cdot 10^{-8}$	0
$t\bar{t} \to t\bar{t}$	0.06775	0.06775	0	0.008638	0.008638	0

2.58 ctpI

		interfere		square			
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	
$HH \to H t \bar t$	$4.472 \cdot 10^{-6}$	$1.407 \cdot 10^{-6}$	0.6855	$3.485 \cdot 10^{-5}$	$1.517 \cdot 10^{-5}$	0.5648	
$HH \to W^+ \bar{t} b$	$1.27 \cdot 10^{-6}$	$1.27 \cdot 10^{-6}$	$-7.873 \cdot 10^{-8}$	$8.485 \cdot 10^{-6}$	$8.485 \cdot 10^{-6}$	0	
$HH \to z t \bar{t}$	$-1.569 \cdot 10^{-7}$	$-1.569 \cdot 10^{-7}$	$-6.373 \cdot 10^{-8}$	$1.546 \cdot 10^{-6}$	$1.546 \cdot 10^{-6}$	0	
$HW^+ \to \gamma t \bar{b}$	$5.43 \cdot 10^{-8}$	$5.43 \cdot 10^{-8}$	$-1.842 \cdot 10^{-8}$	$1.167 \cdot 10^{-6}$	$1.167 \cdot 10^{-6}$	0	
$HW^- o \bar{t}b$	-0.00134	-0.00134	0	0.05763	0.05763	0	
$H\gamma \to t\bar{t}$	$-2.606 \cdot 10^{-18}$	$-3.69 \cdot 10^{-18}$	-0.4161	0.00211	0.00211	0	
$Hz \to t\bar{t}$	-0.001892	-0.001892	0	0.04266	0.04266	0	
$W^+W^- o Hb\bar{b}$	$2.514 \cdot 10^{-7}$	$2.514 \cdot 10^{-7}$	0	$1.309 \cdot 10^{-8}$	$1.309 \cdot 10^{-8}$	0	
$W^+W^- o H t ar t$	$-4.627 \cdot 10^{-7}$	$-4.627 \cdot 10^{-7}$	0	$5.628 \cdot 10^{-7}$	$5.628 \cdot 10^{-7}$	0	
$b\bar{b} o t\bar{t}$	$-4.382 \cdot 10^{-22}$	$9.617 \cdot 10^{-22}$	3.195	$6.906 \cdot 10^{-7}$	$6.906 \cdot 10^{-7}$	0	
$t\bar{t} \to \tau^+ \tau^-$	$-1.563 \cdot 10^{-23}$	$-4.596 \cdot 10^{-23}$	-1.941	$3.49 \cdot 10^{-8}$	$3.49\cdot10^{-8}$	0	
$t\bar{t} \to t\bar{t}$	$4.024 \cdot 10^{-18}$	$2.746 \cdot 10^{-18}$	0.3176	0.004832	0.004832	0	

2.59 ctq1

		int	erference		square			
	mod1	mod2	$1-{\tt mod2/mod1}$	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$		
$t\bar{t} \to c\bar{c}$	0.0297	0.0297	$-3.367 \cdot 10^{-8}$	0.83	0.83	0		
$t\bar{t} \to d\bar{d}$	0.001588	0.001588	$-1.259 \cdot 10^{-7}$	0.2624	0.2624	0		
$t\bar{t} \to s\bar{s}$	0.01785	0.01785	$-5.603 \cdot 10^{-8}$	0.8212	0.8212	0		

2.60 ctq8

		j	interference		square			
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1-{\tt mod2/mod1}$		
$t\bar{t} \to c\bar{c}$	0.4292	0.4292	0	0.1383	0.1383	0		
$t\bar{t} \to d\bar{d}$	0.468	0.468	0	0.1514	0.1514	0		
$t \bar t o s \bar s$	0.3575	0.3575	0	0.1141	0.1141	0		

2.61 ctt1

		terference		square			
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1-{\tt mod2/mod1}$	
$t\bar{t} \to t\bar{t}$	-0.5699	-0.5699	0	5.808	5.808	0	

2.62 ctu1

		in	iterference		square			
	mod1	mod2	$1-{\tt mod2/mod1}$	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$		
$t\bar{t} \to c\bar{c}$	0.05397	0.05397	$-3.706 \cdot 10^{-8}$	0.4654	0.4654	0		

2.63 ctu8

		:	interference		square			
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	1 - mod2/mod1		
$t\bar{t} \to c\bar{c}$	0.3259	0.3259	0	0.1034	0.1034	0		

2.64 sm

			interference	square
	mod1	mod2	$1-{\tt mod2/mod1}$	$\verb mod1 \qquad \verb mod2 \qquad 1-\verb mod2/mod1 $
HH o HH	0	0	0	0.3958 0.3958 0
HH o HHH	0	0	0	$1.288 \cdot 10^{-7}$ $1.288 \cdot 10^{-7}$ 0
$HH o H au^+ au^-$	0	0	0	$7.181 \cdot 10^{-10} 7.181 \cdot 10^{-10} \qquad \qquad 0$
$HH o Hbar{b}$	0	0	0	$4.255 \cdot 10^{-9}$ $4.255 \cdot 10^{-9}$ 0
$HH o Htar{t}$	0	0	0	$1.957 \cdot 10^{-5}$ $1.957 \cdot 10^{-5}$ 0
$HH \to Hzz$	0	0	0	$8.71 \cdot 10^{-6}$ $8.71 \cdot 10^{-6}$ 0
$HH o W^+W^-$	0	0	0	$0.09071 \qquad 0.09071 \qquad 1.102 \cdot 10^{-8}$
$HH \to W^+W^-\gamma$	0	0	0	$1.844 \cdot 10^{-6}$ $1.844 \cdot 10^{-6}$ 0
$HH o W^+ \bar t b$	0	0	0	$3.962 \cdot 10^{-6}$ $3.962 \cdot 10^{-6}$ 0
$HH \to W^+ e^- \bar{\nu}_e$	0	0	0	$1.576 \cdot 10^{-6}$ $1.576 \cdot 10^{-6}$ $6.347 \cdot 10^{-8}$
$HH o W^- u \bar{d}$	0	0	0	$6.988 \cdot 10^{-7}$ $6.988 \cdot 10^{-7}$ $1.431 \cdot 10^{-8}$
$HH o z \bar{b} b$	0	0	0	$9.294 \cdot 10^{-7}$ $9.294 \cdot 10^{-7}$ $1.076 \cdot 10^{-8}$
$HH \to z \nu_e \bar{\nu}_e$	0	0	0	$2.806 \cdot 10^{-6}$ $2.806 \cdot 10^{-6}$ 0
$HH \to z c \bar{c}$	0	0	0	$2.391 \cdot 10^{-7}$ $2.391 \cdot 10^{-7}$ 0
$HH o zd\bar{d}$	0	0	0	$4.075 \cdot 10^{-7}$ $4.075 \cdot 10^{-7}$ 0
$HH \rightarrow ze^+e^-$	0	0	0	$1.448 \cdot 10^{-7}$ $1.448 \cdot 10^{-7}$ 0
HH o zt ar t	0	0	0	$7.747 \cdot 10^{-5}$ $7.747 \cdot 10^{-5}$ 0
$HH \rightarrow zz$	0	0	0	$0.08187 \qquad 0.08187 \qquad 0$
$HW^+ \to \gamma t \bar{b}$	0	0	0	$2.475 \cdot 10^{-6}$ $2.475 \cdot 10^{-6}$ $-4.041 \cdot 10^{-8}$

$HW^+ \to \gamma u \bar{d}$	0	0	0	$2.405 \cdot 10^{-8}$	$2.405 \cdot 10^{-8}$	0
$HW^+ ightarrow u ar{d}$	0	0	0	0.01937	0.01937	0
$HW^- o \bar{t}b$	0	0	0	5.4	5.4	0
$HW^- \to \gamma e^- \bar{\nu}_e$	0	0	0	$4.665 \cdot 10^{-7}$	$4.665 \cdot 10^{-7}$	0
$HW^- o \mu^- \bar{\nu}_\mu$	0	0	0	0.007567	0.007567	$1.321 \cdot 10^{-8}$
$H\gamma ightarrow bar{b}$	0	0	0	0.0001156	0.0001156	0
$H\gamma \to t\bar{t}$	0	0	0	0.4186	0.4186	0
$Hz \rightarrow \mu^+\mu^-$	0	0	0	0.003181	0.003181	0
$Hz \rightarrow \nu_{\tau} \bar{\nu}_{\tau}$	0	0	0	0.005681	0.005681	0
$Hz ightarrow b\dot{\bar{b}}$	0	0	0	0.01438	0.01438	0
$Hz \to s\bar{s}$	0	0	0	0.0145	0.0145	0
$Hz \to t\bar{t}$	0	0	0	1.745	1.745	0
$Hz \to u\bar{u}$	0	0	0	0.008741	0.008741	$1.144 \cdot 10^{-8}$
$W^+W^- \to H b \bar b$	0	0	0	$3.719 \cdot 10^{-6}$	$3.719 \cdot 10^{-6}$	$2.689 \cdot 10^{-8}$
$W^+W^- \to H c \bar{c}$	0	0	0	0.0003064	0.0003064	0
$W^+W^- \to H d\bar{d}$	0	0	0	$3.251 \cdot 10^{-7}$	$3.251 \cdot 10^{-7}$	$3.076 \cdot 10^{-8}$
$W^+W^- \to H t \bar t$	0	0	0	$6.095 \cdot 10^{-5}$	$6.095 \cdot 10^{-5}$	0
$W^+W^- \rightarrow W^+W^-$	0	0	0	5.306	5.306	0
$W^+W^- \to \gamma\gamma$	0	0	0	0.08753	0.08753	$-3.427 \cdot 10^{-8}$
$W^+W^- \to \gamma\gamma\gamma$	0	0	0	$6.125 \cdot 10^{-7}$	$6.125 \cdot 10^{-7}$	$-4.898 \cdot 10^{-8}$
$\bar{b}t \to \bar{d}u$	0	0	0	0.03494	0.03494	$2.862 \cdot 10^{-8}$
$\gamma W^+ \to z W^+$	0	0	0	0.2543	0.2543	0
$\mu^+\mu^- \to \tau^+\tau^-$	0	0	0	0.00934	0.00934	$-3.212 \cdot 10^{-8}$
$\nu_{ au} \bar{\nu}_{ au} ightarrow \nu_{ au} \bar{\nu}_{ au}$	0	0	0	2.986	2.986	0
$\nu_e \bar{\nu}_e \to \nu_\mu \bar{\nu}_\mu$	0	0	0	0.006267	0.006267	0
$b\bar{b} o \gamma \gamma$	0	0	0	0.0001264	0.0001264	0
$b\bar{b} o \mu^+\mu^-$	0	0	0	0.0002917	0.0002917	$-3.428 \cdot 10^{-8}$
$b\bar{b} o u_e \bar{ u}_e$	0	0	0	0.001998	0.001998	0
$b\bar{b} o b\bar{b}$	0	0	0	17.24	17.24	0

$b\bar{b} o d\bar{d}$	0	0	0	0.9711	0.9711	0
b ar b o t ar t	0	0	0	1.683	1.683	0
$b\bar{b} \to u\bar{u}$	0	0	0	0.5288	0.5288	0
$b\bar{t} \to e^- \bar{\nu}_e$	0	0	0	$3.935 \cdot 10^{-6}$	$3.935 \cdot 10^{-6}$	$2.541 \cdot 10^{-8}$
$c\bar{c} \to \mu^+ \mu^-$	0	0	0	0.0007154	0.0007154	$-4.193 \cdot 10^{-8}$
$c\bar{s} \to \tau^+ \nu_{\tau}$	0	0	0	0.00142	0.00142	$7.041 \cdot 10^{-8}$
$d\bar{d} \rightarrow c\bar{c}$	0	0	0	0.7471	0.7471	0
$d\bar{d} \rightarrow e^+e^-$	0	0	0	0.0005879	0.0005879	0
$e^+\nu_\mu \to e^+\nu_\mu$	0	0	0	0.06326	0.06326	$-1.581 \cdot 10^{-8}$
$e^+\nu_e^- o \mu^+\nu_\mu^-$	0	0	0	0.004007	0.004007	$2.496 \cdot 10^{-8}$
$e^+\nu_e \to e^+\nu_e$	0	0	0	0.01343	0.01343	0
$e^+\tau^- \rightarrow e^+\tau^-$	0	0	0	0.134	0.134	0
$e^+e^- \to \mu^+\mu^-$	0	0	0	0.007508	0.007508	$-5.328 \cdot 10^{-8}$
$e^+e^- \rightarrow e^+e^-$	0	0	0	0.02473	0.02473	$-4.044 \cdot 10^{-8}$
gg o gg	0	0	0	2157	2157	0
gg o ggg	0	0	0	0.217	0.217	0
gg o t ar t	0	0	0	2.288	2.288	0
$gg \to u\bar{u}$	0	0	0	1.942	1.942	0
$s\bar{s} \to \nu_{\tau}\bar{\nu}_{\tau}$	0	0	0	0.00139	0.00139	0
$s\bar{s} o s\bar{s}$	0	0	0	2.895	2.895	0
$t\bar{t} o u_{\mu} \bar{ u}_{\mu}$	0	0	0	0.0006629	0.0006629	0
$t\bar{t} \to \tau^+ \tau^-$	0	0	0	0.00173	0.00173	$-5.779 \cdot 10^{-8}$
$t\bar{t} \to c\bar{c}$	0	0	0	0.8819	0.8819	0
$t\bar{t} \to d\bar{d}$	0	0	0	0.5778	0.5778	0
$t\bar{t} \to s\bar{s}$	0	0	0	0.874	0.874	0
$t\bar{t} \to t\bar{t}$	0	0	0	7.939	7.939	0
$u\bar{d} \to \mu^+ \nu_\mu$	0	0	0	0.004938	0.004938	0
$u\bar{d} \to c\bar{s}$	0	0	0	0.03507	0.03507	0
$u\bar{d} \to u\bar{d}$	0	0	0	595.8	595.8	0

$u\bar{u} \to \nu_e \bar{\nu}_e$	0	0	0	0.001784	0.001784	0
$u\bar{u} \to u\bar{u}$	0	0	0	5.993	5.993	0
$zz \to W^+W^-$	0	0	0	30.9	30.9	$3.236 \cdot 10^{-8}$
$zz \rightarrow zz$	0	0	0	0.08079	0.08079	0