Topology Analysis * (v1.6.1)

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^{*}This package is implemented with reference to a program called Topo, which is developed by Prof. Shuxian Du from Zhengzhou University in China and has been widely used by people in BESIII collaboration. Several years ago, when I was a PhD student working on BESIII experiment, I learned the idea of topology analysis and a lot of programming techniques from the Topo program. So, I really appreciate Prof. Du's original work very much. To meet my own needs and to practice developing analysis tools with C++, ROOT and LaTex, I wrote the package from scratch. At that time, the package functioned well but was relatively simple. At the end of last year (2017), my co-supervisor, Prof. Chengping Shen reminded me that it could be a useful tool for Belle II experiment as well. So, I revised and extended it, making it more well-rounded and suitable for Belle II experiment. Here, I would like to thank Prof. Du for his original work, Prof. Shen for his suggestion and encouragement, and Wencheng Yan, Sen Jia, Yubo Li, Suxian Li, Longke Li, Guanda Gong, Junhao Yin, Xiaoping Qin, Xiqing Hao, HongPeng Wang, JiaWei Zhang and Yeqi Chen for their efforts in helping me test the program.

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Table 1: Event trees and their respective initial-final states.

	Table 1. Event trees and then respective intera-man states.				
index	event tree (event initial-final states)	iEvtTr	iEvtIFSts	nEvts	nCmltEvts
1	$\Upsilon(4S) \to B^0 \bar{B}^0, B^0 \to \rho^0 \pi^+ \omega D^-, \bar{B}^0 \to \pi^0 \pi^+ \pi^- \pi^- D^{*+}, \rho^0 \to \pi^+ \pi^-, \omega \to \pi^0 \gamma, D^- \to \mu^- \bar{\nu}_\mu K^*,$ $D^{*+} \to \pi^+ D^0, K^* \to \pi^- K^+, D^0 \to K^- a_1^+, a_1^+ \to \rho^0 \pi^+, \rho^0 \to \pi^+ \pi^-$ $(\Upsilon(4S) \to \mu^- \bar{\nu}_\mu \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- \pi^- K^+ K^- \gamma \gamma \gamma \gamma \gamma)$	0	0	1	1
2	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to K^{*}\chi_{c0}, \bar{B}^{0} \to D^{*+}D_{s}^{-}, K^{*} \to \pi^{-}K^{+}, \chi_{c0} \to \omega K^{+}K^{-}, D^{*+} \to \pi^{+}D^{0},$ $D_{s}^{-} \to \pi^{0}\pi^{-}\bar{K}^{*}, \omega \to \pi^{0}\pi^{+}\pi^{-}, D^{0} \to K_{S}K^{+}K^{-}, \bar{K}^{*} \to \bar{K}^{0}\gamma, K_{S} \to \pi^{+}\pi^{-}, \bar{K}^{0} \to K_{L}$ $(\Upsilon(4S) \to K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}K^{+}K^{-}K^{-}\gamma\gamma\gamma\gamma\gamma)$	1	1	1	2
3	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to K^{+}\bar{D}^{*-}D^{*0}, \bar{B}^{0} \to \mu^{-}\bar{\nu}_{\mu}D_{0}^{*+}, \bar{D}^{*-} \to \pi^{0}D^{-}, D^{*0} \to \pi^{0}D^{0}, D_{0}^{*+} \to \pi^{0}D^{+},$ $D^{-} \to e^{-}\bar{\nu}_{e}K^{*}, D^{0} \to \pi^{0}\pi^{+}K^{-}, D^{+} \to K_{L}a_{1}^{+}, K^{*} \to \pi^{-}K^{+}, a_{1}^{+} \to \rho^{0}\pi^{+}, \rho^{0} \to \pi^{+}\pi^{-}$ $(\Upsilon(4S) \to e^{-}\bar{\nu}_{e}\mu^{-}\bar{\nu}_{\mu}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{+}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	2	2	1	3
4	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{0}\pi^{+}\pi^{+}\pi^{-}\bar{D}^{*-}, \bar{B}^{0} \to D^{*+}D_{s}^{*-}, \bar{D}^{*-} \to \pi^{0}D^{-}, D^{*+} \to \pi^{+}D^{0}, D_{s}^{*-} \to D_{s}^{-}\gamma, $ $D^{-} \to K_{L}a_{1}^{-}, D^{0} \to K^{+}K^{-}, D_{s}^{-} \to \rho^{-}\eta', a_{1}^{-} \to \rho^{0}\pi^{-}, \rho^{-} \to \pi^{0}\pi^{-}, \eta' \to \pi^{+}\pi^{-}\eta, $ $\rho^{0} \to \pi^{+}\pi^{-}, \eta \to \gamma\gamma $ $(\Upsilon(4S) \to K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	3	3	1	4
5	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to e^{+}\nu_{e}D^{-}, \bar{B}^{0} \to \pi^{0}\pi^{+}\pi^{-}\pi^{-}D^{*+}, D^{-} \to e^{-}\bar{\nu}_{e}K^{0}, D^{*+} \to \pi^{+}D^{0}, K^{0} \to K_{S},$ $D^{0} \to e^{+}\nu_{e}K^{*-}, K_{S} \to \pi^{+}\pi^{-}, K^{*-} \to \pi^{-}\bar{K}^{0}, \bar{K}^{0} \to K_{L}$ $(\Upsilon(4S) \to e^{+}e^{+}e^{-}\nu_{e}\nu_{e}\bar{\nu}_{e}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\gamma\gamma)$	4	4	1	5
6	$\Upsilon(4S) \to B^{0}B^{0}, B^{0} \to \pi^{-}\rho^{+}\bar{D}^{*0}, B^{0} \to K^{*+}\bar{D}^{*-}D^{*0}, \rho^{+} \to \pi^{0}\pi^{+}, \bar{D}^{*0} \to \pi^{0}\bar{D}^{0}, K^{*+} \to \pi^{0}K^{+}, \\ \bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, D^{*0} \to \pi^{0}D^{0}, \bar{D}^{0} \to e^{-}\bar{\nu}_{e}\pi^{0}K^{+}, \bar{D}^{0} \to e^{-}\bar{\nu}_{e}K^{+}, D^{0} \to \pi^{0}\pi^{0}\pi^{+}\pi^{-} \\ (\Upsilon(4S) \to e^{-}e^{-}\bar{\nu}_{e}\bar{\nu}_{e}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{+}K^{+}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	5	5	1	6
7	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{-}\bar{D}^{0}D_{s}^{*+}, \bar{B}^{0} \to \pi^{0}\rho^{0}\pi^{-}\pi^{-}\rho^{+}D^{+}, \bar{D}^{0} \to \pi^{+}\pi^{-}\pi^{-}K^{+}, D_{s}^{*+} \to D_{s}^{+}\gamma, \rho^{0} \to \pi^{+}\pi^{-}, \\ \rho^{+} \to \pi^{0}\pi^{+}, D^{+} \to \mu^{+}\nu_{\mu}\bar{K}^{0}, D_{s}^{+} \to \mu^{+}\nu_{\mu}\phi, \bar{K}^{0} \to K_{S}, \phi \to K_{L}K_{S}, K_{S} \to \pi^{+}\pi^{-}, \\ K_{S} \to \pi^{0}\pi^{0} \\ (\Upsilon(4S) \to \mu^{+}\mu^{+}\nu_{\mu}\nu_{\mu}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	6	6	1	7
8	$\Upsilon(4S) \to B^0 \bar{B}^0, B^0 \to \tau^+ \nu_\tau D^-, \bar{B}^0 \to e^- \bar{\nu}_e D^{*+}, \tau^+ \to \bar{\nu}_\tau \pi^+ \pi^+ \pi^-, D^- \to \pi^0 \pi^- \pi^- K^+, D^{*+} \to \pi^+ D^0,$ $D^0 \to \pi^0 \pi^+ K^-$ $(\Upsilon(4S) \to e^- \bar{\nu}_e \nu_\tau \bar{\nu}_\tau \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+ K^- \gamma \gamma \gamma \gamma)$	7	7	1	8
9	$\Upsilon(4S) \to B^0 \bar{B}^0, B^0 \to \pi^0 \pi^- \rho^+ \eta p \bar{\Lambda}_c^-, \bar{B}^0 \to e^- \bar{\nu}_e \pi^0 D^+, \rho^+ \to \pi^0 \pi^+, \eta \to \pi^0 \pi^+ \pi^-, \bar{\Lambda}_c^- \to \pi^- \eta' \bar{n},$ $D^+ \to \mu^+ \nu_\mu \pi^+ K^-, \eta' \to \pi^0 \pi^0 \eta, \eta \to \gamma \gamma$ $(\Upsilon(4S) \to e^- \bar{\nu}_e \mu^+ \nu_\mu \pi^+ \pi^+ \pi^- \pi^- \pi^- K^- \bar{n} p \gamma \gamma)$	8	8	1	9
10	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \mu^{+}\nu_{\mu}D_{1}^{-}, \bar{B}^{0} \to \rho^{-}D_{2}^{*+}, D_{1}^{-} \to \pi^{-}\bar{D}^{*0}, \rho^{-} \to \pi^{0}\pi^{-}, D_{2}^{*+} \to \pi^{+}D^{*0}, \\ \bar{D}^{*0} \to \bar{D}^{0}\gamma, D^{*0} \to \pi^{0}D^{0}, \bar{D}^{0} \to \pi^{0}\pi^{-}K^{+}, D^{0} \to K_{S}K_{S}K_{S}, K_{S} \to \pi^{0}\pi^{0}, K_{S} \to \pi^{+}\pi^{-}, \\ K_{S} \to \pi^{+}\pi^{-} \\ (\Upsilon(4S) \to \mu^{+}\nu_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	9	9	1	10

index	event tree (event initial-final states)	iEvtTr	iEvtIFSts	nEvts	nCmltEvts
11	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{+}\pi^{-}\rho^{+}\eta D^{-}, \bar{B}^{0} \to \pi^{-}\rho^{+}\rho^{-}D^{+}, \rho^{+} \to \pi^{0}\pi^{+}, \eta \to \gamma\gamma, D^{-} \to \pi^{0}K_{L}\pi^{-}, \rho^{+} \to \pi^{0}\pi^{+}, \rho^{-} \to \pi^{0}\pi^{-}, D^{+} \to e^{+}\nu_{e}\pi^{+}K^{-} $ $(\Upsilon(4S) \to e^{+}\nu_{e}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	10	10	1	11
12	$\Upsilon(4S) \to B^0 \bar{B}^0, B^0 \to \pi^0 \pi^+ \Sigma^- \bar{\Xi}_c^{*0}, \bar{B}^0 \to \pi^- \bar{\Delta}^+ \Sigma_c^{++}, \Sigma^- \to \pi^- n, \bar{\Xi}_c^{*0} \to \bar{\Xi}_c^0 \gamma, \bar{\Delta}^+ \to \pi^- \bar{n},$ $\Sigma_c^{++} \to \pi^+ \Lambda_c^+, \bar{\Xi}_c^0 \to \rho^- \bar{\Xi}^+, \Lambda_c^+ \to \pi^0 \pi^+ \pi^- \Sigma^+, \rho^- \to \pi^0 \pi^-, \bar{\Xi}^+ \to \pi^+ \bar{\Lambda}, \Sigma^+ \to \pi^0 p,$ $\bar{\Lambda} \to \pi^0 \bar{n}$ $(\Upsilon(4S) \to \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- \pi^- n \bar{n} \bar{n} p \gamma \gamma \gamma \gamma \gamma \gamma \gamma \gamma)$	11	11	1	12
13	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to K^{0}D^{*0}\bar{D}^{*0}, \bar{B}^{0} \to D^{*+}a_{1}^{-}, K^{0} \to K_{S}, D^{*0} \to D^{0}\gamma, \bar{D}^{*0} \to \pi^{0}\bar{D}^{0},$ $D^{*+} \to \pi^{+}D^{0}, a_{1}^{-} \to \pi^{0}\rho^{-}, K_{S} \to \pi^{+}\pi^{-}, D^{0} \to \pi^{0}\pi^{+}\pi^{-}\bar{K}^{*}, \bar{D}^{0} \to K_{S}K^{+}K^{-}, D^{0} \to e^{+}\nu_{e}\pi^{-}\bar{K}^{0},$ $\rho^{-} \to \pi^{0}\pi^{-}, \bar{K}^{*} \to \pi^{0}\bar{K}^{0}, K_{S} \to \pi^{0}\pi^{0}, \bar{K}^{0} \to K_{S}, \bar{K}^{0} \to K_{S}, K_{S} \to \pi^{+}\pi^{-},$ $K_{S} \to \pi^{+}\pi^{-}$ $(\Upsilon(4S) \to e^{+}\nu_{e}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	12	12	1	13
14	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \mu^{+}\nu_{\mu}\bar{D}^{*-}, \bar{B}^{0} \to \mu^{-}\bar{\nu}_{\mu}D_{1}^{\prime+}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, D_{1}^{\prime+} \to \pi^{0}D^{*+}, \bar{D}^{0} \to \pi^{-}K^{+},$ $D^{*+} \to \pi^{+}D^{0}, D^{0} \to K^{-}a_{1}^{+}, a_{1}^{+} \to \pi^{0}\rho^{+}, \rho^{+} \to \pi^{0}\pi^{+}$ $(\Upsilon(4S) \to \mu^{+}\mu^{-}\nu_{\mu}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}\gamma\gamma\gamma\gamma\gamma)$	13	13	1	14
15	$\Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to K^{0}K^{-}\bar{D}^{0}D_{s}^{+}, \bar{B}^{0} \to \mu^{-}\bar{\nu}_{\mu}D^{*+}, K^{0} \to K_{L}, \bar{D}^{0} \to \pi^{0}\pi^{0}K^{+}K^{-}, D_{s}^{+} \to \rho^{+}\eta,$ $D^{*+} \to \pi^{+}D^{0}, \rho^{+} \to \pi^{0}\pi^{+}, \eta \to \pi^{0}\pi^{+}\pi^{-}, D^{0} \to e^{+}\nu_{e}K^{-}$ $(\Upsilon(4S) \to e^{+}\nu_{e}\mu^{-}\bar{\nu}_{\mu}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{-}K^{+}K^{-}K^{-}Y^{\gamma\gamma\gamma\gamma\gamma\gamma\gamma})$	14	14	1	15
rest	$\Upsilon(4S) \to \text{others}$ $(\Upsilon(4S) \to \text{corresponding to others})$		_	185	200

Table 2: Event initial-final states.

index	event initial-final states	iEvtIFSts	nEvts	nCmltEvts
1	$e^+e^- \to \mu^+\mu^-\nu_\mu\bar{\nu}_\mu\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma\gamma\gamma\gamma\gamma\gamma$	13	3	3
2	$e^{+}e^{-} \to K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}K^{+}K^{-}K^{-}\gamma\gamma\gamma\gamma\gamma$	1	1	4
3	$e^+e^- \to e^-\bar{\nu}_e\mu^-\bar{\nu}_\mu K_L\pi^+\pi^+\pi^+\pi^-\pi^-K^+K^+K^-\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	2	1	5
4	$e^+e^- \to K_L \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- \pi^- K^+ K^- \gamma \gamma$	3	1	6
5	$e^{+}e^{-} \rightarrow e^{+}e^{+}e^{-}\nu_{e}\nu_{e}\bar{\nu}_{e}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\gamma\gamma$	4	1	7
6	$e^{+}e^{-} \rightarrow e^{-}e^{-}\bar{\nu}_{e}\bar{\nu}_{e}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}K^{+}\gamma$	5	1	8
7	$e^+e^- \to \mu^+\mu^+\nu_\mu\nu_\mu K_L\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-K^+\gamma$	6	1	9
8	$e^{+}e^{-} \to e^{-}\bar{\nu}_{e}\nu_{\tau}\bar{\nu}_{\tau}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}\gamma\gamma\gamma\gamma$	7	1	10
9	$e^{+}e^{-} \rightarrow e^{-}\bar{\nu}_{e}\mu^{+}\nu_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{-}\bar{n}p\gamma$	8	1	11
10	$e^{+}e^{-} \rightarrow \mu^{+}\nu_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma$	9	1	12
11	$e^{+}e^{-} \rightarrow e^{+}\nu_{e}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{-}\gamma$	10	1	13
12	$e^{+}e^{-} \rightarrow \pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{\bar{n}}\bar{n}p\gamma$	11	1	14
13	$e^{+}e^{-} \rightarrow e^{+}\nu_{e}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}\gamma$	12	1	15
14	$e^{+}e^{-} \to \mu^{-}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}\gamma\gamma\gamma\gamma\gamma$	0	1	16
15	$e^+e^- \to e^+\nu_e\mu^-\bar{\nu}_\mu K_L\pi^+\pi^+\pi^+\pi^-K^+K^-K^-K^-\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	14	1	17
16	$e^{+}e^{-} \rightarrow e^{-}\bar{\nu}_{e}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	15	1	18
17	$e^{+}e^{-} \rightarrow \pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma$	16	1	19
18	$e^+e^- \to \mu^-\bar{\nu}_\mu K_L \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- \pi^- K^+ \gamma \gamma$	17	1	20
19	$e^{+}e^{-} \to e^{-}\bar{\nu}_{e}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{-}\gamma$	18	1	21
20	$e^+e^- \to K_L K_L K_L \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- K^+ \gamma \gamma \gamma \gamma \gamma \gamma \gamma \gamma$	19	1	22
21	$e^+e^- \to e^+\nu_e\mu^-\mu^-\bar{\nu}_\mu\bar{\nu}_\mu K_L K_L \pi^+\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	20	1	23
22	$e^{+}e^{-} \to \pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}\gamma\gamma\gamma\gamma$	21	1	24
23	$e^{+}e^{-} \to e^{+}e^{-}\nu_{e}\nu_{e}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma$	22	1	25
24	$e^{+}e^{-} \to e^{+}\nu_{e}\mu^{+}\mu^{-}\nu_{\mu}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma\gamma\gamma$	23	1	26
25	$e^{+}e^{-} \rightarrow \mu^{-}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}n\bar{n}\gamma$	24	1	27
26	$e^{+}e^{-} \to K_L K_L K_L \pi^{+} \pi^{+} \pi^{+} \pi^{+} \pi^{+} \pi^{+} \pi^{+} \pi^{-} \pi^{-} \pi^{-} \pi^{-} \pi^{-} \pi^{-} K^{-} \gamma \gamma$	25	1	28
27	$e^{+}e^{-} \to e^{-}\bar{\nu}_{e}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+$	26	1	29
28	$e^{+}e^{-} \rightarrow \mu^{-}\nu_{\mu}K_{L}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}K^{-}\gamma$	27	1	30
29	$e^{+}e^{-} \rightarrow e^{+}e^{-}\nu_{e}\bar{\nu}_{e}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}K^{-}\gamma\gamma$	28	1	31
30	$e^{+}e^{-} \to \mu^{+}\mu^{-}\nu_{\mu}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}\gamma\gamma\gamma\gamma$	29	1	32
31	$e^{+}e^{-} \to \mu^{-}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}K^{+}K^{-}\bar{n}p\gamma\gamma$	30	1	33
32	$e^{+}e^{-} \to \mu^{+}\nu_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}K^{-}n\bar{n}\gamma$	31	1	34

index	event initial-final states	iEvtIFSts	nEvts	nCmltEvts
33	$e^+e^- \rightarrow e^+\nu_e\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-K^+K^-\gamma$	32	1	35
34	$e^+e^- \to K_L \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+ K^- \bar{n} p \gamma $	33	1	36
35	$e^{+}e^{-} \rightarrow e^{-}\bar{\nu}_{e}\mu^{-}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}n\bar{n}\gamma\gamma\gamma\gamma\gamma\gamma$	34	1	37
36	$e^+e^- \to K_L \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- \pi^- \pi^- \pi^- K^+ K^- \gamma \gamma$	35	1	38
37	$e^+e^- \to K_L K_L \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- p \bar{p} \gamma \gamma$	36	1	39
38	$e^{+}e^{-} \rightarrow e^{-}\bar{\nu}_{e}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}K^{-}\gamma$	37	1	40
39	$e^+e^- \to e^-\bar{\nu}_e K_L K_L \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \gamma \gamma$	38	1	41
40	$e^{+}e^{-} \rightarrow e^{+}\nu_{e}\mu^{-}\nu_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}K^{-}\gamma$	39	1	42
41	$e^{+}e^{-} \rightarrow e^{+}e^{-}\mu^{+}\nu_{\mu}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}K^{-}\gamma$	40	1	43
42	$e^+e^- \to K_L \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+ K^- K^- \gamma \gamma$	41	1	44
43	$e^+e^- \to \mu^+\nu_\mu K_L K_L \pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	42	1	45
44	$e^+e^- \to \mu^+\nu_\mu K_L\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^-\gamma$	43	1	46
45	$e^+e^- \to K_L \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- \pi^- \pi^- \pi^- \pi^- K^+ K^+ \gamma \gamma$	44	1	47
46	$e^+e^- \to e^+\nu_e\mu^+\mu^-\nu_\mu\bar{\nu}_\mu\pi^+\pi^-\pi^-\pi^-K^+K^+K^-\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	45	1	48
47	$e^{+}e^{-} \rightarrow \mu^{+}\nu_{\mu}K_{L}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}\gamma$	46	1	49
48	$e^{+}e^{-} \rightarrow e^{+}e^{+}\nu_{e}\nu_{e}\mu^{-}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	47	1	50
49	$e^+e^- \to e^+\nu_e\mu^+\mu^-\nu_\mu\bar{\nu}_\mu\nu_\tau\bar{\nu}_\tau\pi^+\pi^+\pi^+\pi^-\pi^-K^-n\bar{p}\gamma\gamma\gamma\gamma$	48	1	51
50	$e^+e^- \to \mu^-\bar{\nu}_\mu K_L K_L \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- K^+ \gamma \gamma$	49	1	52
51	$e^+e^- \to \mu^-\bar{\nu}_\mu\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+K^+K^-\bar{n}p\gamma\gamma\gamma\gamma\gamma\gamma$	50	1	53
52	$e^+e^- \to \mu^-\bar{\nu}_\mu K_L K_L \pi^+\pi^+\pi^+\pi^- K^+ K^- K^- \gamma \gamma \gamma \gamma$	51	1	54
53	$e^{+}e^{-} \rightarrow e^{-}\bar{\nu}_{e}\mu^{+}\nu_{\mu}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}K^{-}\gamma$	52	1	55
54	$e^+e^- \rightarrow \pi^+\pi^+\pi^+\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	53	1	56
55	$e^+e^- \rightarrow \pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+K^-n\bar{n}\gamma$	54	1	57
56	$e^+e^- \to \pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-K^+K^+p\bar{p}\gamma$	55	1	58
57	$e^+e^- \rightarrow \pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+K^+K^-K^-\gamma$	56	1	59
58	$e^{+}e^{-} \to K_{L}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\gamma\gamma\gamma\gamma\gamma\gamma$	57	1	60
59	$e^{+}e^{-} \to e^{+}e^{+}e^{-}\nu_{e}\nu_{e}\bar{\nu}_{e}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}K^{-}$	58	1	61
60	$e^{+}e^{-} \to e^{+}e^{-}\nu_{e}\bar{\nu}_{e}\mu^{-}\bar{\nu}_{\mu}K_{L}K_{L}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{+}K^{-}\gamma\gamma\gamma\gamma\gamma$	59	1	62
61	$e^+e^- \to e^-\bar{\nu}_e\pi^+\pi^+\pi^+\pi^-\pi^-K^+n\bar{n}p\bar{p}\gamma\gamma\gamma\gamma\gamma$	60	1	63
62	$e^{+}e^{-} \to e^{+}e^{-}\nu_{e}\bar{\nu}_{e}\mu^{-}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}\gamma\gamma\gamma\gamma$	61	1	64
63	$e^+e^- \to \pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^+K^-K^-\gamma$	62	1	65
64	$e^+e^- \to e^+\nu_e K_L \pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^-\gamma$	63	1	66

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65	$e^{+}e^{-} \to e^{+}e^{+}e^{-}e^{-}\mu^{-}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma$	64	1	67
66	$e^+e^- \to e^+e^+\nu_e\nu_e\nu_\tau\bar{\nu}_\tau K_L\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\gamma$	65	1	68
67	$e^{+}e^{-} \rightarrow e^{+}\nu_{e}\mu^{+}\nu_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}K^{-}\gamma$	66	1	69
68	$e^{+}e^{-} \to e^{+}\nu_{e}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma$	67	1	70
69	$e^{+}e^{-} \rightarrow \pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}K^{-}\gamma$	68	1	71
70	$e^+e^- \rightarrow e^-\bar{\nu}_e\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+K^+K^-\gamma$	69	1	72
71	$e^{+}e^{-} \rightarrow \mu^{+}\mu^{+}\nu_{\mu}\nu_{\mu}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{-}\bar{n}p\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	70	1	73
72	$e^+e^- \to e^+\nu_e\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-K^+\gamma$	71	1	74
73	$e^{+}e^{-} \rightarrow e^{+}\nu_{e}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma$	72	1	75
74	$e^{+}e^{-} \to e^{+}e^{-}\nu_{e}\bar{\nu}_{e}\mu^{+}\nu_{\mu}\nu_{\tau}\bar{\nu}_{\tau}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}\gamma\gamma$	73	1	76
75	$e^{+}e^{-} \to e^{+}e^{-}K_{L}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma\gamma\gamma\gamma\gamma\gamma$	74	1	77
76	$e^+e^- \to \mu^+\nu_\mu\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-K^+\gamma$	75	1	78
77	$e^+e^- o K_L K_L \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- \pi^- \pi^- K^+ K^+ \gamma \gamma$	76	1	79
78	$e^{+}e^{-} \to \mu^{-}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}n\bar{n}\gamma$	77	1	80
79	$e^+e^- \to e^+e^-\nu_e\bar{\nu}_eK_L\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma$	78	1	81
80	$e^{+}e^{-} \to e^{+}\nu_{e}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}\gamma\gamma$	79	1	82
81	$e^{+}e^{-} \rightarrow e^{+}e^{-}\mu^{+}\nu_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma$	80	1	83
82	$e^{+}e^{-} \to e^{-}\bar{\nu}_{e}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{-}K^{-}\gamma\gamma\gamma\gamma$	81	1	84
83	$e^{+}e^{-} \rightarrow \nu_{\tau}\bar{\nu}_{\tau}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{-}\gamma\gamma$	82	1	85
84	$e^{+}e^{-} \to \pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-$	83	1	86
85	$e^+e^- \rightarrow \mu^+\nu_\mu\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^-\gamma\gamma\gamma\gamma\gamma\gamma$	84	1	87
86	$e^+e^- \to e^- \bar{\nu}_e K_L \pi^+ \pi^+ \pi^+ \pi^- \pi^- K^+ K^- \gamma \gamma$	85	1	88
87	$e^{+}e^{-} \to e^{+}e^{-}e^{-}\bar{\nu}_{e}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{-}\gamma$	86	1	89
88	$e^+e^- \to \mu^+\mu^+\nu_\mu\nu_\mu K_L\pi^+\pi^+\pi^-\pi^-K^-\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	87	1	90
89	$e^+e^- \rightarrow \pi^+\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	88	1	91
90	$e^+e^- \to \nu_\tau \bar{\nu}_\tau \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- \pi^- K^+ K^+ K^- \gamma \gamma$	89	1	92
91	$e^+e^- \to K_L \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- \pi^- \pi^- \pi^- \gamma \gamma$	90	1	93
92	$e^+e^- \to K_L K_L \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- K^+ K^+ K^- K^- \gamma \gamma$	91	1	94
93	$e^{+}e^{-} \to e^{+}\nu_{e}\mu^{+}\nu_{\mu}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{+}K^{-}K^{-}\gamma\gamma\gamma\gamma$	92	1	95
94	$e^+e^- \to \mu^+\nu_\mu\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-p\bar{p}\gamma\gamma\gamma\gamma\gamma\gamma$	93	1	96
95	$e^+e^- \to \mu^-\bar{\nu}_\mu\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	94	1	97
96	$e^{+}e^{-} \to e^{+}\nu_{e}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\gamma\gamma\gamma\gamma\gamma$	95	1	98

index	event initial-final states	iEvtIFSts	nEvts	nCmltEvts
97	$e^+e^- \to \pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+K^+K^-\gamma$	96	1	99
98	$e^+e^- \to K_L \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+ K^+ K^+ K^- K^- \gamma \gamma$	97	1	100
99	$e^+e^- \rightarrow \mu^+\nu_\mu\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-K^+K^-K^-\gamma$	98	1	101
100	$e^+e^- \to e^+\nu_e\mu^+\nu_\mu\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-\bar{n}p\gamma$	99	1	102
101	$e^+e^- \to e^- \bar{\nu}_e K_L \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- \gamma \gamma$	100	1	103
102	$e^{+}e^{-} \rightarrow \pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}K^{-}\gamma$	101	1	104
103	$e^{+}e^{-} \to \mu^{+}\mu^{+}\mu^{-}\nu_{\mu}\nu_{\mu}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}K^{-}\gamma\gamma\gamma\gamma\gamma$	102	1	105
104	$e^+e^- \to e^+e^-\nu_e\bar{\nu}_e\mu^-\bar{\nu}_\mu K_L\pi^+\pi^+\pi^-\pi^-K^+K^+K^-\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	103	1	106
105	$e^{+}e^{-} \to K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+$	104	1	107
106	$e^{+}e^{-} \rightarrow e^{-}\bar{\nu}_{e}\mu^{-}\bar{\nu}_{\mu}K_{L}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\gamma$	105	1	108
107	$e^{+}e^{-} \rightarrow e^{+}\nu_{e}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\gamma$	106	1	109
108	$e^+e^- \to e^+\nu_e\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+K^-n\bar{n}\gamma$	107	1	110
109	$e^+e^- \rightarrow \pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-K^+K^+K^+\gamma$	108	1	111
110	$e^+e^- \to \pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^-\gamma$	109	1	112
111	$e^+e^- \to e^+\nu_e K_L \pi^+\pi^+\pi^- K^- n\bar{p}\gamma\gamma\gamma\gamma\gamma$	110	1	113
112	$e^+e^- \to K_L \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- \pi^- K^+ n \bar{n} \gamma \gamma \gamma \gamma \gamma \gamma$	111	1	114
113	$e^{+}e^{-} \rightarrow e^{-}\bar{\nu}_{e}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma$	112	1	115
114	$e^{+}e^{-} \rightarrow e^{+}\nu_{e}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}\gamma$	113	1	116
115	$e^{+}e^{-} \rightarrow \mu^{+}\nu_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\gamma$	114	1	117
116	$e^+e^- o \mu^- \bar{\nu}_\mu \nu_\tau \bar{\nu}_\tau K_L \pi^+ \pi^+ \pi^- \gamma \gamma$	115	1	118
117	$e^+e^- \rightarrow \pi^+\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-p\bar{p}\gamma\gamma\gamma\gamma\gamma\gamma$	116	1	119
118	$e^{+}e^{-}\rightarrow\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma$	117	1	120
119	$e^{+}e^{-} \to K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}K^{-}\gamma$	118	1	121
120	$e^+e^- \to K_L \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- \pi^- \pi^- \bar{n} p \gamma $	119	1	122
121	$e^+e^- \to \pi^+\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-K^-\gamma$	120	1	123
122	$e^{+}e^{-} \to e^{-}\bar{\nu}_{e}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}K^{+}\gamma$	121	1	124
123	$e^{+}e^{-} \to e^{+}e^{+}e^{-}e^{-}\nu_{e}\bar{\nu}_{e}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma$	122	1	125
124	$e^+e^- \rightarrow e^+e^-\pi^+\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+K^-K^-K^-\gamma$	123	1	126
125	$e^+e^- \rightarrow \pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+n\bar{n}\gamma$	124	1	127
126	$e^+e^- \to e^- \bar{\nu}_e K_L \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- \pi^- \pi^- K^+ \gamma \gamma$	125	1	128
127	$e^+e^- \to \mu^-\bar{\nu}_\mu K_L K_L \pi^+\pi^+\pi^+\pi^- K^+K^-K^-\gamma\gamma\gamma\gamma\gamma$	126	1	129
128	$e^{+}e^{-} \to \pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}$	127	1	130

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129	$e^{+}e^{-} \to \mu^{+}\nu_{\mu}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma\gamma\gamma\gamma\gamma\gamma$	128	1	131
130	$e^{+}e^{-} \to \mu^{+}\nu_{\mu}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma$	129	1	132
131	$e^+e^- \rightarrow e^+e^-\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^-\bar{n}p\gamma$	130	1	133
132	$e^+e^- \rightarrow e^-\bar{\nu}_e\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^+K^-\gamma\gamma\gamma\gamma\gamma\gamma$	131	1	134
133	$e^+e^- \rightarrow e^-\bar{\nu}_e\mu^+\nu_\mu\nu_\tau\bar{\nu}_\tau K_L\pi^+\pi^+\pi^-\pi^-K^+\gamma\gamma\gamma\gamma$	132	1	135
134	$e^+e^- \to e^-\bar{\nu}_e\mu^-\bar{\nu}_\mu\pi^+\pi^+\pi^+\pi^+\pi^-K^+K^-K^-\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	133	1	136
135	$e^+e^- \to e^-\bar{\nu}_e\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	134	1	137
136	$e^+e^- \to K_L \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- \pi^- \pi^- \pi^- K^- \gamma \gamma$	135	1	138
137	$e^{+}e^{-} \rightarrow \mu^{-}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}n\bar{p}\gamma$	136	1	139
138	$e^+e^- \to \mu^+\nu_\mu\nu_\tau\bar{\nu}_\tau K_L\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^-\gamma$	137	1	140
139	$e^+e^- \to e^+e^-\nu_e\bar{\nu}_e\mu^+\nu_\mu K_L\pi^+\pi^+\pi^-\pi^-K^-\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	138	1	141
140	$e^+e^- \to e^+e^-e^-\nu_e\bar{\nu}_e\bar{\nu}_e\pi^+\pi^+\pi^-K^+K^-\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	139	1	142
141	$e^+e^- \rightarrow \pi^+\pi^+\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-K^+\gamma$	140	1	143
142	$e^+e^- \to e^+e^+e^-e^-\nu_e\nu_e\bar{\nu}_e\bar{\nu}_e\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	141	1	144
143	$e^+e^- \rightarrow \pi^+\pi^+\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-K^+\gamma$	142	1	145
144	$e^+e^- \to e^-\bar{\nu}_e\mu^+\nu_\mu\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	143	1	146
145	$e^+e^- \to e^-\bar{\nu}_e\mu^-\bar{\nu}_\mu\nu_\tau\bar{\nu}_\tau K_L\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-K^+\gamma\gamma\gamma\gamma\gamma$	144	1	147
146	$e^+e^- \to \mu^+\nu_\mu\pi^+\pi^-\pi^-\pi^-K^+\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	145	1	148
147	$e^+e^- \to e^-\bar{\nu}_e\mu^+\mu^+\nu_\mu\nu_\mu K_L\pi^+\pi^-\pi^-\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	146	1	149
148	$e^+e^- \to K_L \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- K^+ n \bar{n} \gamma \gamma$	147	1	150
149	$e^+e^- \rightarrow e^-\bar{\nu}_e\mu^+\nu_\mu\pi^+\pi^+\pi^-\pi^-K^+\gamma\gamma\gamma\gamma$	148	1	151
150	$e^{+}e^{-} \rightarrow e^{-}\bar{\nu}_{e}\nu_{\tau}\bar{\nu}_{\tau}K_{L}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\gamma$	149	1	152
151	$e^{+}e^{-} \rightarrow \mu^{+}\nu_{\mu}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{-}n\bar{n}\gamma$	150	1	153
152	$e^+e^- \rightarrow \pi^+\pi^+\pi^+\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-K^-p\bar{p}\gamma$	151	1	154
153	$e^+e^- \rightarrow e^-\bar{\nu}_e\mu^+\nu_\mu K_L\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+K^-K^-\gamma$	152	1	155
154	$e^{+}e^{-} \to \mu^{-}\mu^{-}\bar{\nu}_{\mu}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}n\bar{n}\gamma\gamma$	153	1	156
155	$e^+e^- \to \mu^-\bar{\nu}_\mu\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^+K^-n\bar{p}\gamma$	154	1	157
156	$e^{+}e^{-} \to \mu^{+}\nu_{\mu}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}K^{-}\gamma\gamma\gamma\gamma$	155	1	158
157	$e^+e^- \rightarrow e^-\bar{\nu}_e K_L K_L \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+ K^- \gamma \gamma \gamma \gamma \gamma \gamma \gamma$	156	1	159
158	$e^{+}e^{-} \to e^{+}\nu_{e}\mu^{+}\nu_{\mu}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma$	157	1	160
159	$e^+e^- \to e^+e^-\nu_e\bar{\nu}_e\pi^+\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-K^-\gamma$	158	1	161
160	$e^{+}e^{-} \to \pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}K^{-}\gamma$	159	1	162

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161	$e^{+}e^{-} \rightarrow \mu^{-}\bar{\nu}_{\mu}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}K^{-}\gamma$	160	1	163
162	$e^+e^- \to e^+\nu_e\mu^+\mu^-\nu_\mu\bar{\nu}_\mu\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^-\gamma$	161	1	164
163	$e^+e^- \to K_L K_L K_L \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- K^+ \gamma \gamma$	162	1	165
164	$e^+e^- \to e^-\bar{\nu}_e\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-p\bar{p}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	163	1	166
165	$e^+e^- \to e^+\nu_e\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma\gamma\gamma\gamma\gamma$	164	1	167
166	$e^{+}e^{-} \to K_L \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- \pi^- \pi^- \gamma \gamma$	165	1	168
167	$e^+e^- \to e^+e^-\mu^-\bar{\nu}_{\mu}K_L\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+K^-\gamma$	166	1	169
168	$e^{+}e^{-} \rightarrow e^{+}\nu_{e}\nu_{\tau}\bar{\nu}_{\tau}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{-}\gamma$	167	1	170
169	$e^{+}e^{-} \rightarrow e^{+}e^{+}\nu_{e}\nu_{e}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}K^{-}\gamma$	168	1	171
170	$e^{+}e^{-} \rightarrow \mu^{-}\bar{\nu}_{\mu}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}\gamma$	169	1	172
171	$e^+e^- \to K_L \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- K^+ n \bar{p} \gamma \gamma$	170	1	173
172	$e^{+}e^{-} \rightarrow e^{-}\bar{\nu}_{e}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}\bar{n}p\gamma$	171	1	174
173	$e^{+}e^{-} \to \pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}n\bar{n}\gamma\gamma$	172	1	175
174	$e^{+}e^{-} \to e^{+}e^{-}\nu_{e}\bar{\nu}_{e}\mu^{+}\nu_{\mu}\pi^{+}\pi^{-}\pi^{-}K^{+}\gamma\gamma$	173	1	176
175	$e^+e^- \rightarrow e^+e^-e^-\nu_e\bar{\nu}_e\bar{\nu}_e\pi^+\pi^+\pi^+\pi^-\pi^-\gamma\gamma\gamma\gamma$	174	1	177
176	$e^+e^- \to \mu^+\nu_\mu K_L K_L \pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^-\gamma$	175	1	178
177	$e^{+}e^{-} \to K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma$	176	1	179
178	$e^+e^- \rightarrow e^-\bar{\nu}_e\mu^+\mu^-\nu_\mu\bar{\nu}_\mu\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^+K^-\gamma$	177	1	180
179	$e^+e^- \to \mu^+\mu^-\nu_\mu\bar{\nu}_\mu\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+K^-\gamma$	178	1	181
180	$e^+e^- \to e^+\nu_e\mu^-\mu^-\bar{\nu}_\mu\bar{\nu}_\mu\pi^+\pi^+\pi^-\pi^-K^+K^+K^-\gamma\gamma\gamma\gamma\gamma\gamma$	179	1	182
181	$e^+e^- \to K_L \pi^+ \pi^+ \pi^- \pi^- \pi^- n \bar{n} \gamma \gamma$	180	1	183
182	$e^+e^- \to K_L \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- n\bar{p}\gamma$	181	1	184
183	$e^{+}e^{-} \to \mu^{-}\bar{\nu}_{\mu}\nu_{\tau}\bar{\nu}_{\tau}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma$ $e^{+}e^{-} \to \mu^{+}\mu^{-}\mu^{-}\nu_{\mu}\bar{\nu}_{\mu}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	182	1	185
184	$e^+e^- \to \mu^+\mu^-\mu^-\nu_\mu\bar{\nu}_\mu\bar{\nu}_\mu\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^+K^-K^-\gamma$	183	1	186
185	$e^+e^- \rightarrow \pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+K^+K^-\gamma$	184	1	187
186	$e^+e^- \to e^- \nu_e K_L \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- K^- \gamma \gamma$	185	1	188
187	$e^+e^- \rightarrow \mu^-\mu^-\nu_\mu\bar{\nu}_\mu\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	186	1	189
188	$e^+e^- \to \pi^+\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	187	1	190
189	$e^+e^- \to K_L \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- \pi^- n \bar{n} \gamma \gamma$	188	1	191
190	$e^{+}e^{-} \to K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	189	1	192
191	$e^{+}e^{-} \rightarrow e^{+}\nu_{e}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\gamma$	190	1	193
192	$e^{+}e^{-} \to \mu^{-}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma$	191	1	194

index	event initial-final states	iEvtIFSts	nEvts	nCmltEvts
193	$e^{+}e^{-} \to \mu^{+}\nu_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma$	192	1	195
194	$e^{+}e^{-} \to K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}K^{-}\gamma$	193	1	196
195	$e^+e^- \to K_L \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- K^- \bar{n} p \gamma $	194	1	197
196	$e^{+}e^{-} \to K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-$	195	1	198
197	$e^+e^- \rightarrow \mu^+\nu_\mu\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-K^+\gamma$	196	1	199
198	$e^{+}e^{-} \to e^{+}\nu_{e}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}\gamma\gamma\gamma\gamma\gamma$	197	1	200