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 $HH \rightarrow Ht\bar{t}$

		interfer	rence	square			
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	
ctp	$2.303 \cdot 10^{-5}$	$2.303 \cdot 10^{-5}$	0	$1.048 \cdot 10^{-5}$	$1.048 \cdot 10^{-5}$	0	
ctpI	$-1.806 \cdot 10^{-5}$	$-1.806 \cdot 10^{-5}$	0	$2.812 \cdot 10^{-5}$	$2.812 \cdot 10^{-5}$	0	
sm	0	0	0	$2.709 \cdot 10^{-5}$	$2.709 \cdot 10^{-5}$	0	

1.6 $HH \rightarrow Hzz$

sm

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

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

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

cbW	$6.091 \cdot 10^{-7}$	$6.091 \cdot 10^{-7}$	$1.642 \cdot 10^{-8}$	$1.68 \cdot 10^{-5}$	$1.68 \cdot 10^{-5}$	0
cbWI	$-4.196 \cdot 10^{-8}$	$-4.196 \cdot 10^{-8}$	$-2.383 \cdot 10^{-8}$	$1.843 \cdot 10^{-5}$	$1.843 \cdot 10^{-5}$	0
cpQ3	$-8.588 \cdot 10^{-6}$	$-8.588 \cdot 10^{-6}$	$1.164 \cdot 10^{-8}$	$3.985 \cdot 10^{-5}$	$3.985 \cdot 10^{-5}$	0
cptb	$-5.803 \cdot 10^{-7}$	$-5.803 \cdot 10^{-7}$	0	$7.26 \cdot 10^{-6}$	$7.26 \cdot 10^{-6}$	0
cptbI	$-1.402 \cdot 10^{-8}$	$-1.402 \cdot 10^{-8}$	0	$9.963 \cdot 10^{-6}$	$9.963 \cdot 10^{-6}$	0
ctW	$-3.73 \cdot 10^{-6}$	$-3.73 \cdot 10^{-6}$	0	$1.84 \cdot 10^{-5}$	$1.84 \cdot 10^{-5}$	0
ctWI	$5.955 \cdot 10^{-8}$	$5.955 \cdot 10^{-8}$	$-6.717 \cdot 10^{-8}$	$1.681 \cdot 10^{-5}$	$1.681 \cdot 10^{-5}$	0
ctp	$4.649 \cdot 10^{-7}$	$4.649 \cdot 10^{-7}$	0	$1.661 \cdot 10^{-6}$	$1.661 \cdot 10^{-6}$	0
ctpI	$4.257 \cdot 10^{-7}$	$4.257 \cdot 10^{-7}$	$-2.349 \cdot 10^{-8}$	$3.599 \cdot 10^{-6}$	$3.599 \cdot 10^{-6}$	0
sm	0	0	0	$2.99 \cdot 10^{-6}$	$2.99 \cdot 10^{-6}$	0

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

			interference		square	
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$
\mathtt{sm}	0	0	0	$9.541 \cdot 10^{-7}$	$9.541 \cdot 10^{-7}$	$4.192 \cdot 10^{-8}$

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

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

cbWI	$3.807 \cdot 10^{-6}$	$3.807 \cdot 10^{-6}$	$2.627 \cdot 10^{-8}$	$3.509 \cdot 10^{-6}$	$3.509 \cdot 10^{-6}$	$2.85 \cdot 10^{-8}$
cpQ3	$2.901 \cdot 10^{-5}$	$2.901 \cdot 10^{-5}$	0	$7.711 \cdot 10^{-5}$	$7.711 \cdot 10^{-5}$	0
cpQM	$1.451 \cdot 10^{-5}$	$1.451 \cdot 10^{-5}$	0	$1.928 \cdot 10^{-5}$	$1.928 \cdot 10^{-5}$	0
cpb	$-3.725 \cdot 10^{-7}$	$-3.725 \cdot 10^{-7}$	$-1.611 \cdot 10^{-7}$	$9.081 \cdot 10^{-6}$	$9.081 \cdot 10^{-6}$	0
sm	0	0	0	$1.653 \cdot 10^{-5}$	$1.653 \cdot 10^{-5}$	$6.051 \cdot 10^{-8}$

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

 ${\rm sm} \qquad \qquad 0 \qquad \qquad 0 \qquad \qquad 1.801 \cdot 10^{-7} \quad 1.801 \cdot 10^{-7} \qquad \qquad 0$

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

		interfer	ence		square			
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$		
cpQM	$2.384 \cdot 10^{-5}$	$2.384 \cdot 10^{-5}$	0	$5.495 \cdot 10^{-5}$	$5.495 \cdot 10^{-5}$	0		
cpt	$-2.149 \cdot 10^{-5}$	$-2.149 \cdot 10^{-5}$	0	$5.497 \cdot 10^{-5}$	$5.497 \cdot 10^{-5}$	0		
ctW	$-7.554 \cdot 10^{-14}$	0	1	$2.99 \cdot 10^{-17}$	0	1		
ctWI	$9.797 \cdot 10^{-13}$	0	1	$3.326 \cdot 10^{-17}$	0	1		
ctZ	$4.008 \cdot 10^{-6}$	$4.008 \cdot 10^{-6}$	$6.238 \cdot 10^{-7}$	$8.247 \cdot 10^{-5}$	$8.247 \cdot 10^{-5}$	$1.067 \cdot 10^{-6}$		
ctZI	$-1.506 \cdot 10^{-6}$	$-1.506 \cdot 10^{-6}$	$6.642 \cdot 10^{-7}$	$7.856 \cdot 10^{-5}$	$7.856 \cdot 10^{-5}$	$1.069 \cdot 10^{-6}$		
ctp	$-2.386 \cdot 10^{-6}$	$-2.386 \cdot 10^{-6}$	0	$4.432 \cdot 10^{-6}$	$4.432 \cdot 10^{-6}$	0		
ctpI	$1.808 \cdot 10^{-7}$	$1.808 \cdot 10^{-7}$	0	$3.373 \cdot 10^{-6}$	$3.373 \cdot 10^{-6}$	0		
sm	0	0	0	$2.299 \cdot 10^{-5}$	$2.299 \cdot 10^{-5}$	0		

$\textbf{1.18} \quad HH \rightarrow zz$

			interference		square		
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1 - \mathtt{mod}2/\mathtt{mod}1$	
sm	0	0	0	0.07616	0.07616	0	

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

		ınterfer	ence		square			
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$		
cbW	$5.904 \cdot 10^{-7}$	$5.904 \cdot 10^{-7}$	$-3.387 \cdot 10^{-8}$	$1.749 \cdot 10^{-5}$	$1.749 \cdot 10^{-5}$	$-5.717 \cdot 10^{-8}$		
cbWI	$-1.428 \cdot 10^{-8}$	$-1.428 \cdot 10^{-8}$	0	$8.729 \cdot 10^{-6}$	$8.729 \cdot 10^{-6}$	$-3.437 \cdot 10^{-8}$		

cpQ3	$-1.495 \cdot 10^{-5}$	$-1.495 \cdot 10^{-5}$	0	$5.579 \cdot 10^{-6}$	$5.579 \cdot 10^{-6}$	$-3.585 \cdot 10^{-8}$
cptb	$-2.278 \cdot 10^{-7}$	$-2.278 \cdot 10^{-7}$	$-4.389 \cdot 10^{-8}$	$1.255 \cdot 10^{-6}$	$1.255 \cdot 10^{-6}$	0
cptbI	$-5.567 \cdot 10^{-9}$	$-5.567 \cdot 10^{-9}$	$-1.796 \cdot 10^{-8}$	$1.394 \cdot 10^{-6}$	$1.394 \cdot 10^{-6}$	0
ctW	$-1.604 \cdot 10^{-6}$	$-1.604 \cdot 10^{-6}$	$3.117 \cdot 10^{-7}$	$1.239 \cdot 10^{-5}$	$1.239 \cdot 10^{-5}$	$6.457 \cdot 10^{-7}$
ctWI	$6.698 \cdot 10^{-6}$	$6.698 \cdot 10^{-6}$	$-7.763 \cdot 10^{-7}$	$2.014 \cdot 10^{-5}$	$2.014 \cdot 10^{-5}$	$2.979 \cdot 10^{-7}$
ctZ	$1.245 \cdot 10^{-5}$	$1.245 \cdot 10^{-5}$	$5.623 \cdot 10^{-7}$	$7.377 \cdot 10^{-6}$	$7.377 \cdot 10^{-6}$	$1.139 \cdot 10^{-6}$
ctZI	$7.093 \cdot 10^{-6}$	$7.093 \cdot 10^{-6}$	$5.498 \cdot 10^{-7}$	$7.377 \cdot 10^{-6}$	$7.377 \cdot 10^{-6}$	$1.139 \cdot 10^{-6}$
ctp	$1.41 \cdot 10^{-6}$	$1.41 \cdot 10^{-6}$	0	$3.177 \cdot 10^{-7}$	$3.177 \cdot 10^{-7}$	$-3.147 \cdot 10^{-8}$
ctpI	$1.851 \cdot 10^{-6}$	$1.851 \cdot 10^{-6}$	0	$3.622 \cdot 10^{-7}$	$3.622 \cdot 10^{-7}$	$-5.522 \cdot 10^{-8}$
sm	0	0	0	$4.043 \cdot 10^{-6}$	$4.043 \cdot 10^{-6}$	$-2.473 \cdot 10^{-8}$

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	$3.318 \cdot 10^{-8}$	$3.318 \cdot 10^{-8}$	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	0.01741	0.01741	$5.745 \cdot 10^{-8}$		

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

		interfe		square		
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$
cbW	0.007907	0.007907	$1.265 \cdot 10^{-8}$	2.073	2.073	0
cbWI	$2.672 \cdot 10^{-7}$	$2.672 \cdot 10^{-7}$	$3.742 \cdot 10^{-8}$	2.277	2.277	0

cpQ3	-0.8737	-0.8737	0	1.632	1.632	0
cptb	-0.05344	-0.05344	0	0.4858	0.4858	0
cptbI	$-8.796 \cdot 10^{-6}$	$-8.796 \cdot 10^{-6}$	$1.137 \cdot 10^{-8}$	0.408	0.408	0
ctW	-0.2654	-0.2654	0	2.277	2.277	0
ctWI	0.0002136	0.0002136	$4.683 \cdot 10^{-8}$	2.073	2.073	0
ctp	0.09425	0.09425	0	0.05191	0.05191	0
ctpI	-0.0009712	-0.0009712	$1.03 \cdot 10^{-8}$	0.05847	0.05847	0
sm	0	0	0	0.429	0.429	0

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

			interference		square		
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	
sm	0	0	0	$3.309 \cdot 10^{-6}$	$3.309 \cdot 10^{-6}$	$3.022 \cdot 10^{-8}$	

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	0.00637	0.00637	$3.14 \cdot 10^{-8}$	

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

		interfer	rence	square			
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	1 - mod2/mod1	
cbW	$-2.598 \cdot 10^{-5}$	$-2.598 \cdot 10^{-5}$	$-3.849 \cdot 10^{-8}$	0.03903	0.03903	$-5.125 \cdot 10^{-8}$	
cbWI	$1.954 \cdot 10^{-22}$	$1.292 \cdot 10^{-22}$	0.3387	0.6327	0.6327	$-4.742 \cdot 10^{-8}$	
sm	0	0	0	0.0001058	0.0001058	$-9.452 \cdot 10^{-8}$	

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

		interfer	rence	square			
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	1 - mod2/mod1	
ctW	-0.6798	-0.6798	$5.737 \cdot 10^{-7}$	14.1	14.1	$1.205 \cdot 10^{-6}$	
ctWI	$1.469 \cdot 10^{-16}$	$1.301 \cdot 10^{-16}$	0.1144	11.34	11.34	$1.235 \cdot 10^{-6}$	
ctZ	0.7729	0.7729	$5.563 \cdot 10^{-7}$	8.69	8.69	$1.128 \cdot 10^{-6}$	
ctZI	$-1.648 \cdot 10^{-17}$	$4.716 \cdot 10^{-18}$	1.286	8.69	8.69	$1.128 \cdot 10^{-6}$	
ctp	-0.07337	-0.07337	$-2.726 \cdot 10^{-8}$	0.002251	0.002251	$-4.442 \cdot 10^{-8}$	
\mathtt{ctpI}	$-1.064 \cdot 10^{-18}$	$3.594 \cdot 10^{-19}$	1.338	0.0028	0.0028	$-3.571 \cdot 10^{-8}$	
sm	0	0	0	0.4547	0.4547	$-4.399 \cdot 10^{-8}$	

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

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

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

cbW	0.001428	0.001428	$7.005 \cdot 10^{-8}$	1.584	1.584	0
cbWI	$-5.261 \cdot 10^{-6}$	$-5.261 \cdot 10^{-6}$	0	0.8563	0.8563	$1.168 \cdot 10^{-8}$
cpQ3	0.4833	0.4833	$2.069 \cdot 10^{-8}$	4.2	4.2	0
cpQM	0.2417	0.2417	0	1.05	1.05	0
cpb	-0.02369	-0.02369	$-4.221 \cdot 10^{-8}$	0.591	0.591	0
sm	0	0	0	0.008332	0.008332	$2.4 \cdot 10^{-8}$

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

	interference			square			
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	1 - mod2/mod1	
sm	0	0	0	0.01352	0.01352	0	

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

		interfer	rence	square			
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	
cpQM	2.071	2.071	0	1.416	1.416	0	
cpt	-2.214	-2.214	0	1.416	1.416	0	
ctW	$4.499 \cdot 10^{-8}$	0	1	$1.164 \cdot 10^{-12}$	0	1	
ctWI	$-1.466 \cdot 10^{-10}$	0	1	$1.521 \cdot 10^{-12}$	0	1	
ctZ	-0.04013	-0.04013	$6.23 \cdot 10^{-7}$	3.642	3.642	$1.071 \cdot 10^{-6}$	
ctZI	0.0002252	0.0002252	$5.328 \cdot 10^{-7}$	3.593	3.593	$1.085 \cdot 10^{-6}$	
ctp	0.003576	0.003576	$-1.957 \cdot 10^{-7}$	0.06905	0.06905	0	
\mathtt{ctpI}	$9.347 \cdot 10^{-5}$	$9.347 \cdot 10^{-5}$	$9.629 \cdot 10^{-8}$	0.06889	0.06889	0	
sm	0	0	0	2.821	2.821	$3.545 \cdot 10^{-8}$	

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

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

		interfer	rence		square			
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1 - \mathtt{mod}2/\mathtt{mod}1$		
cbW	$-3.622 \cdot 10^{-7}$	$-3.622 \cdot 10^{-7}$	0	$8.987 \cdot 10^{-6}$	$8.987 \cdot 10^{-6}$	$1.113 \cdot 10^{-8}$		
cbWI	$-3.357 \cdot 10^{-8}$	$-3.357 \cdot 10^{-8}$	$2.979 \cdot 10^{-8}$	$6.05 \cdot 10^{-7}$	$6.05 \cdot 10^{-7}$	$1.653 \cdot 10^{-8}$		
cpQ3	$-3.208 \cdot 10^{-5}$	$-3.208 \cdot 10^{-5}$	$3.117 \cdot 10^{-8}$	$4.127 \cdot 10^{-6}$	$4.127 \cdot 10^{-6}$	0		
срQМ	$6.858 \cdot 10^{-6}$	$6.858 \cdot 10^{-6}$	$2.916 \cdot 10^{-8}$	$1.937 \cdot 10^{-7}$	$1.937 \cdot 10^{-7}$	0		
cpb	$-4.701 \cdot 10^{-8}$	$-4.701 \cdot 10^{-8}$	$2.127 \cdot 10^{-8}$	$3.024 \cdot 10^{-8}$	$3.024 \cdot 10^{-8}$	$3.307 \cdot 10^{-8}$		
cptb	$-4.649 \cdot 10^{-7}$	$-4.649 \cdot 10^{-7}$	$2.151 \cdot 10^{-8}$	$6.757 \cdot 10^{-7}$	$6.757 \cdot 10^{-7}$	0		
cptbI	$6.72 \cdot 10^{-7}$	$6.72 \cdot 10^{-7}$	0	$2.091 \cdot 10^{-6}$	$2.091 \cdot 10^{-6}$	0		
ctW	$-1.087 \cdot 10^{-6}$	$-1.087 \cdot 10^{-6}$	0	$1.394 \cdot 10^{-6}$	$1.394 \cdot 10^{-6}$	0		
ctWI	$9.743 \cdot 10^{-6}$	$9.743 \cdot 10^{-6}$	$2.053 \cdot 10^{-8}$	$9.56 \cdot 10^{-6}$	$9.56 \cdot 10^{-6}$	$1.046 \cdot 10^{-8}$		
ctp	$-1.225 \cdot 10^{-7}$	$-1.225 \cdot 10^{-7}$	0	$2.749 \cdot 10^{-8}$	$2.749 \cdot 10^{-8}$	0		
ctpI	$1.787 \cdot 10^{-6}$	$1.787 \cdot 10^{-6}$	0	$5.46 \cdot 10^{-8}$	$5.46 \cdot 10^{-8}$	$1.831 \cdot 10^{-8}$		
sm	0	0	0	$3.854 \cdot 10^{-5}$	$3.854 \cdot 10^{-5}$	$2.594 \cdot 10^{-8}$		

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	$1-{\tt mod2/mod1}$	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	
cbW	$1.595 \cdot 10^{-7}$	$1.595 \cdot 10^{-7}$	0	$1.404 \cdot 10^{-8}$	$1.404 \cdot 10^{-8}$	0	
cbWI	$2.281 \cdot 10^{-8}$	$2.281 \cdot 10^{-8}$	$4.384 \cdot 10^{-8}$	$2.633 \cdot 10^{-8}$	$2.633 \cdot 10^{-8}$	0	
cpQ3	$5.711 \cdot 10^{-6}$	$5.711 \cdot 10^{-6}$	$1.751 \cdot 10^{-8}$	$9.948 \cdot 10^{-6}$	$9.948 \cdot 10^{-6}$	$1.005 \cdot 10^{-8}$	
cpQM	$-1.406 \cdot 10^{-7}$	$-1.406 \cdot 10^{-7}$	0	$2.486 \cdot 10^{-6}$	$2.486 \cdot 10^{-6}$	0	
cpt	$-1.592 \cdot 10^{-6}$	$-1.592 \cdot 10^{-6}$	0	$2.486 \cdot 10^{-6}$	$2.486 \cdot 10^{-6}$	0	
cptb	$-1.889 \cdot 10^{-7}$	$-1.889 \cdot 10^{-7}$	$5.295 \cdot 10^{-8}$	$4.296 \cdot 10^{-9}$	$4.296 \cdot 10^{-9}$	0	
cptbI	$-7.514 \cdot 10^{-9}$	$-7.514 \cdot 10^{-9}$	0	$1.236 \cdot 10^{-9}$	$1.236 \cdot 10^{-9}$	0	
ctW	$-8.096 \cdot 10^{-6}$	$-8.096 \cdot 10^{-6}$	0	$4.405 \cdot 10^{-5}$	$4.405 \cdot 10^{-5}$	$-2.27 \cdot 10^{-8}$	
ctWI	$2.418 \cdot 10^{-6}$	$2.418 \cdot 10^{-6}$	0	$3.852 \cdot 10^{-5}$	$3.852 \cdot 10^{-5}$	0	
ctZ	$5.042 \cdot 10^{-7}$	$5.042 \cdot 10^{-7}$	$5.157 \cdot 10^{-7}$	$2.572 \cdot 10^{-7}$	$2.572 \cdot 10^{-7}$	$1.089 \cdot 10^{-6}$	
ctZI	$3.697 \cdot 10^{-8}$	$3.697 \cdot 10^{-8}$	$5.409 \cdot 10^{-7}$	$1.523 \cdot 10^{-7}$	$1.523 \cdot 10^{-7}$	$1.116 \cdot 10^{-6}$	
ctp	$3.188 \cdot 10^{-7}$	$3.188 \cdot 10^{-7}$	0	$4.1 \cdot 10^{-7}$	$4.1\cdot 10^{-7}$	0	
ctpI	$2.884 \cdot 10^{-7}$	$2.884 \cdot 10^{-7}$	0	$6.964 \cdot 10^{-7}$	$6.964 \cdot 10^{-7}$	$-1.436 \cdot 10^{-8}$	
sm	0	0	0	$3.823 \cdot 10^{-5}$	$3.823 \cdot 10^{-5}$	$5.232 \cdot 10^{-8}$	

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

			interference		square		
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	1 - mod2/mod1	
\mathtt{sm}	0	0	0	64.68	64.68	$4.638 \cdot 10^{-8}$	

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

		interference			square		
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1 - \mathtt{mod}2/\mathtt{mod}1$	
\mathtt{sm}	0	0	0	1.27	1.27	$-7.871 \cdot 10^{-8}$	

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	$3.061 \cdot 10^{-7}$	$3.061 \cdot 10^{-7}$	$-9.801 \cdot 10^{-8}$	

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

	interference			square		
	mod1	mod2	$1-{\tt mod2/mod1}$	mod1	mod2	$1-{\tt mod2/mod1}$
cQbqu1	0	0	0	0.25	0.25	$3.08 \cdot 10^{-6}$
cQbqu1I	0	0	0	0.25	0.25	$3.04 \cdot 10^{-6}$
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	0.03633	0.03633	0	0.1717	0.1717	0
cQq83	$5.168 \cdot 10^{-19}$	$5.168 \cdot 10^{-19}$	0	0.03816	0.03816	0
cQtqd1	0	0	0	0.25	0.25	$3.04 \cdot 10^{-6}$
cQtqd1I	0	0	0	0.25	0.25	$3.08 \cdot 10^{-6}$
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	$3.12 \cdot 10^{-6}$
cbQqd1I	0	0	0	0.25	0.25	$3.12 \cdot 10^{-6}$
cbQqd8	0	0	0	0.05556	0.05556	$2.934 \cdot 10^{-6}$

cbQqd8I	0	0	0	$0.05556 0.05556 2.916 \cdot 10$	$)^{-6}$
cbW	0.0003111	0.0003111	$3.214 \cdot 10^{-8}$	0.01141 0.01141 0	
cbWI	$-3.09 \cdot 10^{-19}$	$-5.262 \cdot 10^{-20}$	0.8297	$0.009113 0.009113 1.097 \cdot 10^{-1}$	$)^{-8}$
cbtud1	0	0	0	$0.4674 \qquad 0.4674 \qquad 6.097 \cdot 10^{-1}$	$)^{-6}$
cbtud1I	0	0	0	$0.04294 0.04294 6.079 \cdot 10^{-1}$	$)^{-6}$
cbtud8	0	0	0	$0.06723 \qquad 0.06723 \qquad 5$	$.92 \cdot 10^{-6}$
cbtud8I	0	0	0	$0.1039 \qquad 0.1039 \qquad 5.$	$872 \cdot 10^{-6}$
cpQ3	0.002537	0.002537	$3.942 \cdot 10^{-8}$	$7.689 \cdot 10^{-5} 7.689 \cdot 10^{-5} 3.$	$902 \cdot 10^{-8}$
cptb	$-2.193 \cdot 10^{-6}$	$-2.193 \cdot 10^{-6}$	$4.559 \cdot 10^{-8}$	$2.68 \cdot 10^{-5}$ $2.68 \cdot 10^{-5}$ 3.	$732 \cdot 10^{-8}$
cptbI	$-2.869 \cdot 10^{-21}$	$-2.634 \cdot 10^{-21}$	0.08173	$4.504 \cdot 10^{-6} 4.504 \cdot 10^{-6} 4.$	$441 \cdot 10^{-8}$
ctQqu1	0	0	0	0.25 0.25 3	$.08 \cdot 10^{-6}$
ctQqu1I	0	0	0	0.25 0.25 3	$.12 \cdot 10^{-6}$
ctQqu8	0	0	0	$0.05556 \qquad 0.05556 \qquad 2.$	$934 \cdot 10^{-6}$
ctQqu8I	0	0	0	$0.05556 \qquad 0.05556 \qquad 2.$	$916 \cdot 10^{-6}$
ctW	0.003236	0.003236	$3.091 \cdot 10^{-8}$	$0.008184 \qquad 0.008184 \qquad 2.$	$444 \cdot 10^{-8}$
ctWI	$4.038 \cdot 10^{-18}$	$5.603 \cdot 10^{-18}$	-0.3874	$0.01196 \qquad 0.01196$	0
sm	0	0	0	$0.001922 \qquad 0.001922$	0

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

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

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

			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	$9.864 \cdot 10^{-6}$	$9.864 \cdot 10^{-6}$	0

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

			interference		squa	re
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$
sm	0	0	0	0.007074	0.007074	0

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

		interfer	rence	square			
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	
cbW	$6.124 \cdot 10^{-6}$	$6.124 \cdot 10^{-6}$	$-8.165 \cdot 10^{-8}$	0.0006187	0.0006187	$-8.082 \cdot 10^{-8}$	
cbWI	$2.993 \cdot 10^{-22}$	$-4.261 \cdot 10^{-22}$	2.424	0.0006185	0.0006185	$-8.084 \cdot 10^{-8}$	
sm	0	0	0	0.0009875	0.0009875	$-7.089 \cdot 10^{-8}$	

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

	interference				square			
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1 - \mathtt{mod}2/\mathtt{mod}1$		
cbW	$3.976 \cdot 10^{-5}$	$3.976 \cdot 10^{-5}$	0	0.002136	0.002136	0		
cbWI	$4.552 \cdot 10^{-16}$	$4.552 \cdot 10^{-16}$	$4.833 \cdot 10^{-6}$	0.0007288	0.0007288	$1.372 \cdot 10^{-8}$		
cpQ3	0.0001574	0.0001574	0	$1.163 \cdot 10^{-5}$	$1.163 \cdot 10^{-5}$	0		
срQМ	$7.871 \cdot 10^{-5}$	$7.871 \cdot 10^{-5}$	$3.811 \cdot 10^{-8}$	$2.908 \cdot 10^{-6}$	$2.908 \cdot 10^{-6}$	0		

cpb	$-9.131 \cdot 10^{-5}$	$-9.131 \cdot 10^{-5}$	$-9.857 \cdot 10^{-8}$	$4.263 \cdot 10^{-6}$	$4.263 \cdot 10^{-6}$	$-9.384 \cdot 10^{-8}$
sm	0	0	0	0.002972	0.002972	$3.365 \cdot 10^{-8}$

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

		interfere	ence	square			
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	$\verb mod1 \qquad \verb mod2 \qquad 1-\verb mod2/mod1 $			
cbW	$7.349 \cdot 10^{-5}$	$7.349 \cdot 10^{-5}$	$1.361 \cdot 10^{-8}$	$0.0007733 0.0007733 1.293 \cdot 10^{-8}$			
cbWI	$-4.734 \cdot 10^{-20}$	$-2.342 \cdot 10^{-22}$	0.9951	$0.002014 \qquad 0.002014 \qquad 0$			
cpQ3	0.001059	0.001059	0	$7.604 \cdot 10^{-5}$ $7.604 \cdot 10^{-5}$ 0			
cpQM	0.0005294	0.0005294	0	$1.901 \cdot 10^{-5} 1.901 \cdot 10^{-5}$			
cpb	$-1.648 \cdot 10^{-5}$	$-1.648 \cdot 10^{-5}$	$-6.069 \cdot 10^{-8}$	$3.208 \cdot 10^{-6} 3.208 \cdot 10^{-6} 0$			
sm	0	0	0	$0.001825 \qquad 0.001825 \qquad 5.48 \cdot 10^{-8}$			

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

		interfer	ence		square			
	mod1	mod2	$1-{\tt mod2/mod1}$	mod1	mod2	$1-{\tt mod2/mod1}$		
cQQ1	-0.01592	-0.01592	0	0.1075	0.1075	0		
cQQ8	-0.001313	-0.001313	0	0.005073	0.005073	0		
cQb1	0.009863	0.009863	$-6.083 \cdot 10^{-8}$	3.511	3.511	0		
cQb8	-0.806	-0.806	0	0.7284	0.7284	0		
cbW	0.002621	0.002621	0	0.01788	0.01788	0		
cbWI	$-5.06 \cdot 10^{-18}$	$-1.644 \cdot 10^{-18}$	0.6752	0.02768	0.02768	$3.613 \cdot 10^{-8}$		
cpQ3	-0.001374	-0.001374	$7.279 \cdot 10^{-8}$	$4.899 \cdot 10^{-5}$	$4.899 \cdot 10^{-5}$	$-6.123 \cdot 10^{-8}$		
cpQM	-0.0006869	-0.0006869	$2.911 \cdot 10^{-8}$	$1.225 \cdot 10^{-5}$	$1.225 \cdot 10^{-5}$	0		
cpb	$1.659 \cdot 10^{-5}$	$1.659 \cdot 10^{-5}$	$6.029 \cdot 10^{-8}$	0.000216	0.000216	0		
sm	0	0	0	2.267	2.267	0		

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

		interfere	ence	square
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	$\verb mod1 \qquad \verb mod2 \qquad 1-\verb mod2/mod1 $
cQd1	-0.0005761	-0.0005761	$-5.208 \cdot 10^{-8}$	$0.03964 \qquad 0.03964 \qquad 0$
cQd8	0.3778	0.3778	0	$0.1275 \qquad 0.1275 \qquad 0$
cQq11	0.01288	0.01288	0	$0.05883 \qquad 0.05883 \qquad 0$
cQq13	0.1405	0.1405	0	$0.6415 \qquad 0.6415 \qquad 0$
cQq81	0.4224	0.4224	0	0.1426 0.1426 0
cQq83	0.4224	0.4224	0	$0.1426 \qquad 0.1426 \qquad 0$
cbQqd1	-0.01371	0	1	$0.5 0.5 3.1 \cdot 10^{-6}$
cbQqd1I	$-1.138 \cdot 10^{-19}$	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	$-4.05 \cdot 10^{-21}$	0	1	0.1111 0.1111 $2.97 \cdot 10^{-6}$
cbW	$4.499 \cdot 10^{-5}$	$4.499 \cdot 10^{-5}$	$4.446 \cdot 10^{-8}$	$0.00475 \qquad 0.00475 \qquad 2.105 \cdot 10^{-8}$
cbWI	$7.186 \cdot 10^{-18}$	$7.285 \cdot 10^{-18}$	-0.0137	$0.004122 \qquad 0.004122 \qquad 2.426 \cdot 10^{-8}$
cpQ3	0.0002042	0.0002042	0	$1.571 \cdot 10^{-5} 1.571 \cdot 10^{-5}$
\mathtt{cpQM}	0.0001021	0.0001021	0	$3.927 \cdot 10^{-6}$ $3.927 \cdot 10^{-6}$ $-2.547 \cdot 10^{-8}$
cpb	$-2.797 \cdot 10^{-5}$	$-2.797 \cdot 10^{-5}$	$-7.15 \cdot 10^{-8}$	$3.081 \cdot 10^{-6} 3.081 \cdot 10^{-6}$
sm	0	0	0	$0.6724 \qquad 0.6724 \qquad 0$

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

	interference			square			
	mod1	mod2	$1-{\tt mod2/mod1}$	mod1	mod2	$1-{\tt mod2/mod1}$	
cQQ1	-0.01821	-0.01821	0	0.02019	0.02019	0	
cQQ8	0.006437	0.006437	0	0.0002831	0.0002831	0	
cQb1	-0.01496	-0.01496	0	0.9294	0.9294	0	
cQb8	0.5036	0.5036	0	0.1635	0.1635	0	

cQt1	-0.3049	-0.3049	$3.28 \cdot 10^{-8}$	0.9294	0.9294	0
cQt8	0.1147	0.1147	0	0.1635	0.1635	0
cQtQb1	-0.003584	-0.003584	0	0.8443	0.8443	0
cQtQb1I	$-3.881 \cdot 10^{-19}$	$7.981 \cdot 10^{-21}$	1.021	1.114	1.114	0
cQtQb8	0.001592	0.001592	0	0.1249	0.1249	0
cQtQb8I	$-7.918 \cdot 10^{-19}$	$-8.108 \cdot 10^{-19}$	-0.02403	0.1249	0.1249	0
cbW	0.002697	0.002697	0	0.004085	0.004085	0
cbWI	$7.28 \cdot 10^{-18}$	$-2.575 \cdot 10^{-18}$	1.354	0.0161	0.0161	0
cpQ3	-0.02009	-0.02009	0	0.003616	0.003616	0
\mathtt{cpQM}	-0.0007899	-0.0007899	$-5.064 \cdot 10^{-8}$	$8.135 \cdot 10^{-6}$	$8.135 \cdot 10^{-6}$	$-1.106 \cdot 10^{-7}$
cpb	$5.197 \cdot 10^{-5}$	$5.197 \cdot 10^{-5}$	$-3.849 \cdot 10^{-8}$	$2.441 \cdot 10^{-5}$	$2.441 \cdot 10^{-5}$	$4.097 \cdot 10^{-8}$
cpt	-0.002143	-0.002143	$4.666 \cdot 10^{-8}$	$4.722 \cdot 10^{-5}$	$4.722 \cdot 10^{-5}$	$2.118 \cdot 10^{-8}$
cptb	-0.0004665	-0.0004665	0	0.0005903	0.0005903	$1.694 \cdot 10^{-8}$
cptbI	$-1.46 \cdot 10^{-19}$	$4.537 \cdot 10^{-21}$	1.031	0.000558	0.000558	$1.792 \cdot 10^{-8}$
ctG	0.1261	0.1261	0	0.01022	0.01022	0
ctGI	$-1.329 \cdot 10^{-18}$	$-1.01 \cdot 10^{-18}$	0.2405	0.0007701	0.0007701	0
ctW	0.024	0.024	$-1.25 \cdot 10^{-7}$	0.01454	0.01454	$2.063 \cdot 10^{-7}$
ctWI	$1.28 \cdot 10^{-17}$	$-9.782 \cdot 10^{-17}$	8.64	0.0005489	0.0005489	$1.639 \cdot 10^{-7}$
ctZ	0.004332	0.004332	$5.31 \cdot 10^{-7}$	0.001196	0.001196	$1.087 \cdot 10^{-6}$
ctZI	$-2.178 \cdot 10^{-20}$	$1.672 \cdot 10^{-20}$	1.768	$8.984 \cdot 10^{-5}$	$8.983 \cdot 10^{-5}$	$1.069 \cdot 10^{-6}$
ctb1	-0.0005001	-0.0005001	$-5.999 \cdot 10^{-8}$	0.001274	0.001274	0
ctb8	0.03277	0.03277	0	0.004486	0.004486	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	$1.45 \cdot 10^{-21}$	$5.294 \cdot 10^{-22}$	0.6349	$6.906 \cdot 10^{-7}$	$6.906 \cdot 10^{-7}$	0
sm	0	0	0	0.4485	0.4485	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	$3.855 \cdot 10^{-19}$	0	1	0.5	0.5	$3.06 \cdot 10^{-6}$
cQbqu8	$-3.346 \cdot 10^{-19}$	0	1	0.1111	0.1111	$3.06 \cdot 10^{-6}$
cQbqu8I	$5.876 \cdot 10^{-20}$	0	1	0.1111	0.1111	$3.06 \cdot 10^{-6}$
cQq11	-0.1366	-0.1366	$7.321 \cdot 10^{-8}$	0.6682	0.6682	0
cQq13	0.002214	0.002214	0	0.01083	0.01083	0
cQq81	0.007145	0.007145	0	0.002406	0.002406	0
cQq83	-0.007145	-0.007145	0	0.002406	0.002406	0
cQu1	0.02336	0.02336	$-4.281 \cdot 10^{-8}$	0.8027	0.8027	0
cQu8	0.5286	0.5286	0	0.1784	0.1784	0
cbW	0.000181	0.000181	$5.526 \cdot 10^{-8}$	0.003848	0.003848	0
cbWI	$4.844 \cdot 10^{-18}$	$4.875 \cdot 10^{-18}$	-0.006333	0.002403	0.002403	0
cpQ3	0.001582	0.001582	$6.321 \cdot 10^{-8}$	$8.997 \cdot 10^{-5}$	$8.997 \cdot 10^{-5}$	$4.446 \cdot 10^{-8}$
\mathtt{cpQM}	0.000791	0.000791	$5.057 \cdot 10^{-8}$	$2.249 \cdot 10^{-5}$	$2.249 \cdot 10^{-5}$	$4.446 \cdot 10^{-8}$
cpb	$6.328 \cdot 10^{-5}$	$6.328 \cdot 10^{-5}$	$-3.161 \cdot 10^{-8}$	$2.682 \cdot 10^{-5}$	$2.682 \cdot 10^{-5}$	$7.457 \cdot 10^{-8}$
sm	0	0	0	0.7941	0.7941	0

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

	interference				square			
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$		
cbW	$2.54 \cdot 10^{-5}$	$2.54 \cdot 10^{-5}$	$3.937 \cdot 10^{-8}$	0.002487	0.002487	0		
cbWI	$-3.486 \cdot 10^{-20}$	$-2.515 \cdot 10^{-20}$	0.2786	0.004411	0.004411	$2.267 \cdot 10^{-8}$		
cpQ3	$4.372 \cdot 10^{-5}$	$4.372 \cdot 10^{-5}$	$2.287 \cdot 10^{-8}$	$1.325 \cdot 10^{-6}$	$1.325 \cdot 10^{-6}$	0		
cptb	$-7.312 \cdot 10^{-7}$	$-7.312 \cdot 10^{-7}$	$4.103 \cdot 10^{-8}$	$3.236 \cdot 10^{-6}$	$3.236 \cdot 10^{-6}$	$3.09 \cdot 10^{-8}$		
cptbI	$-2.689 \cdot 10^{-22}$	$-9.117 \cdot 10^{-22}$	-2.391	$1.011 \cdot 10^{-5}$	$1.011 \cdot 10^{-5}$	$9.891 \cdot 10^{-8}$		
ctW	0.002876	0.002876	$3.477 \cdot 10^{-8}$	0.004433	0.004433	0		
ctWI	$-2.966 \cdot 10^{-19}$	$6.486 \cdot 10^{-19}$	3.187	0.002124	0.002124	0		

 ${\tt sm} \qquad \qquad 0 \qquad \qquad 0$

 $0.004172 \qquad 0.004172 \qquad 2.397 \cdot 10^{-8}$

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

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

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

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

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

interference square $\verb|mod1| \verb|mod2| 1 - \verb|mod2| mod1|$ mod1 $mod2 \quad 1 - mod2/mod1$ 0 0 0 $0.4908 \quad 0.4908$ 0 sm**1.58** $e^+\nu_{\mu} \to e^+\nu_{\mu}$ interference square $mod1 \quad mod2 \quad 1 - mod2/mod1$ mod1mod2 1 - mod2/mod10 $0.007448 \quad 0.007448 \quad -8.056 \cdot 10^{-8}$ 0 0 sm**1.59** $e^+\nu_e \to \mu^+\nu_\mu$ interference square $mod1 \quad mod2 \quad 1 - mod2/mod1$ mod2 1 - mod2/mod1mod1 $4.544 \cdot 10^{-8}$ 0 $0.002201 \quad 0.002201$ 0 0 sm**1.60** $e^+\nu_e \to e^+\nu_e$ interference square $mod1 \quad mod2 \quad 1 - mod2/mod1$ mod1mod2 1 - mod2/mod1 $0.004347 \quad 0.004347 \quad -1.15 \cdot 10^{-7}$ 0 0 0 sm**1.61** $e^+\tau^- \to e^+\tau^$ interference square $mod1 \quad mod2 \quad 1 - mod2/mod1$ $mod2 \quad 1 - mod2/mod1$ mod10 $0.2938 \quad -6.806 \cdot 10^{-8}$ 0 0 0.2938

sm

1.62 $e^+e^- \to \mu^+\mu^-$

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

1.64 $gg \rightarrow gg$

1.65 $gg \rightarrow ggg$

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

ctG	1.028	1.028	0	0.1334	0.1334	0
ctGI	$-3.354 \cdot 10^{-18}$	$-3.354 \cdot 10^{-18}$	0	0.1076	0.1076	0
\mathtt{sm}	0	0	0	0.6729	0.6729	0

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

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

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

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

interference square mod2mod1mod21 - mod2/mod1mod11 - mod2/mod1 $-2.371\cdot10^{-6}$ $-2.371 \cdot 10^{-6}$ $2.53 \cdot 10^{-7}$ $4.182 \cdot 10^{-7}$ $4.182 \cdot 10^{-7}$ cpQM 0 $-5.629 \cdot 10^{-8}$ $1.881 \cdot 10^{-5}$ $1.881 \cdot 10^{-5}$ 0.00017770.0001777cpt

ctW	$-1.327 \cdot 10^{-9}$	0	1	$9.75 \cdot 10^{-16}$	0	1
ctWI	$6.983 \cdot 10^{-26}$	0	1	$4.301 \cdot 10^{-16}$	0	1
ctZ	-0.0007723	-0.0007723	$4.403 \cdot 10^{-7}$	0.001683	0.001683	$1.07 \cdot 10^{-6}$
ctZI	$-1.073 \cdot 10^{-19}$	$-3.738 \cdot 10^{-19}$	-2.483	0.001016	0.001016	$1.083 \cdot 10^{-6}$
sm	0	0	0	0.001956	0.001956	$5.112 \cdot 10^{-8}$

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

		interfere		square			
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	1 - mod2/mod1	
cpQM	$-4.659 \cdot 10^{-5}$	$-4.659 \cdot 10^{-5}$	$1.288 \cdot 10^{-7}$	$3.098 \cdot 10^{-6}$	$3.098 \cdot 10^{-6}$	$-3.228 \cdot 10^{-8}$	
cpt	$-7.805 \cdot 10^{-6}$	$-7.805 \cdot 10^{-6}$	$6.534 \cdot 10^{-7}$	$3.328 \cdot 10^{-6}$	$3.328 \cdot 10^{-6}$	$3.004 \cdot 10^{-8}$	
ctW	0.01035	0.01035	$5.798 \cdot 10^{-7}$	0.005794	0.005794	$1.139 \cdot 10^{-6}$	
ctWI	$-2.798 \cdot 10^{-19}$	$-3.29 \cdot 10^{-19}$	-0.1759	0.01564	0.01564	$1.151 \cdot 10^{-6}$	
ctZ	-0.00522	-0.00522	$4.981 \cdot 10^{-7}$	0.01605	0.01605	$1.059 \cdot 10^{-6}$	
ctZI	$2.288 \cdot 10^{-19}$	$2.565 \cdot 10^{-19}$	-0.1214	0.01277	0.01277	$1.018 \cdot 10^{-6}$	
ctp	$-1.013 \cdot 10^{-6}$	$-1.013 \cdot 10^{-6}$	0	$3.101 \cdot 10^{-8}$	$3.101 \cdot 10^{-8}$	0	
ctpI	$-3.906 \cdot 10^{-25}$	$-3.182 \cdot 10^{-24}$	-7.147	$3.49 \cdot 10^{-8}$	$3.49 \cdot 10^{-8}$	0	
sm	0	0	0	0.00672	0.00672	$-1.488 \cdot 10^{-8}$	

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

		interfe	erence	square		
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$
cQq11	0.04969	0.04969	0	0.2237	0.2237	0
cQq13	0.04248	0.04248	$2.354 \cdot 10^{-8}$	0.1907	0.1907	0
cQq81	0.1451	0.1451	0	0.04238	0.04238	0
cQq83	0.1451	0.1451	0	0.04238	0.04238	0
cQu1	0.01322	0.01322	$-7.564 \cdot 10^{-8}$	0.3515	0.3515	0

cQu8	0.2509	0.2509	0	0.07811	0.07811	0
cpQM	-0.0002553	-0.0002553	$7.833 \cdot 10^{-8}$	$9.568 \cdot 10^{-6}$	$9.568 \cdot 10^{-6}$	$1.045 \cdot 10^{-8}$
cpt	$-1.846 \cdot 10^{-5}$	$-1.846 \cdot 10^{-5}$	$4.334 \cdot 10^{-7}$	$1.185 \cdot 10^{-5}$	$1.185 \cdot 10^{-5}$	$8.439 \cdot 10^{-8}$
ctG	0.1977	0.1977	0	0.04676	0.04676	0
ctGI	$2.941 \cdot 10^{-24}$	$-4.412 \cdot 10^{-24}$	2.5	0.03731	0.03731	0
ctQqu1	-0.4725	0	1	0.5004	0.5004	$3.097 \cdot 10^{-6}$
ctQqu1I	$1.925 \cdot 10^{-17}$	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	$-8.565 \cdot 10^{-18}$	0	1	0.1112	0.1112	$2.967 \cdot 10^{-6}$
ctW	0.00924	0.00924	$3.788 \cdot 10^{-7}$	0.02614	0.02614	$9.562 \cdot 10^{-7}$
ctWI	$1.156 \cdot 10^{-10}$	$1.156 \cdot 10^{-10}$	$6.057 \cdot 10^{-7}$	0.02118	0.02118	$9.444 \cdot 10^{-7}$
ctZ	-0.005852	-0.005852	$4.955 \cdot 10^{-7}$	0.01843	0.01843	$1.085 \cdot 10^{-6}$
ctZI	$-1.012 \cdot 10^{-10}$	$-1.012 \cdot 10^{-10}$	$6.919 \cdot 10^{-7}$	0.01471	0.01471	$1.088 \cdot 10^{-6}$
ctq1	0.0163	0.0163	0	0.3515	0.3515	0
ctq8	0.636	0.636	0	0.208	0.208	0
ctu1	0.02637	0.02637	$-3.792 \cdot 10^{-8}$	0.2237	0.2237	0
ctu8	0.1451	0.1451	0	0.04238	0.04238	0
sm	0	0	0	0.5899	0.5899	0

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

		interfer	rence		square			
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$		
cQd1	-0.002078	-0.002078	$-4.812 \cdot 10^{-8}$	0.0278	0.0278	0		
cQd8	0.1343	0.1343	0	0.03876	0.03876	0		
cQq11	-0.07569	-0.07569	$2.642 \cdot 10^{-8}$	0.3745	0.3745	0		
cQq13	0.1513	0.1513	0	0.7445	0.7445	0		
cQq81	0.5097	0.5097	0	0.1655	0.1655	0		
cQq83	-0.5097	-0.5097	0	0.1655	0.1655	0		

cQtqd1	-0.4725	0	1	0.5004	0.5004	$3.037 \cdot 10^{-6}$
cQtqd1I	$2.544 \cdot 10^{-17}$	0	1	0.5004	0.5004	$3.057 \cdot 10^{-6}$
cQtqd8	$-2.891 \cdot 10^{-18}$	0	1	0.1112	0.1112	$3.057 \cdot 10^{-6}$
cQtqd8I	$8.535 \cdot 10^{-18}$	0	1	0.1112	0.1112	$3.057 \cdot 10^{-6}$
cpQM	-0.0005304	-0.0005304	$1.885 \cdot 10^{-8}$	$1.906 \cdot 10^{-5}$	$1.906 \cdot 10^{-5}$	0
cpt	$2.159 \cdot 10^{-5}$	$2.159 \cdot 10^{-5}$	$-2.779 \cdot 10^{-7}$	$9.379 \cdot 10^{-6}$	$9.379 \cdot 10^{-6}$	$1.066 \cdot 10^{-8}$
ctG	0.1977	0.1977	0	0.04553	0.04553	0
ctGI	$-1.019 \cdot 10^{-31}$	$5.882 \cdot 10^{-24}$	$5.775\cdot 10^7$	0.03609	0.03609	0
ctW	0.005777	0.005777	$-1.212 \cdot 10^{-7}$	0.003929	0.003929	$3.817 \cdot 10^{-7}$
ctWI	$1.183 \cdot 10^{-15}$	$1.181 \cdot 10^{-15}$	0.001711	0.00512	0.00512	$3.906 \cdot 10^{-7}$
ctZ	0.000497	0.000497	$7.445 \cdot 10^{-7}$	0.005331	0.005331	$1.05 \cdot 10^{-6}$
ctZI	$-1.043 \cdot 10^{-15}$	$-1.045 \cdot 10^{-15}$	-0.001887	0.004225	0.004225	$1.065 \cdot 10^{-6}$
ctd1	-0.04292	-0.04292	$-4.659 \cdot 10^{-8}$	0.7445	0.7445	0
ctd8	0.5097	0.5097	0	0.1655	0.1655	0
ctq1	-0.005239	-0.005239	$1.909 \cdot 10^{-8}$	0.0278	0.0278	0
ctq8	0.4702	0.4702	0	0.1521	0.1521	0
sm	0	0	0	0.8195	0.8195	0

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

	interference			square			
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	
cQd1	-0.003288	-0.003288	$-3.041 \cdot 10^{-8}$	0.1142	0.1142	0	
cQd8	0.1079	0.1079	0	0.02983	0.02983	0	
cQq11	-0.08905	-0.08905	$2.246 \cdot 10^{-8}$	0.4398	0.4398	0	
cQq13	0.09692	0.09692	$2.064 \cdot 10^{-8}$	0.4783	0.4783	0	
cQq81	0.3344	0.3344	0	0.1063	0.1063	0	
cQq83	-0.3344	-0.3344	0	0.1063	0.1063	0	
cQtqd1	-0.4725	0	1	0.5004	0.5004	$3.057 \cdot 10^{-6}$	

cQtqd1I	$-1.927 \cdot 10^{-19}$	0	1	0.5004	0.5004	$3.057 \cdot 10^{-6}$
cQtqd8	$-1.416 \cdot 10^{-17}$	0	1	0.1112	0.1112	$3.057 \cdot 10^{-6}$
cQtqd8I	$-1.841 \cdot 10^{-18}$	0	1	0.1112	0.1112	$3.057 \cdot 10^{-6}$
cpQM	-0.0006257	-0.0006257	$3.197 \cdot 10^{-8}$	$2.227 \cdot 10^{-5}$	$2.227 \cdot 10^{-5}$	0
cpt	$1.819 \cdot 10^{-5}$	$1.819 \cdot 10^{-5}$	$-2.749 \cdot 10^{-7}$	$7.477 \cdot 10^{-6}$	$7.477 \cdot 10^{-6}$	$1.337 \cdot 10^{-8}$
ctG	0.1977	0.1977	0	0.04352	0.04352	0
ctGI	$7.353 \cdot 10^{-25}$	$5.882 \cdot 10^{-24}$	-7	0.03408	0.03408	0
ctW	0.00455	0.00455	$-8.79 \cdot 10^{-8}$	0.005966	0.005966	$3.855 \cdot 10^{-7}$
ctWI	$5.66 \cdot 10^{-13}$	$5.66 \cdot 10^{-13}$	$7.951 \cdot 10^{-7}$	0.004835	0.004835	$3.723 \cdot 10^{-7}$
ctZ	0.0006122	0.0006122	$7.187 \cdot 10^{-7}$	0.005096	0.005096	$1.06 \cdot 10^{-6}$
ctZI	$-4.955 \cdot 10^{-13}$	$-4.955 \cdot 10^{-13}$	$8.275 \cdot 10^{-7}$	0.00399	0.00399	$1.078 \cdot 10^{-6}$
ctd1	-0.02772	-0.02772	$-7.214 \cdot 10^{-8}$	0.4783	0.4783	0
ctd8	0.3344	0.3344	0	0.1063	0.1063	0
ctq1	-0.002724	-0.002724	$1.101 \cdot 10^{-7}$	0.1142	0.1142	0
ctq8	0.3901	0.3901	0	0.1251	0.1251	0
sm	0	0	0	0.6411	0.6411	0

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

		interfere	ence	square
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	$\verb mod1 & \verb mod2 & 1-\verb mod2 \\ \verb mod1 & \\$
cQQ1	-4.55	-4.55	0	5.049 5.049 0
cQQ8	-0.9055	-0.9055	$1.104 \cdot 10^{-8}$	$0.4619 \qquad 0.4619 \qquad 0$
cQt1	-0.4206	-0.4206	$-4.755 \cdot 10^{-8}$	8.081 8.081 0
cQt8	-7.57	-7.57	0	1.679 1.679 0
cpQM	0.169	0.169	0	$0.009183 0.009183 \qquad 0$
cpt	-0.15	-0.15	0	0.00967 0.00967 0
ctG	0.2901	0.2901	0	1.107 1.107 0
ctGI	$-1.016 \cdot 10^{-16}$	$-9.09 \cdot 10^{-17}$	0.1055	1.039 1.039 0

ctW	-1.342	-1.342	$5.217 \cdot 10^{-7}$	1.213	1.213	$9.066 \cdot 10^{-7}$
ctWI	$-1.66 \cdot 10^{-16}$	$-7.173 \cdot 10^{-17}$	0.5679	0.8842	0.8842	$9.387 \cdot 10^{-7}$
ctZ	0.6349	0.6349	$5.355 \cdot 10^{-7}$	0.6387	0.6387	$1.065 \cdot 10^{-6}$
ctZI	$2.424 \cdot 10^{-16}$	$-4.243 \cdot 10^{-16}$	2.751	0.6091	0.6091	$1.067 \cdot 10^{-6}$
ctp	0.1357	0.1357	0	0.009029	0.009029	0
\mathtt{ctpI}	$-2.124 \cdot 10^{-18}$	$5.931 \cdot 10^{-18}$	3.793	0.004907	0.004907	0
ctt1	-8.334	-8.334	$-1.2 \cdot 10^{-8}$	20.2	20.2	0
sm	0	0	0	17.41	17.41	0

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

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

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

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

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

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

1.82 $zz \to W^+W^-$

1.83 $zz \rightarrow zz$

 $\mathtt{sm} \qquad 0 \qquad 0 \qquad \qquad 0 \qquad \qquad 0.08149 \quad 0.08149 \qquad \qquad 0$

2 By parameter point

2.1 cQQ1

		${ m int}\epsilon$	erference		square			
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$		
$b\bar{b} o b\bar{b}$	-0.01592	-0.01592	0	0.1075	0.1075	0		
$b\bar{b} \to t\bar{t}$	-0.01821	-0.01821	0	0.02019	0.02019	0		
$t \bar t o t \bar t$	-4.55	-4.55	0	5.049	5.049	0		

2.2 cQQ8

		inter	ference		square			
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$		
$b\bar{b} o b\bar{b}$	-0.001313	-0.001313	0	0.005073	0.005073	0		
$b\bar{b} \to t\bar{t}$	0.006437	0.006437	0	0.0002831	0.0002831	0		
$t\bar{t} \to t\bar{t}$	-0.9055	-0.9055	$1.104 \cdot 10^{-8}$	0.4619	0.4619	0		

2.3 cQb1

		ınt∈	erterence		square		
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	
$b\bar{b} \to b\bar{b}$	0.009863	0.009863	$-6.083 \cdot 10^{-8}$	3.511	3.511	0	
$b\bar{b} \to t\bar{t}$	-0.01496	-0.01496	0	0.9294	0.9294	0	

2.4 cQb8

		iı	nterference		square			
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	1 - mod2/mod1		
$b\bar{b} o b\bar{b}$	-0.806	-0.806	0	0.7284	0.7284	0		
$b\bar{b} \to t\bar{t}$	0.5036	0.5036	0	0.1635	0.1635	0		

2.5 cQbqu1

		iı	nterference		square		
	mod1	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1 - \mathtt{mod}2/\mathtt{mod}1$		
$\bar{b}t \to \bar{d}u$	0	0	0	0.25	0.25	$3.08 \cdot 10^{-6}$	
$b\bar{b} \to u\bar{u}$	-0.01371	0	1	0.5	0.5	$3.06 \cdot 10^{-6}$	

2.6 cQbqu1I

		int		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	$3.04 \cdot 10^{-6}$
$b\bar{b} \to u\bar{u}$	$3.855 \cdot 10^{-19}$	0	1	0.5	0.5	$3.06 \cdot 10^{-6}$

2.7 cQbqu8

		inte	erierence	square
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	$\verb mod1 & \verb mod2 & 1-\verb mod2 \\ \verb mod2 & \\$
$\bar{b}t \to \bar{d}u$	0	0	0	$0.05556 0.05556 3.06 \cdot 10^{-6}$
$b\bar{b} \to u\bar{u}$	$-3.346 \cdot 10^{-19}$	0	1	$0.1111 0.1111 3.06 \cdot 10^{-6}$

2.8 cQbqu8I

		int	erference		square		
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	1 - mod2/mod1	
$\bar{b}t \to \bar{d}u$	0	0	0	0.05556	0.05556	$3.06 \cdot 10^{-6}$	
$b\bar{b} \to u\bar{u}$	$5.876 \cdot 10^{-20}$	0	1	0.1111	0.1111	$3.06 \cdot 10^{-6}$	

2.9 cQd1

		interf		square			
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1 - \mathtt{mod}2/\mathtt{mod}1$	
$b\bar{b} \to d\bar{d}$	-0.0005761	-0.0005761	$-5.208 \cdot 10^{-8}$	0.03964	0.03964	0	
$t\bar{t} \to d\bar{d}$	-0.002078	-0.002078	$-4.812 \cdot 10^{-8}$	0.0278	0.0278	0	
$t\bar{t} \to s\bar{s}$	-0.003288	-0.003288	$-3.041 \cdot 10^{-8}$	0.1142	0.1142	0	

2.10 cQd8

]	interference		square			
	mod1	mod2	$1-{\tt mod2/mod1}$	mod1	mod2	$1-{\tt mod2/mod1}$		
$b\bar{b} \to d\bar{d}$	0.3778	0.3778	0	0.1275	0.1275	0		
$t\bar{t} \to d\bar{d}$	0.1343	0.1343	0	0.03876	0.03876	0		
$t\bar{t} \to s\bar{s}$	0.1079	0.1079	0	0.02983	0.02983	0		

2.11 cQq11

		int	erference		square		
	$\verb mod1 & \verb mod2 & 1-\verb mod2/mod1 $			mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	
$b\bar{b} \to d\bar{d}$	0.01288	0.01288	0	0.05883	0.05883	0	

$b\bar{b} \to u\bar{u}$	-0.1366	-0.1366	$7.321 \cdot 10^{-8}$	0.6682	0.6682	0
$t\bar{t} \to c\bar{c}$	0.04969	0.04969	0	0.2237	0.2237	0
$t\bar{t} \to d\bar{d}$	-0.07569	-0.07569	$2.642 \cdot 10^{-8}$	0.3745	0.3745	0
$t\bar{t} \to s\bar{s}$	-0.08905	-0.08905	$2.246 \cdot 10^{-8}$	0.4398	0.4398	0

$2.12 \quad \text{cQq13}$

		int	erference		square			
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$		
$\bar{b}t \to \bar{d}u$	0.03633	0.03633	0	0.1717	0.1717	0		
$b\bar{b} \to d\bar{d}$	0.1405	0.1405	0	0.6415	0.6415	0		
$b\bar{b} \to u\bar{u}$	0.002214	0.002214	0	0.01083	0.01083	0		
$t\bar{t} \to c\bar{c}$	0.04248	0.04248	$2.354 \cdot 10^{-8}$	0.1907	0.1907	0		
$t\bar{t} \to d\bar{d}$	0.1513	0.1513	0	0.7445	0.7445	0		
$t \bar t o s \bar s$	0.09692	0.09692	$2.064 \cdot 10^{-8}$	0.4783	0.4783	0		

$2.13 \quad \text{cQq81}$

		int	erference		square			
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$		
$b\bar{b} \to d\bar{d}$	0.4224	0.4224	0	0.1426	0.1426	0		
$b\bar{b} \to u\bar{u}$	0.007145	0.007145	0	0.002406	0.002406	0		
$t\bar{t} \to c\bar{c}$	0.1451	0.1451	0	0.04238	0.04238	0		
$t\bar{t} \to d\bar{d}$	0.5097	0.5097	0	0.1655	0.1655	0		
$t\bar{t} \to s\bar{s}$	0.3344	0.3344	0	0.1063	0.1063	0		

$2.14 \quad \mathrm{cQq83}$

interference

square

	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$
$\bar{b}t \to \bar{d}u$	$5.168 \cdot 10^{-19}$	$5.168 \cdot 10^{-19}$	0	0.03816	0.03816	0
$b\bar{b} \to d\bar{d}$	0.4224	0.4224	0	0.1426	0.1426	0
$b\bar{b} \to u\bar{u}$	-0.007145	-0.007145	0	0.002406	0.002406	0
$t\bar{t} \to c\bar{c}$	0.1451	0.1451	0	0.04238	0.04238	0
$t\bar{t} \to d\bar{d}$	-0.5097	-0.5097	0	0.1655	0.1655	0
$t\bar{t} \to s\bar{s}$	-0.3344	-0.3344	0	0.1063	0.1063	0

2.15 cQt1

		int	terference		square		
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1 - \mathtt{mod}2/\mathtt{mod}1$	
$b\bar{b} \to t\bar{t}$	-0.3049	-0.3049	$3.28 \cdot 10^{-8}$	0.9294	0.9294	0	
$t\bar{t} \to t\bar{t}$	-0.4206	-0.4206	$-4.755 \cdot 10^{-8}$	8.081	8.081	0	

2.16 cQt8

			interference		square			
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$		
$b\bar{b} \to t\bar{t}$	0.1147	0.1147	0	0.1635	0.1635	0		
$t\bar{t} \to t\bar{t}$	-7.57	-7.57	0	1.679	1.679	0		

2.17 cQtQb1

2.18 cQtQb1I

2.19 cQtQb8

		erference		square		
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$
$b\bar{b} \to t\bar{t}$	0.001592	0.001592	0	0.1249	0.1249	0

2.20 cQtQb8I

		interfere		square		
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$
$b\bar{b} \to t\bar{t}$	$-7.918 \cdot 10^{-19}$	$-8.108 \cdot 10^{-19}$	-0.02403	0.1249	0.1249	0

2.21 cQtqd1

		i	interference		squ	ıare
	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	$3.04 \cdot 10^{-6}$
$t\bar{t} \to d\bar{d}$	-0.4725	0	1	0.5004	0.5004	$3.037 \cdot 10^{-6}$
$t\bar{t} \to s\bar{s}$	-0.4725	0	1	0.5004	0.5004	$3.057 \cdot 10^{-6}$

$2.22 \quad cQtqd1I$

		$\mathrm{int}\epsilon$	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	$3.08 \cdot 10^{-6}$		
$t\bar{t} \to d\bar{d}$	$2.544 \cdot 10^{-17}$	0	1	0.5004	0.5004	$3.057 \cdot 10^{-6}$		
$t\bar{t} \to s\bar{s}$	$-1.927 \cdot 10^{-19}$	0	1	0.5004	0.5004	$3.057 \cdot 10^{-6}$		

$2.23 \quad \text{cQtqd8}$

		inte	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	0.05556	0.05556	$3.06 \cdot 10^{-6}$		
$t\bar{t} \to d\bar{d}$	$-2.891 \cdot 10^{-18}$	0	1	0.1112	0.1112	$3.057 \cdot 10^{-6}$		
$t\bar{t} \to s\bar{s}$	$-1.416 \cdot 10^{-17}$	0	1	0.1112	0.1112	$3.057 \cdot 10^{-6}$		

$2.24 \quad \text{cQtqd8I}$

		$\mathrm{int}\epsilon$	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	$0.05556 0.05556 3.06 \cdot 10^{-6}$
$t\bar{t} \to d\bar{d}$	$8.535 \cdot 10^{-18}$	0	1	$0.1112 0.1112 3.057 \cdot 10^{-6}$
$t\bar{t} \to s\bar{s}$	$-1.841 \cdot 10^{-18}$	0	1	$0.1112 0.1112 3.057 \cdot 10^{-6}$

2.25 cQu1

		11	iterference		square		
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	1 - mod2/mod1	
$b\bar{b} \to u\bar{u}$	0.02336	0.02336	$-4.281 \cdot 10^{-8}$	0.8027	0.8027	0	
$t\bar{t} \to c\bar{c}$	0.01322	0.01322	$-7.564 \cdot 10^{-8}$	0.3515	0.3515	0	

2.26 cQu8

			interference		square		
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	1 - mod2/mod1	
$b\bar{b} \to u\bar{u}$	0.5286	0.5286	0	0.1784	0.1784	0	
$t\bar{t} \to c\bar{c}$	0.2509	0.2509	0	0.07811	0.07811	0	

$2.27 \quad cbQqd1$

	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	0.25	0.25	$3.12 \cdot 10^{-6}$	
$b\bar{b} o d\bar{d}$	-0.01371	0	1	0.5	0.5	$3.1 \cdot 10^{-6}$	

2.28 cbQqd1I

		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	$3.12 \cdot 10^{-6}$
$b\bar{b} o d\bar{d}$	$-1.138 \cdot 10^{-19}$	0	1	0.5	0.5	$3.1 \cdot 10^{-6}$

2.29 cbQqd8

	interference			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	$0.05556 0.05556 2.934 \cdot 10^{-6}$		
$b\bar{b} \to d\bar{d}$	$6.094 \cdot 10^{-10}$	0	1	$0.1111 0.1111 2.97 \cdot 10^{-6}$		

$2.30 \quad cbQqd8I$

		int	erference	square
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	$\verb mod1 & \verb mod2 & 1-\verb mod2/mod1 $
$\bar{b}t \to \bar{d}u$	0	0	0	$0.05556 0.05556 2.916 \cdot 10^{-6}$
$b\bar{b} \to d\bar{d}$	$-4.05 \cdot 10^{-21}$	0	1	$0.1111 0.1111 2.97 \cdot 10^{-6}$

2.31 cbW

		interfer		square			
	mod1	mod2	$1-{\tt mod2/mod1}$	mod1	mod2	$1-{\tt mod2/mod1}$	
$HH o W^+ \bar t b$	$6.091 \cdot 10^{-7}$	$6.091 \cdot 10^{-7}$	$1.642 \cdot 10^{-8}$	$1.68 \cdot 10^{-5}$	$1.68 \cdot 10^{-5}$	0	
$HH o z \bar b b$	$-4.144 \cdot 10^{-7}$	$-4.144 \cdot 10^{-7}$	$2.413 \cdot 10^{-8}$	$1.61 \cdot 10^{-5}$	$1.61 \cdot 10^{-5}$	0	
$HW^+ \to \gamma t \bar{b}$	$5.904 \cdot 10^{-7}$	$5.904 \cdot 10^{-7}$	$-3.387 \cdot 10^{-8}$	$1.749 \cdot 10^{-5}$	$1.749 \cdot 10^{-5}$	$-5.717 \cdot 10^{-8}$	
$HW^- \to \bar{t}b$	0.007907	0.007907	$1.265 \cdot 10^{-8}$	2.073	2.073	0	
$H\gamma o b\bar{b}$	$-2.598 \cdot 10^{-5}$	$-2.598 \cdot 10^{-5}$	$-3.849 \cdot 10^{-8}$	0.03903	0.03903	$-5.125 \cdot 10^{-8}$	
$Hz o b\bar{b}$	0.001428	0.001428	$7.005 \cdot 10^{-8}$	1.584	1.584	0	
$W^+W^- \to Hb\bar{b}$	$-3.622 \cdot 10^{-7}$	$-3.622 \cdot 10^{-7}$	0	$8.987 \cdot 10^{-6}$	$8.987 \cdot 10^{-6}$	$1.113 \cdot 10^{-8}$	
$W^+W^- o H t \bar t$	$1.595 \cdot 10^{-7}$	$1.595 \cdot 10^{-7}$	0	$1.404 \cdot 10^{-8}$	$1.404 \cdot 10^{-8}$	0	
$\bar{b}t \to \bar{d}u$	0.0003111	0.0003111	$3.214 \cdot 10^{-8}$	0.01141	0.01141	0	
$b\bar{b} \to \gamma \gamma$	$6.124 \cdot 10^{-6}$	$6.124 \cdot 10^{-6}$	$-8.165 \cdot 10^{-8}$	0.0006187	0.0006187	$-8.082 \cdot 10^{-8}$	
$b\bar{b} \to \mu^+ \mu^-$	$3.976 \cdot 10^{-5}$	$3.976 \cdot 10^{-5}$	0	0.002136	0.002136	0	
$b\bar{b} o u_e \bar{ u}_e$	$7.349 \cdot 10^{-5}$	$7.349 \cdot 10^{-5}$	$1.361 \cdot 10^{-8}$	0.0007733	0.0007733	$1.293 \cdot 10^{-8}$	
$b\bar{b} o b\bar{b}$	0.002621	0.002621	0	0.01788	0.01788	0	
$b\bar{b} \to d\bar{d}$	$4.499 \cdot 10^{-5}$	$4.499 \cdot 10^{-5}$	$4.446 \cdot 10^{-8}$	0.00475	0.00475	$2.105 \cdot 10^{-8}$	
$b\bar{b} o t\bar{t}$	0.002697	0.002697	0	0.004085	0.004085	0	
$b\bar{b} \to u\bar{u}$	0.000181	0.000181	$5.526 \cdot 10^{-8}$	0.003848	0.003848	0	
$b\bar{t} \to e^- \bar{\nu}_e$	$2.54\cdot10^{-5}$	$2.54\cdot10^{-5}$	$3.937 \cdot 10^{-8}$	0.002487	0.002487	0	

2.32 cbWI

		interfere	ence		square			
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$		
$HH o W^+ \bar t b$	$-4.196 \cdot 10^{-8}$	$-4.196 \cdot 10^{-8}$	$-2.383 \cdot 10^{-8}$	$1.843 \cdot 10^{-5}$	$1.843 \cdot 10^{-5}$	0		
$HH \to z\bar{b}b$	$3.807 \cdot 10^{-6}$	$3.807 \cdot 10^{-6}$	$2.627 \cdot 10^{-8}$	$3.509 \cdot 10^{-6}$	$3.509 \cdot 10^{-6}$	$2.85 \cdot 10^{-8}$		
$HW^+ o \gamma t \bar{b}$	$-1.428 \cdot 10^{-8}$	$-1.428 \cdot 10^{-8}$	0	$8.729 \cdot 10^{-6}$	$8.729 \cdot 10^{-6}$	$-3.437 \cdot 10^{-8}$		
$HW^- \to \bar{t}b$	$2.672 \cdot 10^{-7}$	$2.672 \cdot 10^{-7}$	$3.742 \cdot 10^{-8}$	2.277	2.277	0		
$H\gamma o b\bar{b}$	$1.954 \cdot 10^{-22}$	$1.292 \cdot 10^{-22}$	0.3387	0.6327	0.6327	$-4.742 \cdot 10^{-8}$		
$Hz \to b\bar{b}$	$-5.261 \cdot 10^{-6}$	$-5.261 \cdot 10^{-6}$	0	0.8563	0.8563	$1.168 \cdot 10^{-8}$		
$W^+W^- o Hbar{b}$	$-3.357 \cdot 10^{-8}$	$-3.357 \cdot 10^{-8}$	$2.979 \cdot 10^{-8}$	$6.05 \cdot 10^{-7}$	$6.05\cdot10^{-7}$	$1.653 \cdot 10^{-8}$		
$W^+W^- o H t \bar t$	$2.281 \cdot 10^{-8}$	$2.281 \cdot 10^{-8}$	$4.384 \cdot 10^{-8}$	$2.633 \cdot 10^{-8}$	$2.633 \cdot 10^{-8}$	0		
$\bar{b}t \to \bar{d}u$	$-3.09 \cdot 10^{-19}$	$-5.262 \cdot 10^{-20}$	0.8297	0.009113	0.009113	$1.097 \cdot 10^{-8}$		
$b\bar{b} o \gamma \gamma$	$2.993 \cdot 10^{-22}$	$-4.261 \cdot 10^{-22}$	2.424	0.0006185	0.0006185	$-8.084 \cdot 10^{-8}$		
$b\bar{b} o \mu^+\mu^-$	$4.552 \cdot 10^{-16}$	$4.552 \cdot 10^{-16}$	$4.833 \cdot 10^{-6}$	0.0007288	0.0007288	$1.372 \cdot 10^{-8}$		
$b\bar{b} o u_e \bar{ u}_e$	$-4.734 \cdot 10^{-20}$	$-2.342 \cdot 10^{-22}$	0.9951	0.002014	0.002014	0		
$b\bar{b} o b\bar{b}$	$-5.06 \cdot 10^{-18}$	$-1.644 \cdot 10^{-18}$	0.6752	0.02768	0.02768	$3.613 \cdot 10^{-8}$		
$b\bar{b} \to d\bar{d}$	$7.186 \cdot 10^{-18}$	$7.285 \cdot 10^{-18}$	-0.0137	0.004122	0.004122	$2.426 \cdot 10^{-8}$		
$b\bar{b} o t\bar{t}$	$7.28 \cdot 10^{-18}$	$-2.575 \cdot 10^{-18}$	1.354	0.0161	0.0161	0		
$b\bar{b} \to u\bar{u}$	$4.844 \cdot 10^{-18}$	$4.875 \cdot 10^{-18}$	-0.006333	0.002403	0.002403	0		
$b\bar{t} \to e^-\bar{\nu}_e$	$-3.486 \cdot 10^{-20}$	$-2.515 \cdot 10^{-20}$	0.2786	0.004411	0.004411	$2.267 \cdot 10^{-8}$		

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	0.4674	0.4674	$6.097 \cdot 10^{-6}$		

2.34 cbtud1I

2.35 cbtud8

2.36 cbtud8I

	interference			square	square			
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	$\mathtt{mod1} \mathtt{mod2} 1-\mathtt{m}$.od2/mod1			
$\bar{b}t \to \bar{d}u$	0	0	0	0.1039 0.1039 5.87	$72 \cdot 10^{-6}$			

$2.37 \quad cpQ3$

		interfer	ence		square			
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$		
$HH \to W^+ \bar{t} b$	$-8.588 \cdot 10^{-6}$	$-8.588 \cdot 10^{-6}$	$1.164 \cdot 10^{-8}$	$3.985 \cdot 10^{-5}$	$3.985 \cdot 10^{-5}$	0		
$HH \to z\bar{b}b$	$2.901 \cdot 10^{-5}$	$2.901 \cdot 10^{-5}$	0	$7.711 \cdot 10^{-5}$	$7.711 \cdot 10^{-5}$	0		
$HW^+ o \gamma t \bar{b}$	$-1.495 \cdot 10^{-5}$	$-1.495 \cdot 10^{-5}$	0	$5.579 \cdot 10^{-6}$	$5.579 \cdot 10^{-6}$	$-3.585 \cdot 10^{-8}$		
$HW^- o \bar{t}b$	-0.8737	-0.8737	0	1.632	1.632	0		
$Hz \to b\bar{b}$	0.4833	0.4833	$2.069 \cdot 10^{-8}$	4.2	4.2	0		
$W^+W^- o Hb\bar{b}$	$-3.208 \cdot 10^{-5}$	$-3.208 \cdot 10^{-5}$	$3.117 \cdot 10^{-8}$	$4.127 \cdot 10^{-6}$	$4.127 \cdot 10^{-6}$	0		

$W^+W^- o Htar t$	$5.711 \cdot 10^{-6}$	$5.711 \cdot 10^{-6}$	$1.751 \cdot 10^{-8}$	$9.948 \cdot 10^{-6}$	$9.948 \cdot 10^{-6}$	$1.005 \cdot 10^{-8}$
$\bar{b}t \to \bar{d}u$	0.002537	0.002537	$3.942 \cdot 10^{-8}$	$7.689 \cdot 10^{-5}$	$7.689 \cdot 10^{-5}$	$3.902 \cdot 10^{-8}$
$b\bar{b} \to \mu^+ \mu^-$	0.0001574	0.0001574	0	$1.163 \cdot 10^{-5}$	$1.163 \cdot 10^{-5}$	0
$b\bar{b} \to \nu_e \bar{\nu}_e$	0.001059	0.001059	0	$7.604 \cdot 10^{-5}$	$7.604 \cdot 10^{-5}$	0
$b\bar{b} o b\bar{b}$	-0.001374	-0.001374	$7.279 \cdot 10^{-8}$	$4.899 \cdot 10^{-5}$	$4.899 \cdot 10^{-5}$	$-6.123 \cdot 10^{-8}$
$b\bar{b} \to d\bar{d}$	0.0002042	0.0002042	0	$1.571 \cdot 10^{-5}$	$1.571 \cdot 10^{-5}$	0
$b\bar{b} \to t\bar{t}$	-0.02009	-0.02009	0	0.003616	0.003616	0
$b\bar{b} \to u\bar{u}$	0.001582	0.001582	$6.321 \cdot 10^{-8}$	$8.997 \cdot 10^{-5}$	$8.997 \cdot 10^{-5}$	$4.446 \cdot 10^{-8}$
$b\bar{t} \to e^- \bar{\nu}_e$	$4.372 \cdot 10^{-5}$	$4.372 \cdot 10^{-5}$	$2.287 \cdot 10^{-8}$	$1.325 \cdot 10^{-6}$	$1.325 \cdot 10^{-6}$	0

2.38 cpQM

		interfer	ence		square			
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1-{\tt mod2/mod1}$		
$HH o z \bar b b$	$1.451 \cdot 10^{-5}$	$1.451 \cdot 10^{-5}$	0	$1.928 \cdot 10^{-5}$	$1.928 \cdot 10^{-5}$	0		
$HH \to zt\bar{t}$	$2.384 \cdot 10^{-5}$	$2.384 \cdot 10^{-5}$	0	$5.495 \cdot 10^{-5}$	$5.495 \cdot 10^{-5}$	0		
$Hz o b ar{b}$	0.2417	0.2417	0	1.05	1.05	0		
$Hz \to t\bar{t}$	2.071	2.071	0	1.416	1.416	0		
$W^+W^- o Hb\bar{b}$	$6.858 \cdot 10^{-6}$	$6.858 \cdot 10^{-6}$	$2.916 \cdot 10^{-8}$	$1.937 \cdot 10^{-7}$	$1.937 \cdot 10^{-7}$	0		
$W^+W^- o H t ar t$	$-1.406 \cdot 10^{-7}$	$-1.406 \cdot 10^{-7}$	0	$2.486 \cdot 10^{-6}$	$2.486 \cdot 10^{-6}$	0		
$b\bar{b} o \mu^+\mu^-$	$7.871 \cdot 10^{-5}$	$7.871 \cdot 10^{-5}$	$3.811 \cdot 10^{-8}$	$2.908 \cdot 10^{-6}$	$2.908 \cdot 10^{-6}$	0		
$b\bar{b} o u_e \bar{ u}_e$	0.0005294	0.0005294	0	$1.901 \cdot 10^{-5}$	$1.901 \cdot 10^{-5}$	0		
b ar b o b ar b	-0.0006869	-0.0006869	$2.911 \cdot 10^{-8}$	$1.225 \cdot 10^{-5}$	$1.225 \cdot 10^{-5}$	0		
$b\bar{b} o d\bar{d}$	0.0001021	0.0001021	0	$3.927 \cdot 10^{-6}$	$3.927 \cdot 10^{-6}$	$-2.547 \cdot 10^{-8}$		
$b\bar{b} o t\bar{t}$	-0.0007899	-0.0007899	$-5.064 \cdot 10^{-8}$	$8.135 \cdot 10^{-6}$	$8.135 \cdot 10^{-6}$	$-1.106 \cdot 10^{-7}$		
$b\bar{b} \to u\bar{u}$	0.000791	0.000791	$5.057 \cdot 10^{-8}$	$2.249 \cdot 10^{-5}$	$2.249 \cdot 10^{-5}$	$4.446 \cdot 10^{-8}$		
$t\bar{t} o u_{\mu} \bar{ u}_{\mu}$	$-2.371 \cdot 10^{-6}$	$-2.371 \cdot 10^{-6}$	$2.53 \cdot 10^{-7}$	$4.182 \cdot 10^{-7}$	$4.182 \cdot 10^{-7}$	0		
$t\bar{t} \to \tau^+ \tau^-$	$-4.659 \cdot 10^{-5}$	$-4.659 \cdot 10^{-5}$	$1.288 \cdot 10^{-7}$	$3.098 \cdot 10^{-6}$	$3.098 \cdot 10^{-6}$	$-3.228 \cdot 10^{-8}$		
$t\bar{t} \to c\bar{c}$	-0.0002553	-0.0002553	$7.833 \cdot 10^{-8}$	$9.568 \cdot 10^{-6}$	$9.568 \cdot 10^{-6}$	$1.045 \cdot 10^{-8}$		

$t\bar{t} \to d\bar{d}$	-0.0005304	-0.0005304	$1.885 \cdot 10^{-8}$	$1.906 \cdot 10^{-5}$	$1.906 \cdot 10^{-5}$	0
$t\bar{t} \to s\bar{s}$	-0.0006257	-0.0006257	$3.197 \cdot 10^{-8}$	$2.227 \cdot 10^{-5}$	$2.227\cdot10^{-5}$	0
$t\bar{t} \to t\bar{t}$	0.169	0.169	0	0.009183	0.009183	0

2.39 cpb

		interfer	ence		square			
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$		
$HH \to z\bar{b}b$	$-3.725 \cdot 10^{-7}$	$-3.725 \cdot 10^{-7}$	$-1.611 \cdot 10^{-7}$	$9.081 \cdot 10^{-6}$	$9.081 \cdot 10^{-6}$	0		
$Hz \to b\bar{b}$	-0.02369	-0.02369	$-4.221 \cdot 10^{-8}$	0.591	0.591	0		
$W^+W^- o Hb\bar{b}$	$-4.701 \cdot 10^{-8}$	$-4.701 \cdot 10^{-8}$	$2.127 \cdot 10^{-8}$	$3.024 \cdot 10^{-8}$	$3.024 \cdot 10^{-8}$	$3.307 \cdot 10^{-8}$		
$b\bar{b} \to \mu^+ \mu^-$	$-9.131 \cdot 10^{-5}$	$-9.131 \cdot 10^{-5}$	$-9.857 \cdot 10^{-8}$	$4.263 \cdot 10^{-6}$	$4.263 \cdot 10^{-6}$	$-9.384 \cdot 10^{-8}$		
$b\bar{b} o u_e \bar{ u}_e$	$-1.648 \cdot 10^{-5}$	$-1.648 \cdot 10^{-5}$	$-6.069 \cdot 10^{-8}$	$3.208 \cdot 10^{-6}$	$3.208 \cdot 10^{-6}$	0		
$b\bar{b} o b\bar{b}$	$1.659 \cdot 10^{-5}$	$1.659 \cdot 10^{-5}$	$6.029 \cdot 10^{-8}$	0.000216	0.000216	0		
$b\bar{b} o d\bar{d}$	$-2.797 \cdot 10^{-5}$	$-2.797 \cdot 10^{-5}$	$-7.15 \cdot 10^{-8}$	$3.081 \cdot 10^{-6}$	$3.081 \cdot 10^{-6}$	0		
$b\bar{b} o t\bar{t}$	$5.197 \cdot 10^{-5}$	$5.197\cdot10^{-5}$	$-3.849 \cdot 10^{-8}$	$2.441 \cdot 10^{-5}$	$2.441 \cdot 10^{-5}$	$4.097 \cdot 10^{-8}$		
$b\bar{b} \to u\bar{u}$	$6.328 \cdot 10^{-5}$	$6.328 \cdot 10^{-5}$	$-3.161 \cdot 10^{-8}$	$2.682 \cdot 10^{-5}$	$2.682 \cdot 10^{-5}$	$7.457 \cdot 10^{-8}$		

2.40 cpt

		interfer	ence		square			
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$		
$HH \to z t \bar{t}$	$-2.149 \cdot 10^{-5}$	$-2.149 \cdot 10^{-5}$	0	$5.497 \cdot 10^{-5}$	$5.497 \cdot 10^{-5}$	0		
$Hz \to t\bar{t}$	-2.214	-2.214	0	1.416	1.416	0		
$W^+W^- o H t \bar t$	$-1.592 \cdot 10^{-6}$	$-1.592 \cdot 10^{-6}$	0	$2.486 \cdot 10^{-6}$	$2.486 \cdot 10^{-6}$	0		
$b\bar{b} o t\bar{t}$	-0.002143	-0.002143	$4.666 \cdot 10^{-8}$	$4.722 \cdot 10^{-5}$	$4.722 \cdot 10^{-5}$	$2.118 \cdot 10^{-8}$		
$t\bar{t} o u_{\mu} \bar{ u}_{\mu}$	0.0001777	0.0001777	$-5.629 \cdot 10^{-8}$	$1.881 \cdot 10^{-5}$	$1.881 \cdot 10^{-5}$	0		
$t\bar{t} \to \tau^+ \tau^-$	$-7.805 \cdot 10^{-6}$	$-7.805 \cdot 10^{-6}$	$6.534 \cdot 10^{-7}$	$3.328 \cdot 10^{-6}$	$3.328 \cdot 10^{-6}$	$3.004 \cdot 10^{-8}$		
$t\bar{t} \to c\bar{c}$	$-1.846 \cdot 10^{-5}$	$-1.846 \cdot 10^{-5}$	$4.334 \cdot 10^{-7}$	$1.185 \cdot 10^{-5}$	$1.185 \cdot 10^{-5}$	$8.439 \cdot 10^{-8}$		

$t\bar{t} \to d\bar{d}$	$2.159 \cdot 10^{-5}$	$2.159 \cdot 10^{-5}$	$-2.779 \cdot 10^{-7}$	$9.379 \cdot 10^{-6}$	$9.379 \cdot 10^{-6}$	$1.066 \cdot 10^{-8}$
$t\bar{t} \to s\bar{s}$	$1.819 \cdot 10^{-5}$	$1.819\cdot10^{-5}$	$-2.749 \cdot 10^{-7}$	$7.477 \cdot 10^{-6}$	$7.477 \cdot 10^{-6}$	$1.337 \cdot 10^{-8}$
$t\bar{t} \to t\bar{t}$	-0.15	-0.15	0	0.00967	0.00967	0

2.41 cptb

		interfer	rence	square
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	$\verb mod1 \qquad \verb mod2 \qquad 1-\verb mod2/mod1 $
$HH \to W^+ \bar{t} b$	$-5.803 \cdot 10^{-7}$	$-5.803 \cdot 10^{-7}$	0	$7.26 \cdot 10^{-6}$ $7.26 \cdot 10^{-6}$ 0
$HW^+ \to \gamma t \bar{b}$	$-2.278 \cdot 10^{-7}$	$-2.278 \cdot 10^{-7}$	$-4.389 \cdot 10^{-8}$	$1.255 \cdot 10^{-6} 1.255 \cdot 10^{-6}$
$HW^- \to \bar{t}b$	-0.05344	-0.05344	0	$0.4858 \qquad 0.4858 \qquad 0$
$W^+W^- o Hb\bar{b}$	$-4.649 \cdot 10^{-7}$	$-4.649 \cdot 10^{-7}$	$2.151 \cdot 10^{-8}$	$6.757 \cdot 10^{-7} 6.757 \cdot 10^{-7} \qquad 0$
$W^+W^- o H t \bar t$	$-1.889 \cdot 10^{-7}$	$-1.889 \cdot 10^{-7}$	$5.295 \cdot 10^{-8}$	$4.296 \cdot 10^{-9} 4.296 \cdot 10^{-9}$
$\bar{b}t \to \bar{d}u$	$-2.193 \cdot 10^{-6}$	$-2.193 \cdot 10^{-6}$	$4.559 \cdot 10^{-8}$	$2.68 \cdot 10^{-5}$ $2.68 \cdot 10^{-5}$ $3.732 \cdot 10^{-8}$
$b\bar{b} o t\bar{t}$	-0.0004665	-0.0004665	0	$0.0005903 0.0005903 1.694 \cdot 10^{-8}$
$b\bar{t} \to e^- \bar{\nu}_e$	$-7.312 \cdot 10^{-7}$	$-7.312 \cdot 10^{-7}$	$4.103 \cdot 10^{-8}$	$3.236 \cdot 10^{-6}$ $3.236 \cdot 10^{-6}$ $3.09 \cdot 10^{-8}$

2.42 cptbI

		interfere	ence		square			
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$		
$HH o W^+ \bar t b$	$-1.402 \cdot 10^{-8}$	$-1.402 \cdot 10^{-8}$	0	$9.963 \cdot 10^{-6}$	$9.963 \cdot 10^{-6}$	0		
$HW^+ o \gamma t \bar{b}$	$-5.567 \cdot 10^{-9}$	$-5.567 \cdot 10^{-9}$	$-1.796 \cdot 10^{-8}$	$1.394 \cdot 10^{-6}$	$1.394 \cdot 10^{-6}$	0		
$HW^- \to \bar{t}b$	$-8.796 \cdot 10^{-6}$	$-8.796 \cdot 10^{-6}$	$1.137 \cdot 10^{-8}$	0.408	0.408	0		
$W^+W^- \to H b \bar b$	$6.72 \cdot 10^{-7}$	$6.72 \cdot 10^{-7}$	0	$2.091 \cdot 10^{-6}$	$2.091 \cdot 10^{-6}$	0		
$W^+W^- \to H t \bar t$	$-7.514 \cdot 10^{-9}$	$-7.514 \cdot 10^{-9}$	0	$1.236 \cdot 10^{-9}$	$1.236 \cdot 10^{-9}$	0		
$\bar{b}t \to \bar{d}u$	$-2.869 \cdot 10^{-21}$	$-2.634 \cdot 10^{-21}$	0.08173	$4.504 \cdot 10^{-6}$	$4.504 \cdot 10^{-6}$	$4.441 \cdot 10^{-8}$		
$b\bar{b} o t\bar{t}$	$-1.46 \cdot 10^{-19}$	$4.537 \cdot 10^{-21}$	1.031	0.000558	0.000558	$1.792 \cdot 10^{-8}$		
$b\bar{t} \to e^- \bar{\nu}_e$	$-2.689 \cdot 10^{-22}$	$-9.117 \cdot 10^{-22}$	-2.391	$1.011 \cdot 10^{-5}$	$1.011 \cdot 10^{-5}$	$9.891 \cdot 10^{-8}$		

2.43 ctG

		j	interference		square			
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$		
$b\bar{b} \to t\bar{t}$	0.1261	0.1261	0	0.01022	0.01022	0		
$gg \to t\bar{t}$	1.028	1.028	0	0.1334	0.1334	0		
$t\bar{t} \to c\bar{c}$	0.1977	0.1977	0	0.04676	0.04676	0		
$t\bar{t} \to d\bar{d}$	0.1977	0.1977	0	0.04553	0.04553	0		
$t\bar{t} \to s\bar{s}$	0.1977	0.1977	0	0.04352	0.04352	0		
$t\bar{t} \to t\bar{t}$	0.2901	0.2901	0	1.107	1.107	0		

2.44 ctGI

		interfere	ence	square			
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	
$b\bar{b} \to t\bar{t}$	$-1.329 \cdot 10^{-18}$	$-1.01 \cdot 10^{-18}$	0.2405	0.0007701	0.0007701	0	
$gg \to t\bar{t}$	$-3.354 \cdot 10^{-18}$	$-3.354 \cdot 10^{-18}$	0	0.1076	0.1076	0	
$t\bar{t} \to c\bar{c}$	$2.941 \cdot 10^{-24}$	$-4.412 \cdot 10^{-24}$	2.5	0.03731	0.03731	0	
$t\bar{t} \to d\bar{d}$	$-1.019 \cdot 10^{-31}$	$5.882 \cdot 10^{-24}$	$5.775\cdot 10^7$	0.03609	0.03609	0	
$t\bar{t} \to s\bar{s}$	$7.353 \cdot 10^{-25}$	$5.882 \cdot 10^{-24}$	-7	0.03408	0.03408	0	
$t\bar{t} \to t\bar{t}$	$-1.016 \cdot 10^{-16}$	$-9.09 \cdot 10^{-17}$	0.1055	1.039	1.039	0	

2.45 ctQqu1

		i	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	$3.08 \cdot 10^{-6}$	
$t\bar{t} \to c\bar{c}$	-0.4725	0	1	0.5004	0.5004	$3.097 \cdot 10^{-6}$	

2.46 ctQqu1I

		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	$3.12 \cdot 10^{-6}$
$t\bar{t} \to c\bar{c}$	$1.925 \cdot 10^{-17}$	0	1	0.5004	0.5004	$3.097 \cdot 10^{-6}$

2.47 ctQqu8

		i	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	0	0	0.05556	0.05556	$2.934 \cdot 10^{-6}$		
$t\bar{t} \to c\bar{c}$	$2.1 \cdot 10^{-8}$	0	1	0.1112	0.1112	$2.967 \cdot 10^{-6}$		

2.48 ctQqu8I

		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	0.05556	0.05556	$2.916 \cdot 10^{-6}$	
$t\bar{t} \to c\bar{c}$	$-8.565 \cdot 10^{-18}$	0	1	0.1112	0.1112	$2.967 \cdot 10^{-6}$	

2.49 ctW

$HW^- \to \bar{t}b$	-0.2654	-0.2654	0	2.277	2.277	0
$H\gamma \to t\bar{t}$	-0.6798	-0.6798	$5.737 \cdot 10^{-7}$	14.1	14.1	$1.205 \cdot 10^{-6}$
$Hz \to t\bar{t}$	$4.499 \cdot 10^{-8}$	0	1	$1.164 \cdot 10^{-12}$	0	1
$W^+W^- o Hb\bar b$	$-1.087 \cdot 10^{-6}$	$-1.087 \cdot 10^{-6}$	0	$1.394 \cdot 10^{-6}$	$1.394 \cdot 10^{-6}$	0
$W^+W^- \to H t \bar t$	$-8.096 \cdot 10^{-6}$	$-8.096 \cdot 10^{-6}$	0	$4.405 \cdot 10^{-5}$	$4.405 \cdot 10^{-5}$	$-2.27 \cdot 10^{-8}$
$\bar{b}t \to \bar{d}u$	0.003236	0.003236	$3.091 \cdot 10^{-8}$	0.008184	0.008184	$2.444 \cdot 10^{-8}$
$b\bar{b} o t\bar{t}$	0.024	0.024	$-1.25 \cdot 10^{-7}$	0.01454	0.01454	$2.063 \cdot 10^{-7}$
$b\bar{t} \to e^- \bar{\nu}_e$	0.002876	0.002876	$3.477 \cdot 10^{-8}$	0.004433	0.004433	0
$t\bar{t} o u_{\mu} \bar{ u}_{\mu}$	$-1.327 \cdot 10^{-9}$	0	1	$9.75 \cdot 10^{-16}$	0	1
$t\bar{t} \to \tau^+ \tau^-$	0.01035	0.01035	$5.798 \cdot 10^{-7}$	0.005794	0.005794	$1.139 \cdot 10^{-6}$
$t\bar{t} \to c\bar{c}$	0.00924	0.00924	$3.788 \cdot 10^{-7}$	0.02614	0.02614	$9.562 \cdot 10^{-7}$
$t\bar{t} \to d\bar{d}$	0.005777	0.005777	$-1.212 \cdot 10^{-7}$	0.003929	0.003929	$3.817 \cdot 10^{-7}$
$t\bar{t} \to s\bar{s}$	0.00455	0.00455	$-8.79 \cdot 10^{-8}$	0.005966	0.005966	$3.855 \cdot 10^{-7}$
$t\bar{t} \to t\bar{t}$	-1.342	-1.342	$5.217 \cdot 10^{-7}$	1.213	1.213	$9.066 \cdot 10^{-7}$

2.50 ctWI

		interfere	ence		square			
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$		
$HH o W^+ \bar t b$	$5.955 \cdot 10^{-8}$	$5.955 \cdot 10^{-8}$	$-6.717 \cdot 10^{-8}$	$1.681 \cdot 10^{-5}$	$1.681 \cdot 10^{-5}$	0		
$HH o zt \bar t$	$9.797 \cdot 10^{-13}$	0	1	$3.326 \cdot 10^{-17}$	0	1		
$HW^+ o \gamma t \bar{b}$	$6.698 \cdot 10^{-6}$	$6.698 \cdot 10^{-6}$	$-7.763 \cdot 10^{-7}$	$2.014 \cdot 10^{-5}$	$2.014 \cdot 10^{-5}$	$2.979 \cdot 10^{-7}$		
$HW^- \to \bar{t}b$	0.0002136	0.0002136	$4.683 \cdot 10^{-8}$	2.073	2.073	0		
$H\gamma \to t\bar{t}$	$1.469 \cdot 10^{-16}$	$1.301 \cdot 10^{-16}$	0.1144	11.34	11.34	$1.235 \cdot 10^{-6}$		
$Hz \to t\bar{t}$	$-1.466 \cdot 10^{-10}$	0	1	$1.521 \cdot 10^{-12}$	0	1		
$W^+W^- o Hb\bar b$	$9.743 \cdot 10^{-6}$	$9.743 \cdot 10^{-6}$	$2.053 \cdot 10^{-8}$	$9.56 \cdot 10^{-6}$	$9.56 \cdot 10^{-6}$	$1.046 \cdot 10^{-8}$		
$W^+W^- \to H t \bar t$	$2.418 \cdot 10^{-6}$	$2.418 \cdot 10^{-6}$	0	$3.852 \cdot 10^{-5}$	$3.852 \cdot 10^{-5}$	0		
$\bar{b}t \to \bar{d}u$	$4.038 \cdot 10^{-18}$	$5.603 \cdot 10^{-18}$	-0.3874	0.01196	0.01196	0		
$b\bar{b} \to t\bar{t}$	$1.28 \cdot 10^{-17}$	$-9.782 \cdot 10^{-17}$	8.64	0.0005489	0.0005489	$1.639 \cdot 10^{-7}$		

$b\bar{t} \to e^- \bar{\nu}_e$	$-2.966 \cdot 10^{-19}$	$6.486 \cdot 10^{-19}$	3.187	0.002124	0.002124	0
$t\bar{t} o u_{\mu} \bar{ u}_{\mu}$	$6.983 \cdot 10^{-26}$	0	1	$4.301 \cdot 10^{-16}$	0	1
$t\bar{t} \to \tau^+ \tau^-$	$-2.798 \cdot 10^{-19}$	$-3.29 \cdot 10^{-19}$	-0.1759	0.01564	0.01564	$1.151 \cdot 10^{-6}$
$t\bar{t} \to c\bar{c}$	$1.156 \cdot 10^{-10}$	$1.156 \cdot 10^{-10}$	$6.057 \cdot 10^{-7}$	0.02118	0.02118	$9.444 \cdot 10^{-7}$
$t\bar{t} \to d\bar{d}$	$1.183 \cdot 10^{-15}$	$1.181 \cdot 10^{-15}$	0.001711	0.00512	0.00512	$3.906 \cdot 10^{-7}$
$t\bar{t} \to s\bar{s}$	$5.66 \cdot 10^{-13}$	$5.66 \cdot 10^{-13}$	$7.951 \cdot 10^{-7}$	0.004835	0.004835	$3.723 \cdot 10^{-7}$
$t \bar t o t \bar t$	$-1.66 \cdot 10^{-16}$	$-7.173 \cdot 10^{-17}$	0.5679	0.8842	0.8842	$9.387 \cdot 10^{-7}$

2.51 ctZ

		interf	erence		square			
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$		
$HH \to z t \bar{t}$	$4.008 \cdot 10^{-6}$	$4.008 \cdot 10^{-6}$	$6.238 \cdot 10^{-7}$	$8.247 \cdot 10^{-5}$	$8.247 \cdot 10^{-5}$	$1.067 \cdot 10^{-6}$		
$HW^+ o \gamma t \bar{b}$	$1.245 \cdot 10^{-5}$	$1.245 \cdot 10^{-5}$	$5.623 \cdot 10^{-7}$	$7.377 \cdot 10^{-6}$	$7.377 \cdot 10^{-6}$	$1.139 \cdot 10^{-6}$		
$H\gamma \to t\bar{t}$	0.7729	0.7729	$5.563 \cdot 10^{-7}$	8.69	8.69	$1.128 \cdot 10^{-6}$		
$Hz \to t\bar{t}$	-0.04013	-0.04013	$6.23 \cdot 10^{-7}$	3.642	3.642	$1.071 \cdot 10^{-6}$		
$W^+W^- o H t \bar t$	$5.042 \cdot 10^{-7}$	$5.042 \cdot 10^{-7}$	$5.157 \cdot 10^{-7}$	$2.572 \cdot 10^{-7}$	$2.572 \cdot 10^{-7}$	$1.089 \cdot 10^{-6}$		
$b\bar{b} o t\bar{t}$	0.004332	0.004332	$5.31 \cdot 10^{-7}$	0.001196	0.001196	$1.087 \cdot 10^{-6}$		
$t\bar{t} o u_{\mu} \bar{ u}_{\mu}$	-0.0007723	-0.0007723	$4.403 \cdot 10^{-7}$	0.001683	0.001683	$1.07 \cdot 10^{-6}$		
$t\bar{t} \to \tau^+ \tau^-$	-0.00522	-0.00522	$4.981 \cdot 10^{-7}$	0.01605	0.01605	$1.059 \cdot 10^{-6}$		
$t\bar{t} \to c\bar{c}$	-0.005852	-0.005852	$4.955 \cdot 10^{-7}$	0.01843	0.01843	$1.085 \cdot 10^{-6}$		
$t\bar{t} o d\bar{d}$	0.000497	0.000497	$7.445 \cdot 10^{-7}$	0.005331	0.005331	$1.05 \cdot 10^{-6}$		
$t\bar{t} \to s\bar{s}$	0.0006122	0.0006122	$7.187 \cdot 10^{-7}$	0.005096	0.005096	$1.06 \cdot 10^{-6}$		
$t\bar{t} \to t\bar{t}$	0.6349	0.6349	$5.355 \cdot 10^{-7}$	0.6387	0.6387	$1.065 \cdot 10^{-6}$		

2.52 ctZI

	interfe	erence	square		
mod1	mod2	$1-{\tt mod}2/{\tt mod}1$	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$

```
HH \rightarrow zt\bar{t}
                                                           -1.506 \cdot 10^{-6}
                                                                                      6.642 \cdot 10^{-7}
                                                                                                                            7.856 \cdot 10^{-5} 7.856 \cdot 10^{-5}
                                                                                                                                                                         1.069 \cdot 10^{-6}
                                 -1.506 \cdot 10^{-6}
HW^+ \rightarrow \gamma t \bar{b}
                                  7.093 \cdot 10^{-6}
                                                            7.093 \cdot 10^{-6}
                                                                                      5.498 \cdot 10^{-7}
                                                                                                                            7.377 \cdot 10^{-6}
                                                                                                                                                 7.377 \cdot 10^{-6}
                                                                                                                                                                         1.139 \cdot 10^{-6}
                                -1.648 \cdot 10^{-17}
                                                           4.716 \cdot 10^{-18}
                                                                                                                                                       8.69
                                                                                                                                                                         1.128 \cdot 10^{-6}
H\gamma \to t\bar{t}
                                                                                          1.286
                                                                                                                                  8.69
                                                                                                                                                                         1.085 \cdot 10^{-6}
Hz \to t\bar{t}
                                   0.0002252
                                                             0.0002252
                                                                                      5.328 \cdot 10^{-7}
                                                                                                                                 3.593
                                                                                                                                                      3.593
W^+W^- \to H t \bar{t}
                                  3.697 \cdot 10^{-8}
                                                            3.697 \cdot 10^{-8}
                                                                                      5.409 \cdot 10^{-7}
                                                                                                                                                 1.523 \cdot 10^{-7}
                                                                                                                                                                         1.116 \cdot 10^{-6}
                                                                                                                            1.523 \cdot 10^{-7}
b\bar{b} \to t\bar{t}
                                -2.178 \cdot 10^{-20}
                                                           1.672 \cdot 10^{-20}
                                                                                                                            8.984 \cdot 10^{-5}
                                                                                                                                                 8.983 \cdot 10^{-5}
                                                                                                                                                                         1.069 \cdot 10^{-6}
                                                                                          1.768
                                -1.073 \cdot 10^{-19}
                                                          -3.738 \cdot 10^{-19}
                                                                                                                                                                         1.083 \cdot 10^{-6}
t\bar{t} \to \nu_{\mu}\bar{\nu}_{\mu}
                                                                                         -2.483
                                                                                                                              0.001016
                                                                                                                                                   0.001016
t\bar{t} \rightarrow \tau^+ \tau^-
                                  2.288 \cdot 10^{-19}
                                                           2.565 \cdot 10^{-19}
                                                                                                                                                                         1.018 \cdot 10^{-6}
                                                                                        -0.1214
                                                                                                                               0.01277
                                                                                                                                                    0.01277
                                                                                      6.919 \cdot 10^{-7}
                                                                                                                                                                         1.088 \cdot 10^{-6}
t\bar{t} \to c\bar{c}
                                -1.012 \cdot 10^{-10}
                                                          -1.012 \cdot 10^{-10}
                                                                                                                               0.01471
                                                                                                                                                    0.01471
                                -1.043 \cdot 10^{-15}
t\bar{t} \to d\bar{d}
                                                          -1.045 \cdot 10^{-15}
                                                                                       -0.001887
                                                                                                                                                   0.004225
                                                                                                                                                                         1.065 \cdot 10^{-6}
                                                                                                                              0.004225
                                                                                                                                                                         1.078 \cdot 10^{-6}
t\bar{t} \to s\bar{s}
                                -4.955 \cdot 10^{-13}
                                                          -4.955 \cdot 10^{-13}
                                                                                      8.275 \cdot 10^{-7}
                                                                                                                               0.00399
                                                                                                                                                    0.00399
t\bar{t} \to t\bar{t}
                                 2.424 \cdot 10^{-16}
                                                          -4.243 \cdot 10^{-16}
                                                                                           2.751
                                                                                                                                                                         1.067 \cdot 10^{-6}
                                                                                                                               0.6091
                                                                                                                                                     0.6091
```

2.53 ctb1

		interf	erence		square			
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	1 - mod2/mod1		
$b\bar{b} o t\bar{t}$	-0.0005001	-0.0005001	$-5.999 \cdot 10^{-8}$	0.001274	0.001274	0		

2.54 ctb8

$2.55 \quad \text{ctd1}$

interference square

	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	1 - mod2/mod1
$t\bar{t} \to d\bar{d}$	-0.04292	-0.04292	$-4.659 \cdot 10^{-8}$	0.7445	0.7445	0
$t\bar{t} \to s\bar{s}$	-0.02772	-0.02772	$-7.214 \cdot 10^{-8}$	0.4783	0.4783	0

2.56 ctd8

]	interference		square			
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	1 - mod2/mod1		
$t\bar{t} \to d\bar{d}$	0.5097	0.5097	0	0.1655	0.1655	0		
$t\bar{t} \to s\bar{s}$	0.3344	0.3344	0	0.1063	0.1063	0		

2.57 ctp

		interfer		square			
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	
$HH \to H t \bar t$	$2.303 \cdot 10^{-5}$	$2.303 \cdot 10^{-5}$	0	$1.048 \cdot 10^{-5}$	$1.048 \cdot 10^{-5}$	0	
$HH o W^+ \bar t b$	$4.649 \cdot 10^{-7}$	$4.649 \cdot 10^{-7}$	0	$1.661 \cdot 10^{-6}$	$1.661 \cdot 10^{-6}$	0	
$HH \to z t \bar{t}$	$-2.386 \cdot 10^{-6}$	$-2.386 \cdot 10^{-6}$	0	$4.432 \cdot 10^{-6}$	$4.432 \cdot 10^{-6}$	0	
$HW^+ \to \gamma t \bar{b}$	$1.41 \cdot 10^{-6}$	$1.41 \cdot 10^{-6}$	0	$3.177 \cdot 10^{-7}$	$3.177 \cdot 10^{-7}$	$-3.147 \cdot 10^{-8}$	
$HW^- o \bar{t}b$	0.09425	0.09425	0	0.05191	0.05191	0	
$H\gamma \to t\bar{t}$	-0.07337	-0.07337	$-2.726 \cdot 10^{-8}$	0.002251	0.002251	$-4.442 \cdot 10^{-8}$	
$Hz \to t\bar{t}$	0.003576	0.003576	$-1.957 \cdot 10^{-7}$	0.06905	0.06905	0	
$W^+W^- \to H b \bar b$	$-1.225 \cdot 10^{-7}$	$-1.225 \cdot 10^{-7}$	0	$2.749 \cdot 10^{-8}$	$2.749 \cdot 10^{-8}$	0	
$W^+W^- o H t \bar t$	$3.188 \cdot 10^{-7}$	$3.188 \cdot 10^{-7}$	0	$4.1 \cdot 10^{-7}$	$4.1\cdot 10^{-7}$	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	
$t\bar{t} \to \tau^+ \tau^-$	$-1.013 \cdot 10^{-6}$	$-1.013 \cdot 10^{-6}$	0	$3.101 \cdot 10^{-8}$	$3.101 \cdot 10^{-8}$	0	
$t\bar{t} \to t\bar{t}$	0.1357	0.1357	0	0.009029	0.009029	0	

2.58 ctpI

		interfere		square			
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	
$HH \to H t \bar t$	$-1.806 \cdot 10^{-5}$	$-1.806 \cdot 10^{-5}$	0	$2.812 \cdot 10^{-5}$	$2.812 \cdot 10^{-5}$	0	
$HH o W^+ \bar t b$	$4.257 \cdot 10^{-7}$	$4.257 \cdot 10^{-7}$	$-2.349 \cdot 10^{-8}$	$3.599 \cdot 10^{-6}$	$3.599 \cdot 10^{-6}$	0	
$HH \to z t \bar{t}$	$1.808 \cdot 10^{-7}$	$1.808 \cdot 10^{-7}$	0	$3.373 \cdot 10^{-6}$	$3.373 \cdot 10^{-6}$	0	
$HW^+ o \gamma t \bar{b}$	$1.851 \cdot 10^{-6}$	$1.851 \cdot 10^{-6}$	0	$3.622 \cdot 10^{-7}$	$3.622 \cdot 10^{-7}$	$-5.522 \cdot 10^{-8}$	
$HW^- \to \bar{t}b$	-0.0009712	-0.0009712	$1.03 \cdot 10^{-8}$	0.05847	0.05847	0	
$H\gamma \to t\bar{t}$	$-1.064 \cdot 10^{-18}$	$3.594 \cdot 10^{-19}$	1.338	0.0028	0.0028	$-3.571 \cdot 10^{-8}$	
$Hz \to t\bar{t}$	$9.347 \cdot 10^{-5}$	$9.347 \cdot 10^{-5}$	$9.629 \cdot 10^{-8}$	0.06889	0.06889	0	
$W^+W^- o Hbar{b}$	$1.787 \cdot 10^{-6}$	$1.787 \cdot 10^{-6}$	0	$5.46 \cdot 10^{-8}$	$5.46 \cdot 10^{-8}$	$1.831 \cdot 10^{-8}$	
$W^+W^- o H t \bar t$	$2.884 \cdot 10^{-7}$	$2.884 \cdot 10^{-7}$	0	$6.964 \cdot 10^{-7}$	$6.964 \cdot 10^{-7}$	$-1.436 \cdot 10^{-8}$	
$b\bar{b} o t\bar{t}$	$1.45 \cdot 10^{-21}$	$5.294 \cdot 10^{-22}$	0.6349	$6.906 \cdot 10^{-7}$	$6.906 \cdot 10^{-7}$	0	
$t\bar{t} \to \tau^+ \tau^-$	$-3.906 \cdot 10^{-25}$	$-3.182 \cdot 10^{-24}$	-7.147	$3.49 \cdot 10^{-8}$	$3.49 \cdot 10^{-8}$	0	
$t\bar{t} \to t\bar{t}$	$-2.124 \cdot 10^{-18}$	$5.931 \cdot 10^{-18}$	3.793	0.004907	0.004907	0	

$2.59 \quad ctq1$

		inter		squ	ıare	
	mod1	mod2	$1-\mathtt{mod}2/\mathtt{mod}1$	mod1	mod2	1 - mod2/mod1
$t\bar{t} \to c\bar{c}$	0.0163	0.0163	0	0.3515	0.3515	0
$t\bar{t} \to d\bar{d}$	-0.005239	-0.005239	$1.909 \cdot 10^{-8}$	0.0278	0.0278	0
$t\bar{t} \to s\bar{s}$	-0.002724	-0.002724	$1.101 \cdot 10^{-7}$	0.1142	0.1142	0

2.60 ctq8

$t\bar{t} \to c\bar{c}$	0.636	0.636	0	0.208	0.208	0
$t\bar{t} \to d\bar{d}$	0.4702	0.4702	0	0.1521	0.1521	0
$t \bar t o s \bar s$	0.3901	0.3901	0	0.1251	0.1251	0

2.61 ctt1

2.62 ctu1

2.63 ctu8

2.64 sm

interference square $mod1 \quad mod2 \quad 1 - mod2/mod1$ mod2 1 - mod2/mod1mod1 $HH \rightarrow HH$ 0 0.15340.15340 0 $4.842 \cdot 10^{-8}$ $4.842 \cdot 10^{-8}$ $HH \rightarrow HHH$ 0 0 0 0

$HH \to H au^+ au^-$	0	0	0	$4.942 \cdot 10^{-11}$	$4.942 \cdot 10^{-11}$	0
$HH o Hbar{b}$	0	0	0	$5.049 \cdot 10^{-9}$	$5.049 \cdot 10^{-9}$	0
$HH o Htar{t}$	0	0	0	$2.709 \cdot 10^{-5}$	$2.709 \cdot 10^{-5}$	0
$HH \rightarrow Hzz$	0	0	0	$1.871 \cdot 10^{-5}$	$1.871 \cdot 10^{-5}$	0
$HH \to W^+W^-$	0	0	0	0.1397	0.1397	$7.16 \cdot 10^{-8}$
$HH \to W^+W^-\gamma$	0	0	0	$3.912 \cdot 10^{-6}$	$3.912 \cdot 10^{-6}$	$2.556 \cdot 10^{-8}$
$HH \to W^+ \bar{t} b$	0	0	0	$2.99 \cdot 10^{-6}$	$2.99 \cdot 10^{-6}$	0
$HH o W^+ e^- \bar{\nu}_e$	0	0	0	$9.541 \cdot 10^{-7}$	$9.541 \cdot 10^{-7}$	$4.192 \cdot 10^{-8}$
$HH \to W^- u \bar{d}$	0	0	0	$1.074 \cdot 10^{-6}$	$1.074 \cdot 10^{-6}$	$9.308 \cdot 10^{-8}$
$HH o z \bar{b} b$	0	0	0	$1.653 \cdot 10^{-5}$	$1.653 \cdot 10^{-5}$	$6.051 \cdot 10^{-8}$
$HH \to z \nu_e \bar{\nu}_e$	0	0	0	$8.054 \cdot 10^{-8}$	$8.054 \cdot 10^{-8}$	0
$HH \to z c \bar{c}$	0	0	0	$1.317 \cdot 10^{-7}$	$1.317 \cdot 10^{-7}$	0
$HH \to z d\bar{d}$	0	0	0	$2.723 \cdot 10^{-5}$	$2.723 \cdot 10^{-5}$	$3.673 \cdot 10^{-8}$
$HH \rightarrow ze^+e^-$	0	0	0	$1.801 \cdot 10^{-7}$	$1.801 \cdot 10^{-7}$	0
$HH \to z t \bar{t}$	0	0	0	$2.299 \cdot 10^{-5}$	$2.299 \cdot 10^{-5}$	0
$HH \rightarrow zz$	0	0	0	0.07616	0.07616	0
$HW^+ o \gamma t \bar{b}$	0	0	0	$4.043 \cdot 10^{-6}$	$4.043 \cdot 10^{-6}$	$-2.473 \cdot 10^{-8}$
$HW^+ \to \gamma u \bar{d}$	0	0	0	$3.318 \cdot 10^{-8}$	$3.318 \cdot 10^{-8}$	0
$HW^+ o u \bar d$	0	0	0	0.01741	0.01741	$5.745 \cdot 10^{-8}$
$HW^- \to \bar{t}b$	0	0	0	0.429	0.429	0
$HW^- \to \gamma e^- \bar{\nu}_e$	0	0	0	$3.309 \cdot 10^{-6}$	$3.309 \cdot 10^{-6}$	$3.022 \cdot 10^{-8}$
$HW^- o \mu^- \bar{\nu}_\mu$	0	0	0	0.00637	0.00637	$3.14 \cdot 10^{-8}$
$H\gamma o bar{b}$	0	0	0	0.0001058	0.0001058	$-9.452 \cdot 10^{-8}$
$H\gamma \to t\bar{t}$	0	0	0	0.4547	0.4547	$-4.399 \cdot 10^{-8}$
$Hz \to \mu^+\mu^-$	0	0	0	0.002501	0.002501	0
$Hz \to \nu_{\tau} \bar{\nu}_{\tau}$	0	0	0	0.005481	0.005481	0
$Hz o b ar{b}$	0	0	0	0.008332	0.008332	$2.4\cdot10^{-8}$
$Hz \to s\bar{s}$	0	0	0	0.01352	0.01352	0
$Hz \to t\bar{t}$	0	0	0	2.821	2.821	$3.545 \cdot 10^{-8}$

$Hz \to u\bar{u}$	0	0	0	0.01127	0.01127	0
$W^+W^- o Hb\bar{b}$	0	0	0	$3.854 \cdot 10^{-5}$	$3.854 \cdot 10^{-5}$	$2.594 \cdot 10^{-8}$
$W^+W^- \to Hc\bar{c}$	0	0	0	$7.86 \cdot 10^{-7}$	$7.86 \cdot 10^{-7}$	$3.817 \cdot 10^{-8}$
$W^+W^- o H d \bar d$	0	0	0	$2.957 \cdot 10^{-7}$	$2.957 \cdot 10^{-7}$	$3.382 \cdot 10^{-8}$
$W^+W^- \to H t \bar t$	0	0	0	$3.823 \cdot 10^{-5}$	$3.823 \cdot 10^{-5}$	$5.232 \cdot 10^{-8}$
$W^+W^- o W^+W^-$	0	0	0	64.68	64.68	$4.638 \cdot 10^{-8}$
$W^+W^- \to \gamma\gamma$	0	0	0	1.27	1.27	$-7.871 \cdot 10^{-8}$
$W^+W^- \to \gamma\gamma\gamma$	0	0	0	$3.061 \cdot 10^{-7}$	$3.061 \cdot 10^{-7}$	$-9.801 \cdot 10^{-8}$
$\bar{b}t \to \bar{d}u$	0	0	0	0.001922	0.001922	0
$\gamma W^+ \to z W^+$	0	0	0	0.3531	0.3531	0
$\mu^+\mu^- \to \tau^+\tau^-$	0	0	0	0.02171	0.02171	$-4.606 \cdot 10^{-8}$
$ u_{\tau}\bar{\nu}_{\tau} \to \nu_{\tau}\bar{\nu}_{\tau} $	0	0	0	$9.864 \cdot 10^{-6}$	$9.864 \cdot 10^{-6}$	0
$ u_e \bar{\nu}_e \to \nu_\mu \bar{\nu}_\mu$	0	0	0	0.007074	0.007074	0
$b\bar{b} o \gamma\gamma$	0	0	0	0.0009875	0.0009875	$-7.089 \cdot 10^{-8}$
$b\bar{b} o \mu^+\mu^-$	0	0	0	0.002972	0.002972	$3.365 \cdot 10^{-8}$
$b\bar{b} o \nu_e \bar{\nu}_e$	0	0	0	0.001825	0.001825	$5.48 \cdot 10^{-8}$
$b\bar{b} o b\bar{b}$	0	0	0	2.267	2.267	0
$b\bar{b} \to d\bar{d}$	0	0	0	0.6724	0.6724	0
$b\bar{b} \to t\bar{t}$	0	0	0	0.4485	0.4485	0
$b\bar{b} \to u\bar{u}$	0	0	0	0.7941	0.7941	0
$b\bar{t} \to e^- \bar{\nu}_e$	0	0	0	0.004172	0.004172	$2.397 \cdot 10^{-8}$
$c\bar{c} \to \mu^+ \mu^-$	0	0	0	0.006625	0.006625	$-3.019 \cdot 10^{-8}$
$c\bar{s} \to \tau^+ \nu_{\tau}$	0	0	0	0.009154	0.009154	$3.277 \cdot 10^{-8}$
$d\bar{d} \to c\bar{c}$	0	0	0	0.6579	0.6579	0
$d\bar{d} \to e^+e^-$	0	0	0	0.0003134	0.0003134	$-6.381 \cdot 10^{-8}$
$d\bar{d} o s\bar{s}$	0	0	0	0.4908	0.4908	0
$e^+\nu_\mu \to e^+\nu_\mu$	0	0	0	0.007448	0.007448	$-8.056 \cdot 10^{-8}$
$e^+\nu_e^- o \mu^+\nu_\mu^-$	0	0	0	0.002201	0.002201	$4.544 \cdot 10^{-8}$
$e^+\nu_e \to e^+\nu_e$	0	0	0	0.004347	0.004347	$-1.15 \cdot 10^{-7}$

$e^+\tau^- \to e^+\tau^-$	0	0	0	0.2938	0.2938	$-6.806 \cdot 10^{-8}$
$e^+e^- \to \mu^+\mu^-$	0	0	0	0.008386	0.008386	$-5.962 \cdot 10^{-8}$
$e^+e^- \rightarrow e^+e^-$	0	0	0	2.278	2.278	$-8.778 \cdot 10^{-8}$
gg o gg	0	0	0	33.39	33.39	0
gg o ggg	0	0	0	0.01625	0.01625	0
$gg o t \bar t$	0	0	0	0.6729	0.6729	0
$gg \to u\bar{u}$	0	0	0	0.3362	0.3362	0
$s\bar{s} \to \nu_{\tau}\bar{\nu}_{\tau}$	0	0	0	0.00112	0.00112	0
$s\bar{s} \to s\bar{s}$	0	0	0	13.92	13.92	0
$t\bar{t} o u_{\mu} \bar{ u}_{\mu}$	0	0	0	0.001956	0.001956	$5.112 \cdot 10^{-8}$
$t\bar{t} \to \tau^+ \tau^-$	0	0	0	0.00672	0.00672	$-1.488 \cdot 10^{-8}$
$t\bar{t} \to c\bar{c}$	0	0	0	0.5899	0.5899	0
$t\bar{t} o d\bar{d}$	0	0	0	0.8195	0.8195	0
$t\bar{t} \to s\bar{s}$	0	0	0	0.6411	0.6411	0
$t\bar{t} o t\bar{t}$	0	0	0	17.41	17.41	0
$u\bar{d} \to \mu^+ \nu_\mu$	0	0	0	0.005739	0.005739	$3.485 \cdot 10^{-8}$
$u\bar{d} \to c\bar{s}$	0	0	0	$1.041 \cdot 10^{-5}$	$1.041 \cdot 10^{-5}$	$9.604 \cdot 10^{-8}$
$u\bar{d} \to u\bar{d}$	0	0	0	18.87	18.87	0
$u\bar{u} \to \nu_e \bar{\nu}_e$	0	0	0	0.001371	0.001371	$7.296 \cdot 10^{-8}$
$u\bar{u} \to c\bar{c}$	0	0	0	0.629	0.629	0
$u\bar{u} \to u\bar{u}$	0	0	0	267.5	267.5	0
$zz \to W^+W^-$	0	0	0	51.74	51.74	$7.731 \cdot 10^{-8}$
$zz \to zz$	0	0	0	0.08149	0.08149	0