Process Classes for 2 ab⁻¹ Data Set

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Table 1:

Process Class	Initial State	Final State
1	$e^- e^+$	$\mu^-~\mu^+~b~ar{b}$
2	$e^- \ e^+$	$ au^- \; au^+ \; b \; ar{b}$
3	$e^- e^+$	$e^-~e^+~b~ar{b}$
4	$e^{-} e^{+} \\ e^{-} e^{+}$	$ u_e \ \bar{\nu}_e \ b \ \bar{b} $
	e^-e^+	$ u_{\mu} \ ar{ u}_{\mu} \ b \ b \ u_{ au} \ ar{ u}_{ au} \ b \ ar{b}$
5	$e^- e^+$	$b\; ar{b}\; b\; ar{b}$
6	$e^- \ e^+$	$u\ \bar{u}\ b\ \bar{b}$
	$e^- e^+$	$d\ ar{d}\ b\ ar{ar{b}}$
	$e^- e^+ \ e^- e^+$	$egin{array}{cccccccccccccccccccccccccccccccccccc$
7	e ⁻ e ⁺ e ⁻ e ⁺	$egin{array}{ccc} u & ar{d} & s & ar{c} \\ c & ar{s} & d & ar{u} \end{array}$
8	e ⁻ e ⁺ e ⁻ e ⁺	$egin{array}{ccc} u & ar{u} & u & ar{u} \ d & ar{d} & d & ar{d} \end{array}$
	$e^- e^+$	$s\; ar{s}\; s\; ar{s}$
	$e^- e^+$ $e^- e^+$	$egin{array}{cccc} c \ ar{c} \ c \ ar{c} \ ar{s} \end{array}$
	e^-e^+	$egin{array}{c} u \ u \ s \ s \ \\ u \ ar{u} \ c \ ar{c} \end{array}$
	$e^- e^+$	$d\ \bar{d}\ s\ \bar{s}$
	$e^- e^+$	$c \bar{c} d \bar{d}$
9	e ⁻ e ⁺ e ⁻ e ⁺	$\begin{array}{ccc} u \; \bar{d} \; d \; \bar{u} \\ c \; \bar{s} \; s \; \bar{c} \end{array}$

Table 2:

Process Class	Initial state	Final state
10	$e^{-} e^{+}$	$u \bar{u} e^- e^+$
_	$e^- e^+$	$u \bar{u} \mu^- \mu^+$
	$e^- e^+$	$u \bar{u} \tau^- \tau^+$
	$e^- e^+$	$e^-~e^+~d~ar{d}$
	$e^- e^+$	$\mu^- \ \mu^+ \ d \ ar{d}$
	$e^- e^+$	$ au^- \ au^+ \ d \ ar{d}$
	$e^{-} e^{+}$	$e^- \ e^+ \ s \ \bar{s}$
	$e^- e^+$	$\mu^- \mu^+ s \bar{s}$
	$e^- e^+$	$ au^- au^+ s \bar{s}$
	e ⁻ e ⁺	$c \ \bar{c} \ e^- \ e^+$
	$e^{-} e^{+}$	$c \ \bar{c} \ \mu^- \ \mu^+$
	$e^- e^+$	$c \bar{c} \tau^- \tau^+$
11	$e^- e^+$	$\nu_e \ \bar{\nu}_e \ u \ \bar{u}$
	$e^ e^+$	$ u_{\mu} \ \bar{\nu}_{\mu} \ u \ \bar{u}$
	$e^- e^+$	$ u_{\tau} \bar{\nu}_{\tau} u \bar{u}$
	$e^- \ e^+$	$ u_e \; \bar{ u}_e \; d \; \bar{d}$
	$e^- e^+$	$ u_{\mu} \ \bar{ u}_{\mu} \ d \ \bar{d}$
	$e^- e^+$	$ u_{ au} \; \bar{ u}_{ au} \; d \; \bar{d}$
	$e^- e^+$	$ u_e \ \bar{\nu}_e \ s \ \bar{s}$
	$e^{-} e^{+}$	$ u_{\mu} \ \bar{ u}_{\mu} \ s \ \bar{s}$
	$e^- e^+$	$ u_{ au} \ \bar{ u}_{ au} \ s \ \bar{s}$
	$e^- e^+$	$ u_e \ ar{ u}_e \ c \ ar{c}$
	$e^{-} e^{+}$	$ u_{\mu} \ ar{ u}_{\mu} \ c \ ar{c}$
-	$e^- e^+$	$\nu_{\tau} \ \bar{\nu}_{\tau} \ c \ \bar{c}$
12	$e^- e^+$	24 24
12		$egin{array}{c} u \ ar{u} \ d \ ar{d} \end{array}$
	$e^- e^+$	<u>a a a</u>
13	$e^- e^+$	$s~ar{s}$
10	e^-e^+	$c \ ar{c}$
14	$e^- e^+$	b $ar{b}$
15	$e^- e^+$	$e^- e^+$
16	$e^- e^+$	$\mu^- \mu^+$
		· · ·
17	$e^- e^+$	$ au^ au^+$

Table 3:

Process Class	Initial state	Final state
18	$e^-\gamma$	$e^-\gamma$
19	γe^+	$e^+\gamma$
20	$e^- \ e^+$	$\gamma\gamma$
21	$e^{-} e^{+}$	$\gamma\gamma\gamma$
	$e^- e^+ \ e^- e^+$	$\gamma\gamma\gamma\gamma$ $\gamma\gamma\gamma\gamma\gamma$
22	$e^{-} e^{+}$	$ u_e \ ar{ u}_e \gamma$
22	$e^- e^+$	$ u_{\mu} \; ar{ u}_{\mu} \gamma$
	e ⁻ e ⁺	$\nu_{ au} \ \bar{\nu}_{ au} \gamma$
23	$e^- e^+$ $e^- e^+$	$ u_e ar u_e \gamma \gamma onumber onumber$
	$e^- e^+$ $e^- e^+$	$ u_{ au} \ ar{ u}_{ au} \gamma \gamma \gamma $ $ u_{e} \ ar{ u}_{e} \gamma \gamma \gamma \gamma $
	$e^{-} e^{+} \ e^{-} e^{+}$	$\begin{array}{c} \nu_{\mu} \ \bar{\nu}_{\mu} \gamma \gamma \gamma \\ \nu_{\tau} \ \bar{\nu}_{\tau} \gamma \gamma \gamma \end{array}$
	$e^- e^+$	$\nu_e \ \bar{\nu}_e \ \nu_e \ \bar{\nu}_e \gamma$
	$e^- e^+$ $e^- e^+$	$\begin{array}{cccc} \nu_e \ \bar{\nu}_e \ \nu_\mu \ \bar{\nu}_\mu \gamma \\ \nu_e \ \bar{\nu}_e \ \nu_\tau \ \bar{\nu}_\tau \gamma \end{array}$
	$e^{-} e^{+} \\ e^{-} e^{+}$	$ u_{\mu} \ \bar{ u}_{\mu} \ u_{\mu} \ \bar{ u}_{\mu} \gamma$ $ u_{\mu} \ \bar{ u}_{\mu} \ u_{\tau} \ \bar{ u}_{\tau} \gamma$
	$e^{-} e^{+}$	$\nu_{\tau} \ \bar{\nu}_{\tau} \ \nu_{\tau} \ \bar{\nu}_{\tau} \gamma$
24	$e^{-} e^{+} \ e^{-} e^{+}$	$\begin{array}{ccc} u \; \bar{d} \; e^- \; \bar{\nu}_e \\ u \; \bar{d} \; \mu^- \; \bar{\nu}_\mu \end{array}$
	$e^- e^+ $ $e^- e^+$	$\begin{array}{cccc} u & \bar{d} & \bar{\tau}^{-} & \bar{\nu}_{\tau} \\ u & \bar{d} & \bar{\tau}^{-} & \bar{\nu}_{\tau} \\ c & \bar{s} & e^{-} & \bar{\nu}_{e} \end{array}$
	$e^- e^+$	$c \ \bar{s} \ \mu^- \ \bar{\nu}_{\mu}$
	$e^{-} e^{+}$ $e^{-} e^{+}$	$c \ \bar{s} \ \tau^- \ \bar{\nu}_\tau$ $\nu_e \ e^+ \ d \ \bar{u}$
	$e^- e^+ \ e^- e^+$	$\begin{array}{c} \nu_e \ e^+ \ s \ \bar{c} \\ \nu_\mu \ \mu^+ \ d \ \bar{u} \end{array}$
	$e^{-} e^{+} \ e^{-} e^{+}$	$ \begin{array}{cccc} \nu_{\mu} & \mu^{+} & s & \bar{c} \\ \nu_{\tau} & \tau^{+} & d & \bar{u} \end{array} $
	e^-e^+	$\nu_{\tau} \tau^{+} s \bar{c}$

Table 4:

Process Class	Initial state	Final state
25	$e^- e^+$	$ u_e \ e^+ \ e^- \ ar{ u}_e$
20	e^-e^+	$ \nu_e e^+ e^- \nu_e $ $ \nu_e e^+ \mu^- \bar{\nu}_\mu $
	e^-e^+	$ u_e \ e^+ \ \mu^- \ u_\mu $ $ u_e \ e^+ \ au^- \ u_ au$
	e^-e^+	$ u_e e^+ \tau^- \overline{\nu_{ au}} $ $ u_\mu \mu^+ e^- \overline{\nu}_e$
	e^-e^+	
	e^-e^+	$ u_{\mu} \ \mu^{+} \ \mu^{-} \ ar{ u}_{\mu} $ $ u_{\mu} \ \mu^{+} \ au^{-} \ ar{ u}_{ au} $
	e^-e^+	$ u_{\mu} \mu \tau u_{ au} $ $ u_{ au} \tau^+ e^- \bar{\nu}_e $
	e^-e^+	$ u_{ au}$ τ τ ν_{e} $ u_{ au}$
	$e^- e^+$	$ u_{ au}$
	$e^- e^+$	$ u_e \bar{ u}_e \mu^- \mu^+ $
	$e^- e^+$	$ u_e \ ar{ u}_e \ ar{ au}^- \ au^+$
	$e^- e^+$	$ u_{\mu} \ \bar{\nu}_{\mu} \ e^{-} \ e^{+}$
	$e^- e^+$	$ u_{\mu} \ \bar{ u}_{\mu} \ \bar{ u}^{-} \ au^{+}$
	$e^ e^+$	$ u_{ au} \bar{\nu}_{ au} e^- e^+ $
	$e^ e^+$	$ u_{ au} \; \bar{ u}_{ au} \; \mu^- \; \mu^+$
		1 1 1 1 1 1 1 1
26	$e^- e^+$	$e^{-} e^{+} e^{-} e^{+}$
	$e^- e^+$	$e^ e^+$ $\mu^ \mu^+$
	$e^- e^+$	$e^{-} e^{+} \tau^{-} \tau^{+}$
	$e^- e^+$	$\mu^ \mu^+$ $\mu^ \mu^+$
	$e^- e^+$	$\mu^-~\mu^+~ au^-~ au^+$
	$e^- e^+$	$ au^ au^+$ $ au^ au^+$
27	n= .	4 =
21	$e^-\gamma$	$ u_e d \bar{u} $
-	$e^-\gamma$	$\nu_e \ s \ \bar{c}$
28	$e^-\gamma$	$e^{-} e^{-} e^{+}$
20	$e^{-\gamma}$	$e^- \mu^- \mu^+$
	$e^{-\gamma}$	$e^ au^ au^+$
	$e^{-\gamma}$	$e^- \ u_\mu \ ar{ u}_\mu$
	$e^{-\gamma}$	$e^- u_{ au} ar{ u}_{ au}$
	$e^{-\gamma}$	$ u_e \ e^- \ \bar{\nu}_e$
	$e^{-\stackrel{\prime}{\gamma}}$	$ u_e^{} \mu^{} \bar{\nu}_{\mu}$
	$e^-\dot{\gamma}$	$ u_e \; au^- \; ar{ u}_ au$
29	γe^+	$\bar{\nu}_e \ u \ \bar{d}$
	γe^+	$\bar{\nu}_e \ c \ \bar{s}$

Table 5:

Process Class	Initial state	Final state
30	$ \gamma e^{+} $	$e^{+} e^{-} e^{+}$ $e^{+} \mu^{-} \mu^{+}$ $e^{+} \tau^{-} \tau^{+}$ $e^{+} \nu_{\mu} \bar{\nu}_{\mu}$ $e^{+} \nu_{\tau} \bar{\nu}_{\tau}$ $\bar{\nu}_{e} \nu_{e} e^{+}$ $\bar{\nu}_{e} \nu_{\mu} \mu^{+}$ $\bar{\nu}_{e} \nu_{\tau} \tau^{+}$
31	$\gamma\gamma$ $\gamma\gamma$	$egin{array}{c} u \ ar{u} \ d \ ar{d} \end{array}$
32	$\gamma\gamma$ $\gamma\gamma$	$egin{array}{c} s \ ar{s} \ c \ ar{c} \end{array}$
33	$\gamma\gamma$	b \bar{b}
34	$\gamma\gamma$	$e^- e^+$
35	$\gamma\gamma$	$\mu^- \mu^+$
36	$\gamma\gamma$	$ au^- au^+$
37	e ⁻ e ⁺ e ⁻ e ⁺ e ⁻ e ⁺	$\begin{array}{cccccccccccccccccccccccccccccccccccc$

Table 6:

Process Class	Initial state	Final state
38	$e^{-} e^{+}$	$ u_e \ \bar{ u}_e \ u \ \bar{u} \ u \ \bar{u}$
	$e^- e^+$	$ u_{\mu} \bar{\nu}_{\mu} u \bar{u} u \bar{u} $
	$e^- e^+$	$ u_{\tau} \bar{\nu}_{\tau} u \bar{u} u \bar{u}$
	$e^- e^+$	$ u_e \ \bar{\nu}_e \ d \ \bar{d} \ d \ \bar{d}$
	$e^- e^+$	$ u_{\mu} \ \bar{ u}_{\mu} \ d \ \bar{d} \ d \ \bar{d}$
	$e^- e^+$	$ u_{ au}^{\mu} ar{ u}_{ au}^{\mu} d ar{d} d ar{d}$
	$e^- e^+$	$ u_e \ ar{ u}_e \ s \ ar{s} \ s \ ar{s}$
	$e^- \ e^+$	$ u_{\mu} \ ar{ u}_{\mu} \ s \ ar{s} \ s \ ar{s}$
	$e^- e^+$	$ u_{ au}^{ au} ar{ u}_{ au}^{ au} s ar{s} s ar{s}$
	$e^- e^+$	$ u_e \ \bar{\nu}_e \ c \ \bar{c} \ c \ \bar{c}$
	$e^- e^+$	$ u_{\mu} \ \bar{\nu}_{\mu} \ c \ \bar{c} \ c \ \bar{c}$
	$e^- e^+$	$ u_{ au} \ \bar{ u}_{ au} \ c \ \bar{c} \ c \ \bar{c}$
	$e^- e^+$	$\nu_e \ \bar{\nu}_e \ u \ \bar{u} \ s \ \bar{s}$
	$e^- e^+$	$\nu_{\mu} \ \bar{\nu}_{\mu} \ u \ \bar{u} \ s \ \bar{s}$
	$e^- e^+$	$\nu_{\tau} \ \bar{\nu}_{\tau} \ u \ \bar{u} \ s \ \bar{s}$
	$e^- e^+$	$\nu_e \ \bar{\nu}_e \ u \ \bar{u} \ c \ \bar{c}$
	$e^- e^+$	$\nu_{\mu} \ \bar{\nu}_{\mu} \ u \ \bar{u} \ c \ \bar{c}$
	$e^- e^+$	$\nu_{\tau} \ \bar{\nu}_{\tau} \ u \ \bar{u} \ c \ \bar{c}$
	$e^- e^+$	$\nu_e \ \bar{\nu}_e \ d \ \bar{d} \ s \ \bar{s}$
	$e^- e^+$	$ u_{\mu} \ \bar{ u}_{\mu} \ d \ \bar{d} \ s \ \bar{s}$
	$e^- e^+$	$ u_{ au} \ \bar{ u}_{ au} \ d \ \bar{d} \ s \ \bar{s}$
	$e^- e^+$	$\nu_e \ \bar{\nu}_e \ c \ \bar{c} \ d \ \bar{d}$
	$e^- e^+$	$ u_{\mu} \ \bar{\nu}_{\mu} \ c \ \bar{c} \ d \ \bar{d}$
	$e^- e^+$	$ u_{ au} \ \bar{ u}_{ au} \ c \ \bar{c} \ d \ \bar{d}$
	$e^- e^+$	$\nu_e \ \bar{\nu}_e \ u \ \bar{u} \ b \ \bar{b}$
	$e^- e^+$	$ u_{\mu} \ \bar{ u}_{\mu} \ u \ \bar{u} \ b \ \bar{b}$
	$e^- e^+$	$ u_{ au} \ \bar{ u}_{ au} \ u \ \bar{u} \ b \ \bar{b}$
	$e^- e^+$	$ u_e \ ar{ u}_e \ d \ ar{d} \ b \ ar{b}$
	$e^- e^+$	$ u_{\mu} \; ar{ u}_{\mu} \; d \; ar{d} \; b \; ar{b}$
	$e^- e^+$	$ u_{ au} \; ar{ u}_{ au} \; d \; ar{d} \; b \; ar{b}$
	$e^- e^+$	$ u_e \; ar{ u}_e \; s \; ar{s} \; b \; ar{b}$
	$e^- e^+$	$ u_{\mu}\;ar{ u}_{\mu}\;s\;ar{s}\;b\;ar{b}$
	$e^- e^+$	$ u_{ au} \ ar{ u}_{ au} \ s \ ar{s} \ b \ ar{b}$
	$e^- e^+$	$ u_e \; ar{ u}_e \; c \; ar{c} \; b \; ar{b}$
	$e^- e^+$	$ u_{\mu} \ ar{ u}_{\mu} \ c \ ar{c} \ b \ ar{b}$
	$e^- e^+$	$ u_{ au} \ \bar{ u}_{ au} \ c \ \bar{c} \ b \ \bar{b}$
20		_ 7 _
39	$e^{-} e^{+}$	$\nu_e \ \bar{\nu}_e \ u \ \bar{d} \ s \ \bar{c}$
	$e^{-} e^{+}$	$ u_{\mu} \ ar{ u}_{\mu} \ u \ ar{d} \ s \ ar{c}$
	e ⁻ e ⁺	$ u_{ au} \bar{ u}_{ au} u \bar{d} s \bar{c} $
	$e^{-} e^{+}$	$\nu_e \ \bar{\nu}_e \ c \ \bar{s} \ d \ \bar{u}$
	$e^{-} e^{+}$	$ u_{\mu} \ \bar{\nu}_{\mu} \ c \ \bar{s} \ d \ \bar{u}$
	$e^- e^+$	$\nu_{\tau} \ \bar{\nu}_{\tau} \ c \ \bar{s} \ d \ \bar{u}$

Table 7:

Process Class	Initial state	e Final state
40	$e^{-} e^{+}$	v v dda
40	$\begin{array}{ccc} e & e^+ \\ e^- & e^+ \end{array}$	$egin{aligned} u_e & ar u_e & u & d & d & ar u \ u_\mu & ar u_\mu & u & ar d & d & ar u \end{aligned}$
	e^-e^+	$egin{array}{lll} u_{\mu} & u_{\mu} & u & ar{d} & a & a \\ u_{ au} & ar{ u}_{ au} & ar{d} & ar{d} & ar{u} \end{array}$
	e^-e^+	$ u_{ au} \ u_{ au} \ u \ a \ a \ a \ u $ $ u_{e} \ ar{ u}_{e} \ c \ ar{s} \ s \ ar{c}$
	e^-e^+	$ u_e \ u_e \ c \ s \ c \ $ $ u_\mu \ ar{ u}_\mu \ c \ ar{s} \ s \ ar{c}$
	e^-e^+	$ u_{\mu} \ \overline{\nu}_{\mu} \ c \ \overline{s} \ s \ \overline{c} $ $ u_{\tau} \ \overline{\nu}_{\tau} \ c \ \overline{s} \ s \ \overline{c}$
41(a)	$e^- e^+$	$ u_e \; ar{ u}_e \; u_e \; ar{ u}_e \; \mu^- \; \mu^+$
· ,	$e^- e^+$	$ u_e \ ar{ u}_e \ u_e \ ar{ u}_e \ au^- \ au^+$
	$e^- \ e^+$	$ u_e \; ar{ u}_e \; u_\mu \; ar{ u}_\mu \; au^- \; au^+$
	$e^- \ e^+$	$ u_e \ \bar{\nu}_e \ \nu_{ au} \ \bar{\nu}_{ au} \ \mu^- \ \mu^+$
	$e^- e^+$	$ u_{\mu} \ \bar{\nu}_{\mu} \ \nu_{\mu} \ \bar{\nu}_{\mu} \ e^{-} \ e^{+}$
	$e^- e^+$	$ u_{\mu} \ \bar{ u}_{\mu} \ u_{\mu} \ \bar{ u}_{\mu} \ au^{-} \ au^{+}$
	$e^- e^+$	$\nu_{\mu} \ \bar{\nu}_{\mu} \ \nu_{\tau} \ \bar{\nu}_{\tau} \ e^- \ e^+$
	$e^- e^+$	$\nu_{\tau} \ \bar{\nu}_{\tau} \ \nu_{\tau} \ \bar{\nu}_{\tau} \ e^- \ e^+$
	$e^- e^+$	$\nu_{ au} \; \bar{\nu}_{ au} \; \nu_{ au} \; \bar{\nu}_{ au} \; \mu^- \; \mu^+$
	$e^- e^+$	$\nu_e \ \bar{\nu}_e \ \nu_e \ e^+ \ e^- \ \bar{\nu}_e$
	$e^- e^+$	$\nu_e \ \bar{\nu}_e \ \nu_e \ e^+ \ \mu^- \ \bar{\nu}_\mu$
	$e^{-} e^{+}$	$ u_e \ \bar{\nu}_e \ \nu_e \ e^+ \ au^- \ \bar{\nu}_ au$
	$e^{-} e^{+}$	$ u_e \ \bar{\nu}_e \ \nu_\mu \ \mu^+ \ e^- \ \bar{\nu}_e$
	$e^- e^+$	$ u_e \ ar{ u}_e \ u_\mu \ \mu^+ \ \mu^- \ ar{ u}_\mu$
	$e^{-} e^{+}$	$ u_e \ ar{ u}_e \ u_\mu \ \mu^+ \ au^- \ ar{ u}_ au$
	$e^- e^+$	$ u_e \ \bar{\nu}_e \ \nu_ au \ au^+ \ e^- \ \bar{\nu}_e$
	$e^{-} e^{+}$	$ u_e \ \bar{ u}_e \ u_ au \ au^+ \ \mu^- \ \bar{ u}_\mu$
	e ⁻ e ⁺	$ u_e \ ar{ u}_e \ u_ au^+ \ au^- \ ar{ u}_ au^- $
	$e^{-} e^{+}$	$ u_{\mu} \bar{\nu}_{\mu} \nu_{e} e^{+} e^{-} \bar{\nu}_{e} $
	$e^- \ e^+$ $e^- \ e^+$	$ u_{\mu} \bar{\nu}_{\mu} \nu_{e} e^{+} \mu^{-} \bar{\nu}_{\mu} $
	e^-e^+	$ u_{\mu} \bar{\nu}_{\mu} \nu_{e} e^{+} \tau^{-} \bar{\nu}_{\tau} $
	e^-e^+	$ u_{\mu} \ \bar{\nu}_{\mu} \ \nu_{\mu} \ \mu^{+} \ e^{-} \ \bar{\nu}_{e} $
	e^-e^+	$ u_{\mu} \; ar{ u}_{\mu} \; u_{\mu} \; \mu^{+} \; \mu^{-} \; ar{ u}_{\mu} onumber onumber $
	$e^- e^+$	$ u_{\mu} \bar{\nu}_{\mu} \nu_{\mu} \mu \mu \tau \bar{\nu}_{\tau} $ $ u_{\mu} \bar{\nu}_{\mu} \nu_{\tau} \tau^{+} e^{-} \bar{\nu}_{e} $
	$e^- e^+$	$ u_{\mu} \ \overline{\nu}_{\mu} \ \overline{\nu}_{\tau} \ r \ c \ \overline{\nu}_{e} $ $ u_{\mu} \ \overline{\nu}_{\mu} \ \overline{\nu}_{\tau} \ \overline{\nu}_{\tau} \ \tau^{+} \ \mu^{-} \ \overline{\nu}_{\mu} $
	$e^ e^+$	$ u_{\mu} \bar{\nu}_{\mu} \nu_{\tau} \tau^{+} \tau^{-} \bar{\nu}_{\tau} $
	$e^ e^+$	$ \nu_{\mu} \; \bar{\nu}_{\mu} \; \nu_{\tau} \; \nu_{e} \; e^{+} \; e^{-} \; \bar{\nu}_{e} $
	$e^ e^+$	$ u_{ au} \bar{\nu}_{ au} \nu_e e^+ \mu^- \bar{\nu}_{\mu}$
	$e^ e^+$	$ u_{ au} \bar{ u}_{ au} \nu_{e} e^{+} \tau^{-} \bar{ u}_{ au} $
	$e^ e^+$	$\nu_{\tau} \; \bar{\nu}_{\tau} \; \nu_{\mu} \; \mu^{+} \; e^{-} \; \bar{\nu}_{e}$
	$e^- \ e^+$	$ u_{ au} \; \bar{ u}_{ au} \; u_{\mu} \; \mu^{+} \; \mu^{-} \; \bar{ u}_{\mu}$
	$e^- \ e^+$	$ u_{ au} \; \bar{ u}_{ au} \; \nu_{\mu} \; \mu^+ \; au^- \; \bar{ u}_{ au}$
	$e^- e^+$	$\nu_{\tau} \ \bar{\nu}_{\tau} \ \nu_{\tau} \ \tau^{+} \ e^{-} \ \bar{\nu}_{e}$
	$e^- e^+$	$ u_{ au} \; \bar{ u}_{ au} \; u_{ au} \; au^+ \; \mu^- \; \bar{ u}_{\mu}$
	$e^- e^+$	$ u_{ au} \; \bar{ u}_{ au} \; u_{ au} \; au^+ \; au^- \; \bar{ u}_{ au}$

Table 8:

Process Class	Initial state	Final state
41(b)	$e^- e^+$	$\nu_e \; \bar{\nu}_e \; \nu_e \; e^+ \; d \; \bar{u}$
	$e^- e^+$	$\nu_e \; \bar{\nu}_e \; \nu_e \; e^+ \; s \; \bar{c}$
	$e^- e^+$	$\nu_e \ \bar{\nu}_e \ \nu_\mu \ \mu^+ \ d \ \bar{u}$
	$e^- e^+$	$\nu_e \; \bar{\nu}_e \; \nu_\mu \; \mu^+ \; s \; \bar{c}$
	$e^{-} e^{+}$	$\nu_e \; \bar{\nu}_e \; \nu_\tau \; au^+ \; d \; \bar{u}$
	$e^{-} e^{+}$	$\nu_e \ \bar{\nu}_e \ \nu_ au \ au^+ \ s \ \bar{c}$
	$e^{-} e^{+}$	$\nu_{\mu} \; \bar{\nu}_{\mu} \; \nu_{e} \; e^{+} \; d \; \bar{u}$
	$e^{-} e^{+}$	$ u_{\mu} \bar{\nu}_{\mu} \nu_{e} e^{+} s \bar{c} $
	$e^{-} e^{+}$	$ u_{\mu} \ \bar{\nu}_{\mu} \ \nu_{\mu} \ \mu^{+} \ d \ \bar{u} $
	$e^{-} e^{+}$	$ u_{\mu} \bar{\nu}_{\mu} \nu_{\mu} \mu^{+} s \bar{c} $
	$e^- e^+$ $e^- e^+$	$ u_{\mu} \bar{\nu}_{\mu} \nu_{\tau} \tau^{+} d \bar{u} $
	e^-e^+	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
	e^-e^+	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
	e^-e^+	$ u_{ au} \ v_{ au} \ v_{e} \ e^{-s} \ c$ $ u_{ au} \ ar{ u}_{ au} \ \mu^{+} \ d \ ar{u}$
	e^-e^+	$ u_{ au} \ v_{ au} \ u_{\mu} \ \mu \ a \ a \ $ $ u_{ au} \ ar{ u}_{ au} \ u_{\mu} \ \mu^{+} \ s \ ar{c}$
	$e^- e^+$	$ u_{ au} \ \overline{\nu}_{ au} \ \overline{\nu}_{ au} \ \mu \ \overline{\sigma} \ \overline{c} $ $ u_{ au} \ \overline{\nu}_{ au} \ \overline{\nu}_{ au} \ \overline{\tau}^+ \ d \ \overline{u}$
	$e^- e^+$	$ u_{\tau} \ \overline{\nu_{\tau}} \ \nu_{\tau} \ r \ \alpha \ \alpha $ $ u_{\tau} \ \overline{\nu_{\tau}} \ \nu_{\tau} \ \nu_{\tau} \ \tau^{+} \ s \ \overline{c} $
	e^-e^+	$ u_e \ \bar{\nu}_e \ u \ \bar{d} \ e^- \ \bar{\nu}_e $
	$e^ e^+$	$ u_e \ \bar{\nu}_e \ u \ \bar{d} \ \mu^- \ \bar{\nu}_u$
	$e^ e^+$	$ u_e \ \bar{\nu}_e \ u \ \bar{d} \ \tau^- \ \bar{\nu}_{\tau} $
	$e^- e^+$	$\nu_e \ \bar{\nu}_e \ c \ \bar{s} \ e^- \ \bar{\nu}_e$
	$e^- \ e^+$	$\nu_e \ \bar{\nu}_e \ c \ \bar{s} \ \mu^- \ \bar{\nu}_\mu$
	$e^- e^+$	$\nu_e \; \bar{\nu}_e \; c \; \bar{s} \; au^- \; \bar{\nu}_ au$
	$e^- e^+$	$\nu_{\mu} \ \bar{\nu}_{\mu} \ u \ \bar{d} \ e^- \ \bar{\nu}_e$
	$e^- e^+$	$\nu_{\mu} \ \bar{\nu}_{\mu} \ u \ \bar{d} \ \mu^- \ \bar{\nu}_{\mu}$
	$e^- e^+$	$\nu_{\mu} \; \bar{\nu}_{\mu} \; u \; \bar{d} \; \tau^- \; \bar{\nu}_{\tau}$
	$e^- e^+$	$\nu_{\mu} \ \bar{\nu}_{\mu} \ c \ \bar{s} \ e^- \ \bar{\nu}_e$
	$e^- e^+$	$\nu_{\mu} \ \bar{\nu}_{\mu} \ c \ \bar{s} \ \mu^- \ \bar{\nu}_{\mu}$
	$e^- e^+$	$\nu_{\mu} \ \bar{\nu}_{\mu} \ c \ \bar{s}_{\underline{}} \tau^{-} \ \bar{\nu}_{\tau}$
	$e^{-} e^{+}$	$\nu_{\tau} \ \bar{\nu}_{\tau} \ u \ \bar{d} \ e^- \ \bar{\nu}_e$
	$e^{-} e^{+}$	$ u_{ au} \; \bar{\nu}_{ au} \; u \; \bar{d} \; \mu^- \; \bar{\nu}_{\mu}$
	$e^- e^+$	$\nu_{\tau} \ \bar{\nu}_{\tau} \ u \ \bar{d} \ \tau^- \ \bar{\nu}_{\tau}$
	$e^- e^+$	$\nu_{ au} \; \bar{\nu}_{ au} \; c \; \bar{s} \; e^- \; \bar{\nu}_e$
	$e^- e^+$	$\nu_{\tau} \ \bar{\nu}_{\tau} \ c \ \bar{s} \ \mu^- \ \bar{\nu}_{\mu}$
	$e^- e^+$	$\nu_{\tau} \ \bar{\nu}_{\tau} \ c \ \bar{s} \ \tau^- \ \bar{\nu}_{\tau}$

Table 9:

Process Class	Initial state	Final state
Process Class 42(a)	$e^{-}e^{+}$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$

Table 10:

Process Class	Initial state	Final state
(-)		
42(b)	$e^- e^+$	$\mu^- \mu^+ \nu_e e^+ d \bar{u}$
	$e^- e^+$	$\mu^- \mu^+ \nu_e e^+ s \bar{c}$
	$e^- e^+$	$\mu^- \mu^+ \nu_\mu \mu^+ d \bar{u}$
	$e^- e^+$	$\mu^- \mu^+ \nu_\mu \mu^+ s \bar{c}$
	$e^- e^+$	$\mu^- \mu^+ \nu_\tau \tau^+ d \bar{u}$
	$e^- e^+$	$\mu^- \mu^+ \nu_\tau \tau^+ s \bar{c}$
	$e^- e^+$	$ au^- au^+ au_e e^+ d \bar{u}$
	$e^- e^+$	$ au^- au^+ ext{ν_e } e^+ ext{ } s arc$
	$e^- e^+$	$\tau^- \ \tau^+ \ \nu_\mu \ \mu^+ \ d \ \bar{u}$
	$e^- e^+$	$ au^- au^+ u_\mu \mu^+ s \bar{c}$
	$e^- e^+$	$\tau^- \ \tau^+ \ \nu_\tau \ \tau^+ \ d \ \bar{u}$
	$e^- e^+$	$ au^- au^+ au_ au au^+ s ar{c}$
	$e^- e^+$	$e^- \ e^+ \ u \ \bar{d} \ e^- \ \bar{\nu}_e$
	$e^- e^+$	$e^-~e^+~u~ar{d}~\mu^-~ar{ u}_\mu$
	$e^- e^+$	$e^- \ e^+ \ u \ \bar{d} \ \tau^- \ \bar{\nu}_{\tau}$
	$e^- e^+$	$e^- \ e^+ c \ \bar{s} \ e^- \ \bar{\nu}_e$
	$e^- e^+$	$e^- \ e^+ c \ \bar{s} \ \mu^- \ \bar{\nu}_{\mu}$
	$e^- e^+$	$e^{-} e^{+} c \bar{s} \tau^{-} \bar{\nu}_{\tau}$
	$e^- e^+$	$\mu^- \mu^+ u \bar{d} e^- \bar{\nu}_e$
	$e^- e^+$	$\mu^- \; \mu^+ \; u \; \bar{d} \; \mu^- \; \bar{\nu}_{\mu}$
	$e^- e^+$	$\mu^- \mu^+ u \bar{d} \tau^- \bar{\nu}_{\tau}$
	$e^- e^+$	$\mu^- \; \mu^+ c \; \bar{s} \; e^- \; \bar{\nu}_e$
	$e^- e^+$	$\mu^- \; \mu^+ c \; \bar{s} \; \mu^- \; \bar{\nu}_\mu$
	$e^- e^+$	$\mu^- \; \mu^+ c \; \bar{s}_{\underline{\tau}} \tau^- \; \bar{\nu}_{\tau}$
	$e^- e^+$	$ au^- au^+ u \bar{d} e^- \bar{\nu}_e$
	$e^- e^+$	$ au^- au^+ u ar{d} \mu^- ar{ u}_\mu$
	$e^- e^+$	$ au^- au^+ u ar{d} au^- ar{ u}_{ au}$
	$e^- e^+$	$ au^- au^+ c \ \bar{s} \ e^- \ \bar{\nu}_e$
	$e^- e^+$	$ au^- au^+ c \ \bar{s} \ \mu^- \ \bar{\nu}_\mu$
	$e^- e^+$	$\tau^- \tau^+ c \bar{s} \tau^- \bar{\nu}_{\tau}$

Table 11:

Process Class	Initial state	Final state
40	1	
43	$e^- e^+$	$\nu_e \ \bar{\nu}_e \ \nu_e \ \bar{\nu}_e \ u \ \bar{u}$
	$e^- e^+$	$\nu_e \ \bar{\nu}_e \ \nu_e \ \bar{\nu}_e \ c \ \bar{c}$
	$e^- e^+$	$\nu_e \ \bar{\nu}_e \ \nu_\mu \ \bar{\nu}_\mu \ u \ \bar{u}$
	$e^- e^+$	$\nu_e \ \bar{\nu}_e \ \nu_\mu \ \bar{\nu}_\mu \ c \ \bar{c}$
	$e^- e^+$	$\nu_e \ \bar{\nu}_e \ \nu_\tau \ \bar{\nu}_\tau \ u \ \bar{u}$
	$e^- e^+$	$\nu_e \ \bar{\nu}_e \ \nu_\tau \ \bar{\nu}_\tau \ c \ \bar{c}$
	$e^- e^+$	$\nu_{\mu} \ \bar{\nu}_{\mu} \ \nu_{\mu} \ \bar{\nu}_{\mu} \ u \ \bar{u}$
	$e^- e^+$	$ u_{\mu} \ \bar{\nu}_{\mu} \ \nu_{\mu} \ \bar{\nu}_{\mu} \ c \ \bar{c}$
	$e^- e^+$	$\nu_{\mu} \ \bar{\nu}_{\mu} \ \nu_{\tau} \ \bar{\nu}_{\tau} \ u \ \bar{u}$
	$e^- e^+$	$\nu_{\mu} \ \bar{\nu}_{\mu} \ \nu_{\tau} \ \bar{\nu}_{\tau} \ c \ \bar{c}$
	$e^- e^+$	$\nu_{\tau} \ \bar{\nu}_{\tau} \ \nu_{\tau} \ \bar{\nu}_{\tau} \ u \ \bar{u}$
	$e^- e^+$	$\nu_{\tau} \ \bar{\nu}_{\tau} \ \nu_{\tau} \ \bar{\nu}_{\tau} \ c \ \bar{c}$
	$e^- e^+$	$\nu_e \ \bar{\nu}_e \ \nu_e \ \bar{\nu}_e \ d \ \bar{d}$
	$e^- e^+$	$\nu_e \ \bar{\nu}_e \ \nu_e \ \bar{\nu}_e \ s \ \bar{s}$
	$e^- e^+$	$ u_e \ ar{ u}_e \ u_e \ ar{ u}_e \ b \ ar{b}$
	$e^- e^+$	$\nu_e \; \bar{\nu}_e \; \nu_\mu \; \bar{\nu}_\mu \; d \; \bar{d}$
	$e^- e^+$	$\nu_e \ \bar{\nu}_e \ \nu_\mu \ \bar{\nu}_\mu \ s \ \bar{s}$
	$e^- e^+$	$ u_e \; ar{ u}_e \; u_\mu \; ar{ u}_\mu \; b \; ar{b}$
	$e^- e^+$	$\nu_e \ \bar{\nu}_e \ \nu_\tau \ \bar{\nu}_\tau \ d \ \bar{d}$
	$e^- e^+$	$\nu_e \ \bar{\nu}_e \ \nu_{ au} \ \bar{\nu}_{ au} \ s \ \bar{s}$
	$e^- e^+$	$ u_e \; ar{ u}_e \; u_ au \; ar{ u}_ au \; b \; ar{b}$
	$e^- e^+$	$ u_{\mu} \ \bar{\nu}_{\mu} \ \nu_{\mu} \ \bar{\nu}_{\mu} \ d \ \bar{d}$
	$e^- e^+$	$ u_{\mu} \ \bar{\nu}_{\mu} \ \nu_{\mu} \ \bar{\nu}_{\mu} \ s \ \bar{s}$
	$e^- e^+$	$ u_{\mu} \ \bar{ u}_{\mu} \ u_{\mu} \ \bar{ u}_{\mu} \ b \ \bar{b}$
	$e^- e^+$	$\nu_{\mu} \; \bar{\nu}_{\mu} \; \nu_{\tau} \; \bar{\nu}_{\tau} \; d \; \bar{d}$
	$e^- e^+$	$ u_{\mu} \; \bar{\nu}_{\mu} \; \nu_{\tau} \; \bar{\nu}_{\tau} \; s \; \bar{s}$
	$e^- e^+$	$ u_{\mu} \; ar{ u}_{\mu} \; u_{ au} \; u_{ au} \; ar{ u}_{ au} \; b \; ar{b}$
	$e^- \ e^+$	$\nu_{\tau} \ \bar{\nu}_{\tau} \ \nu_{\tau} \ \bar{\nu}_{\tau} \ d \ \bar{d}$
	$e^- e^+$	$\nu_{\tau} \ \bar{\nu}_{\tau} \ \nu_{\tau} \ \bar{\nu}_{\tau} \ s \ \bar{s}$
	$e^- e^+$	$\nu_{\tau} \ \bar{\nu}_{\tau} \ \nu_{\tau} \ \bar{\nu}_{\tau} \ b \ \bar{b}$

Table 12:

Process Class	Initial	state Final state
44(2)	$e^- \ e^+$	$ u_e \; ar{ u}_e \; u \; ar{u} \; \mu^- \; \mu^+$
44(a)	e^-e^+	$ u_e \ ar{ u}_e \ u \ ar{u} \ ar{ au}^- \ ar{ au}^+ $
	$e^ e^+$	$ u_{\mu} \bar{\nu}_{\mu} u \bar{u} e^{-} e^{+} $
	$e^ e^+$	$ u_{\mu} \ \bar{\nu}_{\mu} \ u \ \bar{u} \ \tau^{-} \ \tau^{+} $
	$e^ e^+$	$ u_{ au} \bar{\nu}_{\mu} u \bar{u} e^- e^+ $
	$e^ e^+$	$ u_{ au} \bar{ u}_{ au} u \bar{u} \mu^- \mu^+$
	$e^- e^+$	$u \bar{u} \nu_e e^+ e^- \bar{\nu}_e$
	$e^- e^+$	$u \bar{u} \nu_e^c e^+ \mu^- \bar{\nu}_\mu$
	$e^- e^+$	$u \bar{u} \nu_e e^+ \tau^- \bar{\nu}_{\tau}$
	$e^- e^+$	$u \bar{u} \nu_{\mu} \mu^{+} e^{-} \bar{\nu}_{e}$
	$e^- e^+$	$u \bar{u} \nu_{\mu} \mu^{+} \mu^{-} \bar{\nu}_{\mu}$
	$e^- e^+$	$u \ \bar{u} \ \nu_{\mu} \ \mu^+ \ \tau^- \ \bar{\nu}_{\tau}$
	$e^- e^+$	$u \ \bar{u} \ \nu_{\tau} \ \tau^+ \ e^- \ \bar{\nu}_e$
	$e^- e^+$	$u \bar{u} \nu_{\tau} \tau^{+} \mu^{-} \bar{\nu}_{\mu}$
	$e^- e^+$	$u \bar{u} \nu_{\tau} \tau^{+} \tau^{-} \bar{\nu}_{\underline{\tau}}$
	$e^- e^+$	$ u_e \ \bar{\nu}_e \ \mu^- \ \mu^+ \ d \ \bar{d}$
	$e^- e^+$	$ u_e \ ar{ u}_e \ au^- \ au^+ \ d \ ar{d}$
	$e^{-} e^{+}$	$ u_{\mu} \ \bar{\nu}_{\mu} \ e^{-} \ e^{+} \ d \ \bar{d}_{-}$
	$e^- e^+$	$ u_{\mu} \ \bar{\nu}_{\mu} \ au^{-} \ au^{+} \ d \ \bar{d}$
	$e^- e^+$	$ u_{\tau} \ \bar{\nu}_{\tau} \ e^{-} \ e^{+} \ d \ \bar{d}_{\bar{q}}$
	$e^- e^+$	$ u_{ au} \bar{\nu}_{ au} \mu^- \mu^+ d \bar{d}$
	$e^- e^+$	$d \stackrel{d}{} \nu_e e^+ e^- \bar{\nu}_e$
	$e^- e^+$	$d \stackrel{d}{_{\scriptstyle -}} \nu_e e^+ \mu^- \bar{\nu}_\mu$
	$e^{-} e^{+}$	$d\ \bar{d}\ \nu_e\ e^+\ au^-\ \bar{ u}_ au$
	$e^{-} e^{+}$	$d \ \bar{d} \ \nu_{\mu} \ \mu^{+} \ e^{-} \ \bar{\nu}_{e}$
	$e^{-} e^{+} \\ e^{-} e^{+}$	$d \ \bar{d} \ \nu_{\mu} \ \mu^{+} \ \mu^{-} \ \bar{\nu}_{\mu}$
	e^-e^+	$d\ ar{d}\ u_{\mu}\ \mu^{+}\ au^{-}\ ar{ u}_{ au} \ d\ ar{d}\ u_{ au}\ au^{+}\ e^{-}\ ar{ u}_{e}$
	e^-e^+	$d \ d \ u_{ au} \ au^+ \ \mu^- \ ar{ u}_{\mu}$
	e^-e^+	$d \ d \ u_{ au} \ u_{ au} \ u_{ au} \ u_{ au} \ d \ d \ u_{ au} \ u_{ au}^+ \ u_{ au}^- \ u_{ au}$
	$e^ e^+$	$ u_e \bar{\nu}_e \mu^- \mu^+ s \bar{s} $
	$e^ e^+$	$ u_e \ \overline{\nu}_e \ \tau^- \ \tau^+ \ s \ \overline{s} $
	$e^ e^+$	$ u_{\mu} \bar{\nu}_{\mu} e^{-} e^{+} s \bar{s} $
	$e^ e^+$	$ u_{\mu} \ \bar{\nu}_{\mu} \ \tau^{-} \ \tau^{+} \ s \ \bar{s} $
	$e^- e^+$	$ u_{ au}^{\mu} \bar{\nu}_{ au}^{\mu} e^{-} e^{+} s \bar{s} $
	$e^- e^+$	$ u_{ au} \; \bar{ u}_{ au} \; \mu^- \; \mu^+ \; s \; \bar{s}$
	$e^ e^+$	$s \bar{s} \nu_e e^+ e^- \bar{\nu}_e$
	$e^- e^+$	$s~ar{s}~ u_e~e^+~\mu^-~ar{ u}_\mu$
	$e^- e^+$	$s \bar{s} \nu_e e^+ \tau^- \bar{\nu}_{\tau}$
	$e^- e^+$	$s \bar{s} \nu_{\mu} \mu^{+} e^{-} \bar{\nu}_{e}$
	$e^- e^+$	$s \ \bar{s} \ u_{\mu} \ \mu^+ \ \mu^- \ \bar{ u}_{\mu}$
	$e^- e^+$	$s \bar{s} \nu_{\mu} \mu^{+} \tau^{-} \bar{\nu}_{\tau}$

Table 13:

Process Class	Initial state	Final state
4.4(1.)	1	
44(b)	$e^{-} e^{+}$	$s \bar{s} \nu_{\tau} \tau^{+} e^{-} \bar{\nu}_{e}$
	$e^{-} e^{+}$	$s \bar{s} \nu_{ au} \tau^+ \mu^- \bar{\nu}_{\mu}$
	$e^- e^+$	$s \bar{s} \nu_{\tau} \tau^{+} \tau^{-} \bar{\nu}_{\tau}$
	$e^{-} e^{+}$	$ u_e \ \bar{\nu}_e \ c \ \bar{c} \ \mu^- \ \mu^+$
	$e^- e^+$	$ u_e \ \bar{\nu}_e \ c \ \bar{c} \ au^- \ au^+$
	$e^- e^+$	$\nu_{\mu} \; \bar{\nu}_{\mu} \; c \; \bar{c} \; e^- \; e^+$
	$e^- e^+$	$\nu_{\mu} \ \bar{\nu}_{\mu} \ c \ \bar{c} \ \tau^- \ \tau^+$
	$e^- e^+$	$\nu_{\tau} \ \bar{\nu}_{\tau} \ c \ \bar{c} \ e^- \ e^+$
	$e^{-} e^{+}$	$\nu_{ au} \; \bar{\nu}_{ au} \; c \; \bar{c} \; \mu^- \; \mu^+$
	$e^{-} e^{+}$	$c \bar{c} \nu_e e^+ e^- \bar{\nu}_e$
	$e^- e^+$	$c \ \bar{c} \ \nu_e \ e^+ \ \mu^- \ \bar{\nu}_{\mu}$
	$e^- e^+$	$c \ \bar{c} \ \nu_e \ e^+ \ \tau^- \ \bar{\nu}_{\tau}$
	$e^- e^+$	$c \bar{c} \nu_{\mu} \mu^{+} e^{-} \bar{\nu}_{e}$
	$e^- e^+$	$c \bar{c} \nu_{\mu} \mu^{+} \mu^{-} \bar{\nu}_{\mu}$
	$e^- e^+$	$c \bar{c} \nu_{\mu} \mu^{+} \tau^{-} \bar{\nu}_{\tau}$
	$e^- e^+$	$c \bar{c} \nu_{\tau} \tau^{+} e^{-} \bar{\nu}_{e}$
	$e^- e^+$	$c \bar{c} \nu_{\tau} \tau^{+} \mu^{-} \bar{\nu}_{\mu}$
	$e^- e^+$	$c \bar{c} \nu_{\tau} \tau^{+} \tau^{-} \bar{\nu}_{\tau}$
45	$e^- e^+$	$b \; ar{b} \; u \; ar{d} \; s \; ar{c}$
	$e^- e^+$	$b \ \bar{b} \ c \ \bar{s} \ d \ \bar{u}$
		. = = .
46	$e^- e^+$	$b \ \overline{b} \ u \ \overline{d} \ d \ \overline{u}$
	$e^- e^+$	$b\;b\;c\;ar{s}\;s\;ar{c}$
		. = =
47	$e^- e^+$	$b \ \bar{b} \ u \ \bar{d} \ e^- \ \bar{\nu}_e$
	$e^- e^+$	$b\ ar{b}\ u\ ar{d}\ \mu^-\ ar{ u}_\mu$
	$e^{-} e^{+}$	$b\ ar{b}\ u\ ar{d}\ au^-\ ar{ u}_ au$
	$e^- e^+$	$b\ b\ c\ ar{s}\ e^-\ ar{ u}_e$
	$e^- e^+$	$b\ \underline{b}\ c\ \overline{s}\ \mu^-\ \overline{ u}_\mu$
	$e^{-} e^{+}$	$b\ ar{b}\ c\ ar{s}\ au^-\ ar{ u}_ au$
	$e^{-} e^{+}$	$b \ \bar{b} \ \nu_e \ e^+ \ d \ \bar{u}$
	$e^- e^+$	$b \ \underline{b} \ \nu_e \ e^+ \ s \ \overline{c}$
	$e^- e^+$	$b \ \bar{b} \ \nu_{\mu} \ \mu^+ \ d \ \bar{u}$
	$e^- e^+$	$b \ ar{b} \ u_{\mu} \ \mu^+ \ s \ ar{c}$
	$e^- e^+$	$b \ \bar{b} \ \nu_{ au} \ au^+ \ d \ \bar{u}$
	$e^- e^+$	$b \ \bar{b} \ \nu_{\tau} \ \tau^{+} \ s \ \bar{c}$

Table 14:

Process Class	Initial state	Final state
48	$e^{-} e^{+}$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
	$e^{-} e^{+}$	$b \ \bar{b} \ \nu_e \ e^+ \ \mu^- \ \bar{\nu}_\mu$
	$e^{-} e^{+}$	$b \ \bar{b} \ \nu_e \ e^+ \ au^- \ \bar{\nu}_{ au}$
	e ⁻ e ⁺	$b \ \bar{b} \ \nu_{\mu} \ \mu^{+} \ e^{-} \ \bar{\nu}_{e}$
	$e^- e^+$ $e^- e^+$	$b \ b \ \nu_{\mu} \ \mu^{+} \ \mu^{-} \ \bar{\nu}_{\mu}$
	e^-e^+	$b \ \bar{b} \ \nu_{\mu} \ \mu^+ \ \tau^- \ \bar{\nu}_{\tau}$
	e^-e^+	$egin{array}{cccccccccccccccccccccccccccccccccccc$
	e^-e^+	$b \ ar b \ u_ au \ au^+ \ au^- \ ar u_ au$
	e^-e^+	$ u_e \ ar{ u}_e \ \mu^- \ \mu^+ \ b \ ar{b} $
	$e^- e^+$	$ u_e \ ar{ u}_e \ ar{ u}_e \ ar{ au}^- \ au^+ \ b \ ar{b}$
	$e^- e^+$	$ u_{\mu} \ \bar{\nu}_{\mu} \ e^- \ e^+ \ b \ \bar{b} $
	$e^ e^+$	$ u_{\mu} \ ar{ u}_{\mu} \ au^{-} \ au^{+} \ b \ ar{b} $
	$e^ e^+$	$ u_{ au}^{\mu} \bar{ u}_{ au}^{\mu} e^- e^+ b \bar{b}$
	$e^- e^+$	$ u_{ au} \; ar{ u}_{ au} \; \mu^- \; \mu^+ \; b \; ar{b}$
49	$e^- e^+$	$u\ \bar{u}\ u\ \bar{u}\ b\ \bar{b}$
	$e^- e^+$	$d\;ar{d}\;d\;ar{d}\;b\;ar{b}$
	$e^- e^+$	$s\; ar{s}\; s\; ar{s}\; b\; ar{ar{b}}$
	$e^- e^+$	$c\; ar{c}\; c\; ar{c}\; b\; b_{_}$
	$e^- e^+$	$u \ \bar{u} \ s \ \bar{s} \ b \ \bar{b}$
	$e^- e^+$	$u \; \bar{u} \; c \; \bar{c} \; b \; \bar{b}$
	$e^- e^+$	$d\ ar{d}\ s\ ar{s}\ b\ ar{b}$
	$e^- e^+$	$c\ ar{c}\ d\ ar{d}\ b\ ar{b}$
F 0	_ +	1 1 1 1 1
50	$e^{-} e^{+}$	$b\ \overline{b}\ b\ \overline{b}\ b\ \overline{b}$
	$e^- e^+ \ e^- e^+$	$u \ \bar{u} \ b \ \bar{b} \ b \ \bar{b}$
	$\begin{array}{ccc} e & e^+ \\ e^- & e^+ \end{array}$	$egin{array}{cccccccccccccccccccccccccccccccccccc$
	e^-e^+	$egin{array}{cccccccccccccccccccccccccccccccccccc$
	e e	330000
51	$e^- e^+$	$e^-\;e^+\;b\;ar{b}\;b\;ar{b}$
O1	e^-e^+	$\mu^ \mu^+$ b \bar{b} b \bar{b}
	$e^- e^+$	$ au^- au^+ b ar{b} b ar{b}$

Table 15:

Process Class	Initial state	Final state
52	$e^{-} e^{+}$	$e^{-} e^{+} e^{-} e^{+} d \bar{d}$
32	e^-e^+	$e^{-}e^{+}e^{-}e^{+}s\bar{s}$
	e^-e^+	$e^{-}e^{+}e^{-}e^{+}b\bar{b}$
	e^-e^+	$e^- \ e^+ \ \mu^- \ \mu^+ \ d \ ar{d}$
	$e^- e^+$	$e^{-} e^{+} \mu^{-} \mu^{+} s \bar{s}$
	e^-e^+	$e^ e^+$ $\mu^ \mu^+$ b \bar{b}
	$e^ e^+$	$e^ e^+$ $ au^ au^+$ d $ar{d}$
	$e^- e^+$	$e^{-} \ e^{+} \ au^{-} \ au^{+} \ s \ ar{s}$
	$e^- e^+$	$e^-~e^+~ au^-~ au^+~b~ar{b}$
	$e^- \ e^+$	$\mu^ \mu^+$ $\mu^ \mu^+$ d \bar{d}
	$e^- e^+$	$\mu^- \mu^+ \mu^- \mu^+ s \bar{s}$
	$e^- e^+$	$\mu^-~\mu^+~\mu^-~\mu^+~b~ar{b}$
	$e^- e^+$	$\mu^- \mu^+ \tau^- \tau^+ d \bar{d}$
	$e^- e^+$	$\mu^- \; \mu^+ \; \tau^- \; \tau^+ \; s \; \bar{s}$
	$e^- e^+$	$\mu^-~\mu^+~ au^-~ au^+~b~ar{b}$
	$e^{-} e^{+}$	$ au^ au^+$ $ au^ au^+$ d \bar{d}
	$e^- e^+$	$ au^- au^+ au^- au^+ s ar{s}$
	$e^- e^+$	$ au^ au^+$ $ au^ au^+$ b $ar{b}$
	$e^{-} e^{+}$	$u \bar{u} e^- e^+ e^- e^+$
	$e^{-} e^{+}$	$u \ \bar{u} \ e^- \ e^+ \ \mu^- \ \mu^+$
	$e^{-} e^{+}$	$u \bar{u} e^- e^+ \tau^- \tau^+$
	$e^{-} e^{+}$	$u \bar{u} \mu^{-} \mu^{+} \mu^{-} \mu^{+}$
	$e^{-} e^{+} \ e^{-} e^{+}$	$u \bar{u} \mu^- \mu^+ \tau^- \tau^+$
	e e' $e^ e^+$	$u \ \bar{u} \ \tau^- \ \tau^+ \ \tau^- \ \tau^+ \ c \ \bar{c} \ e^- \ e^+ \ e^- \ e^+$
	e^-e^+	$c \ \bar{c} \ e^- \ e^+ \ \mu^- \ \mu^+$
	e^-e^+	c \bar{c} $e^ e^+$ $\tau^ \tau^+$
	e^-e^+	$c \bar{c} \mu^- \mu^+ \mu^- \mu^+$
	$e^- e^+$	c \bar{c} $\mu^ \mu^+$ $\tau^ \tau^+$
	$e^ e^+$	$c \ \bar{c} \ \tau^- \ au^+ \ au^- \ au^+$
53	$e^- e^+$	$e^{-} e^{+} e^{-} e^{+} e^{-} e^{+}$
	$e^- e^+$	$e^- \ e^+ \ e^- \ e^+ \ \mu^- \ \mu^+$
	$e^- e^+$	$e^{-} e^{+} e^{-} e^{+} \tau^{-} \tau^{+}$
	$e^- e^+$	$e^- \ e^+ \ \mu^- \ \mu^+ \ \mu^- \ \mu^+$
	$e^- e^+$	$e^{-} e^{+} \mu^{-} \mu^{+} \tau^{-} \tau^{+}$
	$e^- e^+$	$e^{-} e^{+} \tau^{-} \tau^{+} \tau^{-} \tau^{+}$
	$e^- e^+$	$\mu^- \ \mu^+ \ \mu^- \ \mu^+ \ \mu^- \ \mu^+$
	$e^- e^+$	$\mu^- \ \mu^+ \ \mu^- \ \mu^+ \ au^- \ au^+$
	$e^- e^+$	$\mu^- \ \mu^+ \ \tau^- \ \tau^+ \ \tau^- \ \tau^+$
	$e^- e^+$	$\tau^- \tau^+ \tau^- \tau^+ \tau^- \tau^+$

Table 16:

54 $e^{-}e^{+} \qquad u \bar{u} u \bar{u} \mu^{-} \mu^{+}$ $e^{-}e^{+} \qquad u \bar{u} u \bar{u} \mu^{-} \mu^{+}$ $e^{-}e^{+} \qquad u \bar{u} u \bar{u} \tau^{-} \tau^{+}$ $e^{-}e^{+} \qquad e^{-}e^{+} d \bar{d} d \bar{d}$ $e^{-}e^{+} \qquad \mu^{-} \mu^{+} d \bar{d} d \bar{d}$ $e^{-}e^{+} \qquad \mu^{-} \mu^{+} s \bar{s} s \bar{s}$ $e^{-}e^{+} \qquad \mu^{-} \mu^{+} s \bar{s} \bar{s} s \bar{s}$ $e^{-}e^{+} \qquad \mu^{-} \mu^{+} s \bar{s} \bar{s} s \bar{s}$ $e^{-}e^{+} \qquad \mu^{-} \mu^{+} s \bar{s} \bar{s} \bar{s} \bar{s}$ $e^{-}e^{+} \qquad \mu^{-} \mu^{+} s \bar{s} \bar{s} \bar{s} \bar{s} \bar{s} \bar{s} \bar{s} \bar$	Process Class	Initial state	Final state
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	54	a- a+	u ū u ū e- e+
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	04		
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$\begin{array}{cccccccccccccccccccccccccccccccccccc$			_
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		$e^- e^+$	$\mu^ \mu^+$ d \bar{d} b \bar{b}
$e^{-}e^{+}$ $\mu^{-}\mu^{+}s\bar{s}b\bar{b}$ $e^{-}e^{+}$ $\tau^{-}\tau^{+}s\bar{s}b\bar{b}$ $e^{-}e^{+}$ $c\bar{c}e^{-}e^{+}b\bar{b}$ $e^{-}e^{+}$ $c\bar{c}\mu^{-}\mu^{+}b\bar{b}$ $e^{-}e^{+}$ $c\bar{c}\tau^{-}\tau^{+}b\bar{b}$			
$e^{-}e^{+}$ $\tau^{-}\tau^{+}s\bar{s}b\bar{b}$ $e^{-}e^{+}$ $c\bar{c}e^{-}e^{+}b\bar{b}$ $e^{-}e^{+}$ $c\bar{c}\mu^{-}\mu^{+}b\bar{b}$ $e^{-}e^{+}$ $c\bar{c}\tau^{-}\tau^{+}b\bar{b}$			$e^-~e^+~s~ar{s}~b~ar{b}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		$e^- e^+$	$\mu^-~\mu^+~s~ar{s}~b~ar{b}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		$e^- e^+$	$ au^ au^+$ s $ar{s}$ b $ar{b}$
$e^- e^+ \qquad c \ \bar{c} \ \tau^- \tau^+ \ b \ \bar{b}$		$e^- e^+$	$c\ \bar{c}\ e^-\ e^+\ b\ \bar{b}$
_		$e^- e^+$	$c \; \bar{c} \; \mu^- \; \mu^+ \; b \; \bar{b}$
		$e^- e^+$	$c~ar{c}~ au^-~ au^+~b~ar{b}$
_	55	$e^- e^+$	$e^ e^+$ u \bar{d} s \bar{c}
$e^- e^+ \qquad \qquad \mu^- \mu^+ u \ \bar{d} \ s \ \bar{c}$			
$e^- e^+ \qquad \qquad \tau^- \tau^+ u \ \bar{d} \ s \ \bar{c}$			
$e^- e^+ \qquad \qquad e^- e^+ c \ \bar{s} \ d \ \bar{u}$			
$e^- e^+ \qquad \qquad \mu^- \ \mu^+ c \ \bar{s} \ d \ \bar{u}$			' '
$e^- e^+ \qquad \qquad \tau^- \tau^+ c \ \bar{s} \ d \ \bar{u}$		$e^- e^+$	$\tau^- \tau^+ c \bar{s} d \bar{u}$

Table 17:

Process Class	Initial state	Final state
56	$e^{-} e^{+}$	$e^- \ e^+ \ u \ \bar{d} \ d \ \bar{u}$
	$e^- e^+$	$\mu^- \mu^+ u \bar{d} d \bar{u}$
	$e^- e^+$	$ au^ au^+$ u $ar{d}$ d $ar{u}$
	$e^- e^+$	$e^-\ e^+ c\ ar s\ s\ ar c$
	$e^- e^+$	$\mu^- \; \mu^+ c \; \bar{s} \; s \; \bar{c}$
	$e^- e^+$	$ au^- au^+ c \ \bar{s} \ s \ \bar{c}$
57	$e^- e^+$	$u \bar{u} u \bar{u} u \bar{u}$
	$e^- e^+$	$u \bar{u} u \bar{u} s \bar{s}$
	$e^- e^+$	$u \bar{u} u \bar{u} c \bar{c}$
	$e^- e^+$	$u \bar{u} s \bar{s} s \bar{s}$
	$e^{-} e^{+}$	$u \ \overline{u} \ c \ \overline{c} \ c \ \overline{c}$
	$e^{-} e^{+}$	$d\stackrel{d}{} d\stackrel{d}{} d d$
	$e^{-} e^{+}$	$d\ d\ d\ d\ s\ ar{s}$
	$e^- e^+$	$c \bar{c} d d d d$
	$e^- e^+$	$d d s \bar{s} s \bar{s}$
	$e^{-} e^{+}$	$c\; ar{c}\; c\; ar{c}\; d\; ar{d}$
	$e^{-} e^{+}$	$s\ ar{s}\ s\ ar{s}\ s\ ar{s}$
	$e^- e^+$	$c\ \bar{c}\ c\ \bar{c}\ c\ \bar{c}$
58(a)	$e^{-} e^{+}$	$u\; ar{u}\; u\; ar{d}\; s\; ar{c}$
()	$e^- e^+$	$u \bar{u} c \bar{s} d \bar{u}$
	$e^- e^+$	$d\ ar{d}\ u\ ar{d}\ s\ ar{c}$
	$e^- e^+$	$d\ \bar{d}\ c\ \bar{s}\ d\ \bar{u}$
	$e^- e^+$	$s \bar{s} u \bar{d} s \bar{c}$
	$e^- e^+$	$s \bar{s} c \bar{s} d \bar{u}$
	$e^- e^+$	$c\ \bar{c}\ u\ \bar{d}\ s\ \bar{c}$
	$e^- e^+$	$c \bar{c} c \bar{s} d \bar{u}$
	$e^- e^+$	$u \bar{u} \nu_e e^+ d \bar{u}$
	$e^- e^+$	$u \bar{u} \nu_e e^+ s \bar{c}$
	$e^- e^+$	$u \bar{u} \nu_{\mu} \mu^{+} d \bar{u}$
	$e^- e^+$	$u \bar{u} \nu_{\mu} \mu^{+} s \bar{c}$
	$e^{-} e^{+}$	$u \bar{u} \nu_{\tau} \tau^{+} d \bar{u}$
	$e^- e^+$	$u \bar{u} \nu_{\tau} \tau^{+} s \bar{c}$
	$e^- e^+$	$u \bar{u} u d e^- \bar{\nu}_e$
	$e^{-} e^{+}$	$u \ \bar{u} \ u \ \bar{d} \ \mu^- \ \bar{\nu}_{\mu}$
	$e^{-} e^{+}$	$u \bar{u} u d \tau^- \bar{\nu}_{\tau}$
	$e^{-} e^{+}$	$u \bar{u} c \bar{s} e^- \bar{\nu}_e$
	$e^{-} e^{+}$	$u\ \bar{u}\ c\ \bar{s}\ \mu^-\ \bar{\nu}_\mu$
	$e^- e^+$	$u \bar{u} c \bar{s} \tau^- \bar{\nu}_{\tau}$

Table 18:

Process Class	Initial state	Final state
58(b)	$e^- e^+$	$d\ \bar{d}\ \nu_e\ e^+\ d\ \bar{u}$
()	$e^- e^+$	$d\ ar{d}\ u_e^{}\ e^+\ s\ ar{c}$
	$e^- e^+$	$d\ \bar{d}\ \nu_{\mu}\ \mu^{+}\ d\ \bar{u}$
	$e^- e^+$	$d\ \bar{d}\ \nu_{\mu}\ \mu^{+}\ s\ \bar{c}$
	$e^- e^+$	$d \bar{d} \nu_{\tau} \tau^{+} d \bar{u}$
	$e^- e^+$	$d \ \bar{d} \ \nu_{\tau} \ \tau^{+} \ s \ \bar{c}$
	$e^{-} e^{+}$	$d\ \bar{d}\ u\ \bar{d}\ e^-\ \bar{\nu}_e$
	$e^{-} e^{+}$	$d\ \bar{d}\ u\ \bar{d}\ \mu^-\ \bar{\nu}_\mu$
	$e^- e^+$	$d \stackrel{d}{d} u \stackrel{d}{d} \tau^- \bar{\nu}_{\tau}$
	$e^{-} e^{+}$	$d\ d\ c\ \bar{s}\ e^-\ \bar{\nu}_e$
	$e^{-} e^{+}$	$d\ ar{d}\ c\ ar{s}\ \mu^-\ ar{ u}_\mu$
	$e^{-} e^{+}$	$d\ ar{d}\ c\ ar{s}\ au^-\ ar{ u}_ au$
	$e^- e^+$ $e^- e^+$	$s \bar{s} \nu_e e^+ d \bar{u}$
	e^-e^+	$s \bar{s} \nu_e e^+ s \bar{c}$
	e^-e^+	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
	e^-e^+	$s \bar{s} \nu_{\mu} \mu s c$ $s \bar{s} \nu_{\tau} \tau^{+} d \bar{u}$
	e^-e^+	$s \bar{s} \nu_{ au} \tau^{+} s \bar{c}$
	$e^- e^+$	$s \bar{s} u \bar{d} e^- \bar{\nu}_e$
	$e^ e^+$	$s \bar{s} u \bar{d} \mu^- \bar{\nu}_\mu$
	$e^ e^+$	$s \bar{s} u \bar{d} \tau^- \bar{\nu}_{ au}$
	$e^- e^+$	$s \bar{s} c \bar{s} e^- \bar{\nu}_e$
	$e^- \ e^+$	$s \bar{s} c \bar{s} \mu^- \bar{\nu}_\mu$
	$e^- e^+$	$s\ \bar{s}\ c\ \bar{s}\ au^-\ ar{ u}_{ au}$
	$e^- e^+$	$c \ \bar{c} \ \nu_e \ e^+ \ d \ \bar{u}$
	$e^- e^+$	$c \ \bar{c} \ \nu_e \ e^+ \ s \ \bar{c}$
	$e^- e^+$	$c \ \bar{c} \ \nu_{\mu} \ \mu^{+} \ d \ \bar{u}$
	$e^{-} e^{+}$	$c \ \bar{c} \ \nu_{\mu} \ \mu^{+} \ s \ \bar{c}$
	$e^- e^+$	$c \bar{c} \nu_{\tau} \tau^{+} d \bar{u}$
	$e^{-} e^{+}$	$c \bar{c} \nu_{\tau} \tau^{+} s \bar{c}$
	e ⁻ e ⁺	$c\ \bar{c}\ u\ \bar{d}\ e^-\ \bar{ u}_e$
	$e^{-} e^{+}$	$c \bar{c} u \bar{d} \mu^- \bar{\nu}_\mu$
	$e^- e^+$ $e^- e^+$	$c \ \bar{c} \ u \ \bar{d} \ au^- \ ar{ u}_{ au}$
	e^-e^+	$c\ \bar{c}\ c\ \bar{s}\ e^-\ \bar{\nu}_e$
	e^-e^+	$c\ \bar{c}\ c\ \bar{s}\ \mu^-\ \bar{\nu}_\mu$
	е е	$c \bar{c} c \bar{s} \tau^- \bar{\nu}_{\tau}$
59	$e^- e^+$	$u\ \bar{u}\ u\ \bar{d}\ d\ \bar{u}$
	$e^- e^+$	$d\ ar{d}\ u\ ar{d}\ d\ ar{u}$
	$e^ e^+$	$s \ \bar{s} \ u \ \bar{d} \ d \ \bar{u}$
	$e^- e^+$	$c \ \bar{c} \ u \ \bar{d} \ d \ \bar{u}$
	$e^- e^+$	$u\ \bar{u}\ c\ \bar{s}\ s\ \bar{c}$
	$e^- e^+$	$d\; \bar{d}\; c\; \bar{s}\; s\; \bar{c}$
	$e^- e^+$	$s\ \bar{s}\ c\ \bar{s}\ s\ \bar{c}$
	$e^- e^+$	$c\ \bar{c}\ c\ \bar{s}\ s\ \bar{c}$

Table 19:

Process Class	Initial	state	Final state
60			= 1 =
60	$e^-\gamma$		$ u_e \ u \ \bar{u} \ d \ \bar{u}$
	$e^-\gamma$		$\nu_e \ u \ \bar{u} \ s \ \bar{c}$
	$e^-\gamma$		$\nu_e \ c \ \bar{c} \ d \ \bar{u}$
	$e^-\gamma$		$ u_e \ c \ \overline{c} \ s \ \overline{c}$
	$e^-\gamma$		$\nu_e d d d \bar{u}$
	$e^-\gamma$		$\nu_e \ d \ ar{d} \ s \ ar{c}$
	$e^-\gamma$		$\nu_e \ s \ \bar{s} \ d \ \bar{u}$
	$e^-\gamma$		$ u_e \ s \ \bar{s} \ s \ \bar{c}$
	$e^-\dot{\gamma}$		$ u_e \ b \ ar{b} \ d \ ar{u}$
	$e^-\dot{\gamma}$		$ u_e \; b \; ar{b} \; s \; ar{c}$
	$e^-\dot{\gamma}$		$e^- u \bar{d} d \bar{u}$
	$e^{-\dot{\gamma}}$		$e^- u \bar{d} s \bar{c}$
	$e^-\dot{\gamma}$		$e^-c\ \bar s\ d\ \bar u$
	$e^-\dot{\gamma}$		$e^-c\; \bar{s}\; s\; \bar{c}$
	$e^{-\gamma}$		$e^- u \bar{u} u \bar{u}$
	$e^{-\gamma}$		$e^- u \bar{u} c \bar{c}$
	$e^-\dot{\gamma}$		$e^-c\; ar c\; c\; ar c$
	$e^{-\dot{\gamma}}$		$e^- u \bar{u} s \bar{s}$
	$e^-\dot{\gamma}$		$e^-~u~ar{u}~b~ar{b}$
	$e^{-\gamma}$		$e^-c\ \bar c\ d\ \bar d$
	$e^-\dot{\gamma}$		$e^-c\ ar{c}\ b\ ar{b}$
	$e^{-\gamma}$		$e^ d$ \bar{d} d \bar{d}
	$e^-\gamma$		$e^ d$ \bar{d} s \bar{s}
	$e^-\gamma$		$e^ d$ \bar{d} b \bar{b}
	$e^-\gamma$		$e^- \ s \ \bar{s} \ s \ \bar{s}$
	$e^-\gamma$		$e^- \ s \ ar s \ b \ ar b$
	'		$e^ b$ \bar{b} b \bar{b}
	$e^{-\gamma}$		

Table 20:

Process Class	Initial state	Final state
61(a)	$e^-\gamma$	$e^- u \bar{u} e^- e^+$
OI(a)	$e^-\gamma$	$e^{-} u \bar{u} \mu^{-} \mu^{+}$
	$e^{-\gamma}$	$e^-u \bar{u} \tau^- \tau^+$
	$e^-\gamma$	e^-c \bar{c} $e^ e^+$
	$e^-\gamma$	e^-c \bar{c} $\mu^ \mu^+$
	$e^-\gamma$	$e^-c\ ar c\ au^-\ au^+$
	$e^-\gamma$	$\nu_e \ e^- \ e^+ \ d \ \bar{u}$
	$e^{-\gamma}$	$ u_e \ e^- \ e^+ \ s \ ar{c}$
	$e^{-\stackrel{\prime}{\gamma}}$	$ u_e^{-} \mu^{-} \mu^{+} d \bar{u}$
	$e^{-\stackrel{\prime}{\gamma}}$	$ u_e \mu^- \mu^+ s \bar{c}$
	$e^-\gamma$	$\nu_e \ \tau^- \ \tau^+ \ d \ \bar{u}$
	$e^-\gamma$	$ u_e \; au^- \; au^+ \; s \; ar{c}$
	$e^-\gamma$	$e^-\ e^-\ e^+\ d\ ar{d}$
	$e^-\gamma$	$e^-\ e^-\ e^+\ s\ \bar s$
	$e^-\gamma$	$e^-~e^-~e^+~b~ar{b}$
	$e^-\gamma$	$e^- \mu^- \mu^+ d \bar{d}$
	$e^-\gamma$	$e^- \mu^- \mu^+ s \bar{s}$
	$e^-\gamma$	$e^ \mu^ \mu^+$ b \bar{b}
	$e^-\gamma$	$e^- \tau^- \tau^+ d \bar{d}$
	$e^-\gamma$	$e^ \tau^ \tau^+$ s \bar{s}
	$e^-\gamma$	$e^- \ au^- \ au^+ \ b \ ar{b}$
	$e^-\gamma$	$e^- \nu_\mu \mu^+ d \bar{u}$
	$e^-\gamma$	$e^- \nu_\mu \mu^+ s \bar{c}$
	$e^-\gamma$	$e^- \nu_{ au} \ au^+ \ d \ ar{u}$
	$e^-\gamma$	$e^- \nu_{\tau} \tau^+ s \bar{c}$
	$e^-\gamma$	$e^- u \bar{d} e^- \bar{\nu}_e$
	$e^-\gamma$	$e^- u \bar{d}_{\bar{\mu}} \mu^- \bar{\nu}_{\mu}$
	$e^-\gamma$	$e^- u \bar{d} \tau^- \bar{\nu}_{\tau}$
	$e^-\gamma$	$e^- c \ \bar{s} \ e^- \ \bar{\nu}_e$
	$e^-\gamma$	$e^-c\ \bar{s}\ \mu^-\ ar{ u}_\mu$
	$e^-\gamma$	$e^-c\ \bar{s}\ \tau^-\ \bar{\nu}_{ au}$

Table 21:

Process Class	Initial state	Final state
61(b)	$e^-\gamma$	$\nu_e \ u \ \bar{u} \ e^- \ \bar{\nu}_e$
	$e^-\gamma$	$\nu_e \ u \ \bar{u} \ \mu^- \ \bar{\nu}_\mu$
	$e^-\gamma$	$\nu_e \ u \ \bar{u} \ \tau^- \ \bar{\nu}_{\tau}$
	$e^-\gamma$	$\nu_e \ c \ \bar{c} \ e^- \ \bar{\nu}_e$
	$e^-\gamma$	$\nu_e \ c \ \bar{c} \ \mu^- \ \bar{\nu}_\mu$
	$e^-\gamma$	$ u_e \ c \ \bar{c} \ au^- \ ar{ u}_{ au}$
	$e^-\gamma$	$\nu_e \ d \ \bar{d} \ e^- \ \bar{\nu}_e$
	$e^-\gamma$	$ u_e \ d \ \bar{d} \ \mu^- \ \bar{\nu}_\mu$
	$e^-\gamma$	$\nu_e \ d \ d \ au^- \ ar{ u}_{ au}$
	$e^-\gamma$	$\nu_e \ s \ \bar{s} \ e^- \ \bar{\nu}_e$
	$e^-\gamma$	$\nu_e \ s \ \bar{s} \ \mu^- \ \bar{\nu}_\mu$
	$e^-\gamma$	$\nu_e \ s \ \bar{s} \ \tau^- \ \bar{\nu}_{\tau}$
	$e^-\gamma$	$ u_e \ b \ ar{b} \ e^- \ ar{ u}_e$
	$e^-\gamma$	$ u_e \ b \ ar{b} \ \mu^- \ ar{ u}_\mu$
	$e^-\gamma$	$ u_e \ b \ ar{b} \ au^- \ ar{ u}_{ au}$
	$e^-\gamma$	$e^- \nu_\mu \bar{\nu}_\mu u \bar{u}$
	$e^-\gamma$	$e^- \ \nu_\mu \ \bar{\nu}_\mu \ c \ \bar{c}$
	$e^-\gamma$	$e^- \nu_{\tau} \bar{\nu}_{\tau} u \bar{u}$
	$e^-\gamma$	$e^- \nu_{\tau} \bar{\nu}_{\tau} c \bar{c}$
	$e^-\gamma$	$e^- \ u_{\mu} \ \bar{\nu}_{\mu} \ d \ \bar{d}$
	$e^-\gamma$	$e^- \nu_\mu \bar{\nu}_\mu s \bar{s}$
	$e^-\gamma$	$e^- \ u_{\mu} \ \bar{ u}_{\mu} \ b \ \bar{b}$
	$e^-\gamma$	$e^- \nu_{\tau} \bar{\nu}_{\tau} d \bar{d}$
	$e^-\gamma$	$e^- \nu_{\tau} \bar{\nu}_{\tau} s \bar{s}$
	$e^-\gamma$	$e^- \ u_{ au} \ ar{ u}_{ au} \ b \ ar{b}$
	$e^-\gamma$	$\nu_e \ \nu_e \ \bar{\nu}_e \ d \ \bar{u}$
	$e^-\gamma$	$\nu_e \ \nu_e \ \bar{\nu}_e \ s \ \bar{c}$
	$e^-\gamma$	$\nu_e \ \nu_\mu \ \bar{\nu}_\mu \ d \ \bar{u}$
	$e^-\gamma$	$ u_e \ u_\mu \ ar{ u}_\mu \ s \ ar{c}$
	$e^-\gamma$	$\nu_e \ \nu_\tau \ \bar{\nu}_\tau \ d \ \bar{u}$
	$e^-\gamma$	$\nu_e \ \nu_\tau \ \bar{\nu}_\tau \ s \ \bar{c}$

Table 22:

Process Class	Initial state	Final state
69	_	+ _ +
62	$e^-\gamma$	$e^{-} \ e^{-} \ e^{+} \ e^{-} \ e^{+}$
	$e^-\gamma$	$e^{-} \ e^{-} \ e^{+} \ \mu^{-} \ \mu^{+} \ e^{-} \ e^{-} \ e^{+} \ au^{-} \ au^{+}$
	$e^-\gamma$	$e^{-}e^{-}\mu^{-}\mu^{+}\mu^{-}\mu^{+}$
	$e^-\gamma$	$e^{-}\mu^{-}\mu^{+}\tau^{-}\tau^{+}$
	$e^-\gamma \ e^-\gamma$	$e^-\mu^-\mu^+\tau^-\tau^+$
	$e^{-\gamma}$	$e^{-} \nu_{\mu} \ ar{ u}_{\mu} \ e^{-} \ e^{+}$
	$e^-\gamma$	$e^- u_\mu ar{ u}_\mu au^- au^+$
	$e^-\gamma$	$e^{-} \nu_{ au} \bar{\nu}_{ au} e^{-} e^{+}$
	$e^-\gamma$	$e^- \ u_ au \ ar{ u}_ au \ \mu^- \ \mu^+$
	$e^{-\gamma}$	$e^- \nu_\mu \mu^+ e^- \bar{\nu}_e$
	$e^{-\stackrel{\prime}{\gamma}}$	$e^ \nu_\mu^\mu$ μ^+ $\mu^ \bar{\nu}_\mu$
	$e^-\gamma$	$e^ \nu_\mu$ μ^+ $\tau^ \bar{\nu}_ au$
	$e^-\gamma$	$e^ \nu_{ au}$ $ au^+$ $e^ \bar{\nu}_e$
	$e^-\gamma$	$e^- \nu_{\tau} \tau^+ \mu^- \bar{\nu}_{\mu}$
	$e^-\gamma$	$e^- \nu_{ au} \ au^+ \ au^- \ ar{ u}_{ au}$
	$e^-\gamma$	$\nu_e \ e^- \ e^+ \ e^- \ \bar{\nu}_e$
	$e^-\gamma$	$ u_e \ e^- \ e^+ \ \mu^- \ \bar{\nu}_\mu$
	$e^-\gamma$	$\nu_e \ e^- \ e^+ \ au^- \ ar{ u}_ au$
	$e^-\gamma$	$\nu_e \mu^- \mu^+ e^- \bar{\nu}_e$
	$e^-\gamma$	$ u_e \ \mu^- \ \mu^+ \ \mu^- \ \bar{\nu}_{\mu}$
	$e^-\gamma$	$ u_e \ \mu^- \ \mu^+ \ \tau^- \ \bar{\nu}_{ au} $
	$e^-\gamma$	$\nu_e \ \tau^- \ \tau^+ \ e^- \ \bar{\nu}_e$
	$e^-\gamma$	$ u_e \ au^- \ au^+ \ \mu^- \ ar{ u}_{\mu} $
	$e^-\gamma$	$ u_e au^- au^+ au^- ar u_ au$
	$e^-\gamma$	$e^- \nu_\mu \bar{\nu}_\mu \nu_\mu \bar{\nu}_\mu$
	$e^-\gamma \ e^-\gamma$	$e^- \ u_\mu \ ar{ u}_\mu \ u_ au \ ar{ u}_ au$ $e^- \ u_ au \ ar{ u}_ au \ u_ au \ ar{ u}_ au$
	$e^-\gamma$	$ u_e \ \nu_e \ \bar{\nu}_e \ e^- \ \bar{\nu}_e $
	$e^{-\gamma}$	$ u_e \ \nu_e \ \bar{\nu}_e \ \mu^- \ \bar{\nu}_\mu$
	$e^-\gamma$	$ u_e \ \nu_e \ \bar{\nu}_e \ au^- \ \bar{\nu}_ au$
	$e^{-\stackrel{\prime}{\gamma}}$	$ u_e \ \nu_\mu \ \bar{\nu}_\mu \ e^- \ \bar{\nu}_e$
	$e^-\dot{\gamma}$	$ u_e^- u_\mu^- u_\mu^- u_\mu^- u_\mu^- $
	$e^-\gamma$	$ u_e \ u_\mu \ abla^- \ abla^- \ abla^-$
	$e^-\gamma$	$\nu_e \ \nu_\tau \ \bar{\nu}_\tau \ e^- \ \bar{\nu}_e$
	$e^-\gamma$	$\nu_e \ \nu_\tau \ \bar{\nu}_\tau \ \mu^- \ \bar{\nu}_\mu$
_	$e^-\gamma$	$\nu_e \ \nu_\tau \ \bar{\nu}_\tau \ \tau^- \ \bar{\nu}_\tau$

Table 23:

Process Class	Initial	state	Final state
62	• · · · · +		J
63	γe^+		$\bar{\nu}_e \ u \ \bar{d} \ u \ \bar{u}$
	γe^+		$ar{ u}_e \ u \ d \ c \ ar{c}$
	γe^+		$\bar{\nu}_e \ c \ \bar{s} \ u \ \bar{u}$
	γe^+		$ar{ u}_e$ c $ar{s}$ c $ar{c}$
	γe^+		$ar{ u}_e \ u \ ar{d} \ d \ ar{d}$
	γe^+		$\bar{\nu}_e \ u \ d \ s \ \bar{s}$
	γe^+		$ar{ u}_e \ u \ ar{d} \ b \ ar{b}$
	γe^+		$\bar{\nu}_e \ c \ \bar{s} \ d \ \bar{d}$
	γe^+		$\bar{\nu}_e \ c \ \bar{s} \ s \ \bar{s}$
	γe^+		$ar{ u}_e c ar{s} b ar{b}$
	γe^+		$e^+~u~ar{d}~d~ar{u}$
	γe^+		$e^+~u~ar{d}~s~ar{c}$
	γe^+		$e^+c\ \bar s\ d\ \bar u$
	γe^+		$e^+c\; \bar{s}\; s\; \bar{c}$
	γe^+		e^+ u \bar{u} u \bar{u}
	γe^+		e^+ u \bar{u} c \bar{c}
	$\dot{\gamma} e^+$		$e^+c\ \bar c\ c\ \bar c$
	γe^+		e^+ u \bar{u} s \bar{s}
	$\stackrel{'}{\gamma}e^{+}$		$e^+~u~ar{u}~b~ar{b}$
	$\stackrel{'}{\gamma}e^+$		$e^+c\ \bar c\ d\ \bar d$
	$\stackrel{'}{\gamma}e^{+}$		$e^+c\ ar{c}\ b\ ar{b}$
	$\stackrel{'}{\gamma}e^+$		e^+ d \bar{d} d \bar{d}
	$\stackrel{'}{\gamma}e^+$		e^+ d \bar{d} s \bar{s}
	$\stackrel{'}{\gamma}e^{+}$		e^+ d \bar{d} b \bar{b}
	$\stackrel{'}{\gamma}e^{+}$		e^+ s \bar{s} s \bar{s}
	$\stackrel{'}{\gamma} e^+$		e^+ s \bar{s} b \bar{b}
	$\stackrel{'}{\gamma}e^{+}$		e^+ b \bar{b} b \bar{b}

Table 24:

Process Class	Initial state	e Final state
64(a)	$\gamma \ e^+$	$\bar{\nu}_e \ u \ \bar{d} \ e^- \ e^+$
	γe^+	$\bar{\nu}_e \ u \ \bar{d} \ \mu^- \ \mu^+$
	γe^+	$\bar{\nu}_e \ u \ \bar{d} \ \tau^- \ \tau^+$
	γe^+	$\bar{\nu}_e \ c \ \bar{s} \ e^- \ e^+$
	γe^+	$\bar{\nu}_e \ c \ \bar{s} \ \mu^- \ \mu^+$
	γe^+	$\bar{\nu}_e \ c \ \bar{s} \ au^- \ au^+$
	γe^+	e^+ u \bar{u} $e^ e^+$
	γe^+	e^+ u \bar{u} $\mu^ \mu^+$
	γe^+	e^+ u \bar{u} $\tau^ \tau^+$
	γe^+	$e^+c\ \bar c\ e^-\ e^+$
	γe^+	$e^+c\ \bar c\ \mu^-\ \mu^+$
	γe^+	$e^+c\ \bar c\ au^-\ au^+$
	γe^+	$e^+\ e^-\ e^+\ d\ ar{d}$
	γe^+	$e^+~e^-~e^+~s~ar{s}$
	γe^+	$e^+~e^-~e^+~b~ar{b}$
	γe^+	$e^+ \mu^- \mu^+ d \bar{d}$
	γe^+	$e^{+} \mu^{-} \mu^{+} s \bar{s}$
	γe^+	e^+ $\mu^ \mu^+$ b \bar{b}
	γe^+	$e^{+} \mu^{-} \mu^{+} b \bar{b}$ $e^{+} \tau^{-} \tau^{+} d \bar{d}$
	γe^+	$e^+~ au^-~ au^+~s~ar{s}$
	γe^+	$e^+~ au^-~ au^+~b~ar{b}$
	γe^+	$e^+ \ \nu_{\mu} \ \mu^+ \ d \ \bar{u}$
	γe^+	e^+ ν_{μ} μ^+ s \bar{c}
	γe^+	e^+ $\nu_{ au}$ τ^+ d \bar{u}
	γe^+	$e^+ \nu_{\tau} \tau^+ s \bar{c}$
	γe^+	$e^+ u \bar{d} e^- \bar{\nu}_e$
	γe^+	$e^+ u \bar{d} \mu^- \bar{\nu}_{\mu}$
	γe^+	$e^+ u \bar{d} \tau^- \bar{\nu}_{\tau}$
	$\stackrel{'}{\gamma}e^{+}$	$e^+c\; \bar{s}\; e^-\; \bar{\nu}_e$
	γe^+	$e^+c\ ar{s}\ \mu^-\ ar{ u}_\mu$
	γe^+	$e^+c\ \bar{s}\ \tau^-\ \bar{\nu}_{ au}$

Table 25:

Process Class	Initial state	Final state
64(b)	$\gamma \ e^+$	$\bar{\nu}_e \ \nu_e \ e^+ \ u \ \bar{u}$
01(0)	γe^+	$\bar{\nu}_e \ \nu_e \ e^+ c \ \bar{c}$
	γe^+	$\bar{\nu}_e \; \nu_\mu \; \mu^+ \; u \; \bar{u}$
	$\stackrel{7}{\gamma} \stackrel{6}{e^+}$	$\bar{\nu}_e \; \nu_\mu \; \mu^+ c \; \bar{c}$
	$\stackrel{7}{\gamma} \stackrel{6}{e^+}$	$\bar{\nu}_e \; \nu_{ au} \; \tau^+ \; u \; \bar{u}$
	γe^+	$\bar{\nu}_e \ \nu_{ au} \ au^+ c \ \bar{c}$
	γe^+	$\bar{\nu}_e \ \nu_e \ e^+ \ d \ \bar{d}$
	$\stackrel{7}{\gamma} e^+$	$\bar{\nu}_e \ \nu_e \ e^+ \ s \ \bar{s}$
	$\stackrel{7}{\gamma}e^+$	$ar{ u}_e \ u_e \ e^+ \ b \ ar{b}$
	$\stackrel{'}{\gamma}e^+$	$\bar{\nu}_e \; \nu_\mu \; \mu^+ \; d \; \bar{d}$
	$\stackrel{'}{\gamma}e^+$	$\bar{\nu}_e \; \nu_\mu \; \mu^+ \; s \; \bar{s}$
	γe^+	$\bar{\nu}_e \; \nu_\mu \; \mu^+ \; b \; \bar{b}$
	$\dot{\gamma} e^+$	$\bar{\nu}_e \; \nu_\tau \; \tau^+ \; d \; \bar{d}$
	γe^+	$ar{ u}_e \ u_ au \ au^+ \ s \ ar{s}$
	γe^+	$ar{ u}_e \ u_ au \ au^+ \ b \ ar{b}$
	γe^+	$e^+ \nu_\mu \bar{\nu}_\mu u \bar{u}$
	γe^+	e^+ ν_μ $\bar{\nu}_\mu$ c \bar{c}
	γe^+	$e^+ \nu_{\tau} \bar{\nu}_{\tau} u \bar{u}$
	γe^+	$e^+ \ \nu_{ au} \ \bar{\nu}_{ au} \ c \ \bar{c}$
	γe^+	$e^+ \ \nu_{\mu} \ \bar{\nu}_{\mu} \ d \ \bar{d}$
	γe^+	$e^+ \ \nu_{\mu} \ \bar{\nu}_{\mu} \ s \ \bar{s}$
	γe^+	$e^+ \ u_{\mu} \ \bar{\nu}_{\mu} \ b \ \bar{b}$
	γe^+	$e^+ \ \nu_{\tau} \ \bar{\nu}_{\tau} \ d \ \bar{d}$
	γe^+	$e^+ \nu_{\tau} \bar{\nu}_{\tau} s \bar{s}$
	γe^+	$e^+ \ \nu_{ au} \ \bar{\nu}_{ au} \ b \ \bar{b}$
	γe^+	$\bar{\nu}_e \ u \ \bar{d} \ \nu_e \ \bar{\nu}_e$
	γe^+	$\bar{\nu}_e \ u \ \bar{d} \ \nu_\mu \ \bar{\nu}_\mu$
	γe^+	$\bar{\nu}_e \ u \ \bar{d} \ \nu_{\tau} \ \bar{\nu}_{\tau}$
	γe^+	$\bar{\nu}_e \ c \ \bar{s} \ \nu_e \ \bar{\nu}_e$
	γe^+	$\bar{\nu}_e \ c \ \bar{s} \ \nu_\mu \ \bar{\nu}_\mu$
	γe^+	$\bar{\nu}_e \ c \ \bar{s} \ \nu_{\tau} \ \bar{\nu}_{\tau}$

Table 26:

Process Class	Initial state	Final state
a -		
65	γe^+	$e^{+} e^{-} e^{+} e^{-} e^{+}$
	γe^+	e^{+} e^{-} e^{+} μ^{-} μ^{+}
	γe^+	$e^{+} e^{-} e^{+} \tau^{-} \tau^{+}$
	γe^+	$e^{+} \mu^{-} \mu^{+} \mu^{-} \mu^{+}$
	γe^+	$e^{+} \mu^{-} \mu^{+} \tau^{-} \tau^{+}$ $e^{+} \tau^{-} \tau^{+} \tau^{-} \tau^{+}$
	γe^+	
	$\begin{array}{ccc} \gamma & e^+ \\ \gamma & e^+ \end{array}$	$e^+ \nu_{\mu} \bar{\nu}_{\mu} e^- e^+$
	γe^+	$e^{+} \ u_{\mu} \ \bar{ u}_{\mu} \ au^{-} \ au^{+} \ e^{+} \ u_{ au} \ \bar{ u}_{ au} \ e^{-} \ e^{+}$
	γe^+	$e^+ u_ au u_ au e^- e^ e^+ u_ au u_ au u^- u^+$
	γe^+	$e^{+} \ u_{\mu} \ \mu^{+} \ e^{-} \ ar{ u}_{e}$
	γe^+	$e^+ \ u_{\mu} \ \mu^+ \ \mu^- \ ar{ u}_{\mu}$
	γe^+	$e^+ u_\mu \mu^+ \tau^- \bar{\nu}_ au$
	γe^+	$e^+ \ u_{ au} \ au^+ \ e^- \ ar{ u}_e$
	$\stackrel{7}{\gamma} \stackrel{6}{e^+}$	e^+ $ u_{ au}$ $ au^+$ $ u^ ar{ u}_{\mu}$
	$\stackrel{'}{\gamma}e^{+}$	e^+ $\nu_{ au}$ $ au^+$ $ au^ ar{ u}_{ au}$
	γe^+	$\bar{\nu}_e \; \nu_e \; e^+ \; e^- \; e^+$
	γe^+	$\bar{\nu}_e \ \nu_e \ e^+ \ \mu^- \ \mu^+$
	γe^+	$\bar{\nu}_e \ \nu_e \ e^+ \ \tau^- \ \tau^+$
	γe^+	$\bar{\nu}_e \ \nu_\mu \ \mu^+ \ e^- \ e^+$
	γe^+	$\bar{\nu}_e \; \nu_\mu \; \mu^+ \; \mu^- \; \mu^+$
	γe^+	$\bar{\nu}_e \; \nu_\mu \; \mu^+ \; au^- \; au^+$
	γe^+	$\bar{\nu}_e \ \nu_\tau \ \tau^+ \ e^- \ e^+$
	γe^+	$\bar{\nu}_e \ \nu_ au \ au^+ \ \mu^- \ \mu^+$
	γe^+	$\bar{\nu}_e \; \nu_\tau \; au^+ \; au^- \; au^+$
	γe^+	$e^{+} \ \nu_{\mu} \ \bar{\nu}_{\mu} \ \nu_{\mu} \ \bar{\nu}_{\mu}$
	γe^+	$e^{+}_{\mu} \nu_{\mu} \bar{\nu}_{\mu} \nu_{\tau} \bar{\nu}_{\tau}$
	γe^+	e^+ $\nu_{ au}$ $\bar{\nu}_{ au}$ $\nu_{ au}$ $\bar{\nu}_{ au}$
	γe^+	$\bar{\nu}_e \ \nu_e \ e^+ \ \nu_e \ \bar{\nu}_e$
	$\begin{array}{ccc} \gamma & e^+ \\ \gamma & e^+ \end{array}$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
	γe^+	$ar{ u}_e \ u_e \ e^+ \ u_ au^- \ u_ au^- \ ar{ u}_e \ u_\mu \ \mu^+ \ u_e \ ar{ u}_e$
	γe^+	$\bar{\nu}_e \; \nu_\mu \; \mu^+ \; \nu_e \; \bar{\nu}_e$ $\bar{\nu}_e \; \nu_\mu \; \mu^+ \; \nu_\mu \; \bar{\nu}_\mu$
	γe^+	$ar{ u}_e \ u_\mu \ \mu^+ \ u_ au \ ar{ u}_ au$
	$\stackrel{7}{\gamma} \stackrel{6}{e^+}$	$\bar{\nu}_e \; \nu_\tau \; au^+ \; u_e \; \bar{\nu}_e$
	$\stackrel{'}{\gamma}e^+$	$ar u_e^- u_ au^+ u_\mu^-ar u_\mu^-$
	$\stackrel{'}{\gamma}e^+$	$\bar{\nu}_e \; \nu_\tau \; au^+ \; u_ au \; \bar{ u}_ au$

Table 27:

Process Class	Initial	state	Final state
66	γγ γγ γγ γγ γγ γγ γγ γγ γγ γγ		$\begin{array}{cccccccccccccccccccccccccccccccccccc$
67	77 77 77 77 77 77 77 77 77 77 77		$\begin{array}{cccccccccccccccccccccccccccccccccccc$

Table 28:

Process Class	Initial state	Final state
68	$\gamma\gamma$	$\nu_e \ \bar{\nu}_e \ u \ \bar{u}$
	$\gamma\gamma$	$\nu_e \ \bar{\nu}_e \ c \ \bar{c}$
	$\gamma\gamma$	$ u_{\mu} \ \bar{\nu}_{\mu} \ u \ \bar{u}$
	$\gamma\gamma$	$ u_{\mu} \ \bar{ u}_{\mu} \ c \ \bar{c}$
	$\gamma\gamma$	$\nu_{\tau} \ \bar{\nu}_{\tau} \ u \ \bar{u}$
	$\gamma\gamma$	$ u_{ au} \ ar{ u}_{ au} \ c \ ar{c}$
	$\gamma\gamma$	$ u_e \ \bar{ u}_e \ d \ \bar{d}$
	$\gamma\gamma$	$ u_e \ \bar{ u}_e \ s \ \bar{s}$
	$\gamma\gamma$	$ u_ear u_ebar b$
	$\gamma\gamma$	$ u_{\mu} \ ar{ u}_{\mu} \ d \ ar{d}$
	$\gamma\gamma$	$ u_{\mu} \ ar{ u}_{\mu} \ s \ ar{s}$
	$\gamma\gamma$	$ u_{\mu}ar{ u}_{\mu}bar{b}$
	$\gamma\gamma$	$ u_{ au} \ ar{ u}_{ au} \ d \ ar{d}$
	$\gamma\gamma$	$ u_{ au} \ \bar{ u}_{ au} \ s \ \bar{s}$
	$\gamma\gamma$	$ u_{ au} \; ar{ u}_{ au} \; b \; ar{b}$
69	$\gamma\gamma$	$e^{-} e^{+} e^{-} e^{+}$
	$\gamma\gamma$	$e^{-} e^{+} \mu^{-} \mu^{+}$
	$\gamma\gamma$	$e^ e^+$ $\tau^ \tau^+$
	$\gamma\gamma$	$\mu^ \mu^+$ $\mu^ \mu^+$
	$\gamma\gamma$	$\mu^ \mu^+$ $\tau^ \tau^+$
	$\gamma\gamma$	$ au^ au^+$ $ au^ au^+$

Table 29:

Process Class	Initial stat	te Final state
70	2/2/	$ u_e \; ar{ u}_e \; \mu^- \; \mu^+$
10	$\gamma\gamma$	$ u_e \ \overline{ u}_e \ \mu \ \mu $ $ \nu_e \ \overline{ u}_e \ au^- \ au^+ $
	$\gamma\gamma$ $\gamma\gamma$	$ u_{\mu} \ ar{ u}_{\mu} \ e^- \ e^+$
	$\gamma \gamma$	$ u_{\mu} ar{ u}_{\mu} au^{-} au^{+}$
	$\gamma\gamma$	$ u_{ au} \bar{ u}_{ au} e^- e^+ $
	$\gamma\gamma$	$ u_{ au}$ $\bar{ u}_{ au}$ $\mu^ \mu^+$
	$\gamma\gamma$	$\nu_e \ e^+ \ e^- \ \bar{\nu}_e$
	$\gamma\gamma$	$ u_e \ e^+ \ \mu^- \ \bar{\nu}_{\mu}$
	$\gamma\gamma$	$\nu_e~e^+~ au^-~ar{ u}_ au$
	$\gamma\gamma$	$\nu_{\mu} \ \mu^+ \ e^- \ \bar{\nu}_e$
	$\gamma\gamma$	$ u_{\mu} \ \mu^+ \ \mu^- \ ar{ u}_{\mu}$
	$\gamma\gamma$	$ u_{\mu} \ \mu^+ \ au^- \ ar{ u}_{ au}$
	$\gamma\gamma$	$ u_{ au} \ au^+ \ e^- \ ar{ u}_e$
	$\gamma\gamma$	$ u_{ au} \ au^+ \ \mu^- \ ar{ u}_{\mu}$
	$\gamma\gamma$	$ u_{ au} \stackrel{\tau^+}{\tau^-} \stackrel{\tau^-}{\bar{\nu}_{ au}} $
	$\gamma\gamma$	$u\ d\ e^-\ ar{ u}_e$
	$\gamma\gamma$	$u \ ar{d} \ \mu^- \ ar{ u}_\mu \ u \ ar{d} \ au^- \ ar{ u}_ au$
	$\gamma\gamma$	$egin{array}{cccccccccccccccccccccccccccccccccccc$
	$\gamma\gamma$ $\gamma\gamma$	$c~ar s~\mu^-~ar u_\mu$
	$\gamma\gamma$	$c~ar s~\mu^- u_\mu \ c~ar s~ au^-~ar u_ au$
	$\gamma \gamma$	$\nu_e e^+ d \bar{u}$
	$\gamma\gamma$	$\nu_e^- e^+ s \bar{c}$
	$\gamma\gamma$	$\nu_{\mu} \mu^{+} d \bar{u}$
	$\gamma\gamma$	$ u_{\mu} \mu^{+} s \bar{c}$
	$\gamma\gamma$	$\nu_{\tau} \ \tau^{+} \ d \ \bar{u}$
	$\gamma\gamma$	$\nu_{ au} \ au^+ \ s \ ar{c}$
	1	. = _
71	$e^{-} e^{+}$	$t \ ar{t} \ u_e \ ar{ u}_e$
	$e^- e^+$ $e^- e^+$	$egin{array}{ccc} t \; ar{t} \; u_{\mu} \; ar{ u}_{\mu} \ t \; ar{t} \; u_{ au} \; ar{ u}_{ au} \end{array}$
	e^-e^+	$egin{array}{cccc} t & t & u_{ au} & u_{ au} \ \end{array}$
	e^-e^+	$egin{array}{cccccccccccccccccccccccccccccccccccc$
	e^-e^+	$t \ t \ c \ c$ $t \ \overline{t} \ e^- \ e^+$
	$e^- e^+$	t \bar{t} $\mu^ \mu^+$
	$e^ e^+$	$t \ ar t \ au^- \ au^+$
	$e^- e^+$	$tar{t}dar{d}$
	$e^- e^+$	$t\; ar t\; s\; ar s$
	$e^- e^+$	$t\; ar t\; b\; ar b$

Table 30:

Process Class	Initial state	Final state
72	$\gamma\gamma$	t $ar{t}$
73	$e^-\gamma$	e^-t \bar{t}
	$e^-\gamma$	$ u_e \ b \ \overline{t}$
74	γe^+	$e^+ t \; ar{t} \ ar{ u}_e t \; ar{b}$
	γe^+	$ u_e \iota \ 0$
75	$e^- e^+$	$\nu_e \ \bar{\nu}_e H$
76	$e^-\gamma$	$e^- d \bar{d}$
	$e^-\gamma$	$egin{array}{ccc} e^- & s \ ar{s} \ e^- & b \ ar{b} \end{array}$
	$e^-\gamma \ e^-\gamma$	$e^-uar{u}$
	$e^-\gamma$	$e^-c \ \bar{c}$
77	γe^+	$e^+ \ d \ \bar{d}$
	γe^+	e^+ s \bar{s}
	$\begin{array}{ccc} \gamma & e^+ \\ \gamma & e^+ \end{array}$	$e^+ \ b \ ar{b}$ $e^+ \ u \ ar{u}$
	γe^+	e^+c \bar{c}
70	o- o+	о- о+ и
78	$e^- e^+$	$e^- e^+ H$