

# 1 By process

## 1.1 $HH \rightarrow HHH$

			interference		square	
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
sm	0	0	0	$8.745 \cdot 10^{-8}$	$8.745 \cdot 10^{-8}$	0

## 1.2 $HH \rightarrow z\bar{b}b$

			interference		square	
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
sm	0	0	0	$8.92 \cdot 10^{-7}$	$8.92 \cdot 10^{-7}$	0

## 1.3 $HH \rightarrow zc\bar{c}$

			interference		square	
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
sm	0	0	0	$3.014 \cdot 10^{-7}$	$3.014 \cdot 10^{-7}$	0

## 1.4 $HH \rightarrow zd\bar{d}$

			interference		square	
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
sm	0	0	0	$3.171 \cdot 10^{-7}$	$3.171 \cdot 10^{-7}$	0

## 1.5 $HH \rightarrow ze^+e^-$

			interference		square	
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
sm	0	0	0	$2.489 \cdot 10^{-8}$	$2.489 \cdot 10^{-8}$	0

### 1.6 $H\gamma \rightarrow b\bar{b}$

			interference		square	
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
sm	0	0	0	0.0002857	0.0002857	0

### 1.7 $H\gamma \rightarrow c\bar{c}$

			interference		square	
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
sm	0	0	0	0.0002126	0.0002126	0

### 1.8 $H\gamma \rightarrow d\bar{d}$

			interference		square	
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
sm	0	0	0	0.0002833	0.0002833	0

### 1.9 $H\gamma \rightarrow e^+e^-$

			interference		square	
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$	mod1	mod2	$1 - \text{mod2}/\text{mod1}$
sm	0	0	0	$6.537 \cdot 10^{-5}$	$6.537 \cdot 10^{-5}$	0

### 1.10 $W^+W^- \rightarrow Hb\bar{b}$

			interference			square
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$		mod1	$1 - \text{mod2}/\text{mod1}$
sm	0	0	0		$2.743 \cdot 10^{-6}$	0

### 1.11 $W^+W^- \rightarrow Hdd\bar{d}$

			interference			square
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$		mod1	$1 - \text{mod2}/\text{mod1}$
sm	0	0	0		$3.36 \cdot 10^{-5}$	0

### 1.12 $W^+W^- \rightarrow Ht\bar{t}$

			interference			square
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$		mod1	$1 - \text{mod2}/\text{mod1}$
sm	0	0	0		$1.322 \cdot 10^{-5}$	0

### 1.13 $W^+W^- \rightarrow \gamma\gamma$

			interference			square
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$		mod1	$1 - \text{mod2}/\text{mod1}$
sm	0	0	0		0.1019	0

### 1.14 $W^+W^- \rightarrow \gamma\gamma\gamma$

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

sm	0	0	0	$4.15 \cdot 10^{-7}$	$4.15 \cdot 10^{-7}$	0
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### 1.15 $\gamma W^+ \rightarrow z W^+$

			interference			square
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$		mod1	$1 - \text{mod2}/\text{mod1}$
sm	0	0	0		0.2902	0

### 1.16 $b\bar{b} \rightarrow \gamma\gamma$

			interference			square
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$		mod1	$1 - \text{mod2}/\text{mod1}$
sm	0	0	0		0.08983	0

### 1.17 $gg \rightarrow gg$

			interference			square
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$		mod1	$1 - \text{mod2}/\text{mod1}$
sm	0	0	0		93.32	0

### 1.18 $gg \rightarrow ggg$

			interference			square
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$		mod1	$1 - \text{mod2}/\text{mod1}$
sm	0	0	0		0.9636	0

### 1.19 $gg \rightarrow t\bar{t}$

			interference			square
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$		mod1	$1 - \text{mod2}/\text{mod1}$
sm	0	0	0		4.219	0

### 1.20 $gg \rightarrow u\bar{u}$

			interference			square
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$		mod1	$1 - \text{mod2}/\text{mod1}$
sm	0	0	0		1.625	0

### 1.21 $t\bar{t} \rightarrow z\gamma$

			interference			square
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$		mod1	$1 - \text{mod2}/\text{mod1}$
sm	0	0	0		0.08131	0

### 1.22 $zz \rightarrow W^+W^-$

			interference			square
	mod1	mod2	$1 - \text{mod2}/\text{mod1}$		mod1	$1 - \text{mod2}/\text{mod1}$
sm	0	0	0		31.29	0

## 2 By parameter point

### 2.1 sm

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

$HH \rightarrow HHH$	0	0	0	$8.745 \cdot 10^{-8}$	$8.745 \cdot 10^{-8}$	0
$HH \rightarrow z\bar{b}b$	0	0	0	$8.92 \cdot 10^{-7}$	$8.92 \cdot 10^{-7}$	0
$HH \rightarrow z c \bar{c}$	0	0	0	$3.014 \cdot 10^{-7}$	$3.014 \cdot 10^{-7}$	0
$HH \rightarrow z d \bar{d}$	0	0	0	$3.171 \cdot 10^{-7}$	$3.171 \cdot 10^{-7}$	0
$HH \rightarrow z e^+ e^-$	0	0	0	$2.489 \cdot 10^{-8}$	$2.489 \cdot 10^{-8}$	0
$H\gamma \rightarrow b\bar{b}$	0	0	0	0.0002857	0.0002857	0
$H\gamma \rightarrow c\bar{c}$	0	0	0	0.0002126	0.0002126	0
$H\gamma \rightarrow d\bar{d}$	0	0	0	0.0002833	0.0002833	0
$H\gamma \rightarrow e^+ e^-$	0	0	0	$6.537 \cdot 10^{-5}$	$6.537 \cdot 10^{-5}$	0
$W^+W^- \rightarrow Hb\bar{b}$	0	0	0	$2.743 \cdot 10^{-6}$	$2.743 \cdot 10^{-6}$	0
$W^+W^- \rightarrow H d \bar{d}$	0	0	0	$3.36 \cdot 10^{-5}$	$3.36 \cdot 10^{-5}$	0
$W^+W^- \rightarrow H t \bar{t}$	0	0	0	$1.322 \cdot 10^{-5}$	$1.322 \cdot 10^{-5}$	0
$W^+W^- \rightarrow \gamma\gamma$	0	0	0	0.1019	0.1019	0
$W^+W^- \rightarrow \gamma\gamma\gamma$	0	0	0	$4.15 \cdot 10^{-7}$	$4.15 \cdot 10^{-7}$	0
$\gamma W^+ \rightarrow z W^+$	0	0	0	0.2902	0.2902	0
$b\bar{b} \rightarrow \gamma\gamma$	0	0	0	0.08983	0.08983	0
$gg \rightarrow gg$	0	0	0	93.32	93.32	0
$gg \rightarrow ggg$	0	0	0	0.9636	0.9636	0
$gg \rightarrow t\bar{t}$	0	0	0	4.219	4.219	0
$gg \rightarrow u\bar{u}$	0	0	0	1.625	1.625	0
$t\bar{t} \rightarrow z\gamma$	0	0	0	0.08131	0.08131	0
$zz \rightarrow W^+W^-$	0	0	0	31.29	31.29	0