

Heavy Flavor Averaging Group - B^0 Branching Fractions ($\times 10^6$) - August 25th, 2004. (UL 90% CL)

In PDG2002 **New since PDG2002 (preliminary)** **New since PDG2002 (published)**

RPP#	Mode	PDG2002 Avg.	BABAR	Belle	CLEO	New Avg.
88	$K^+\pi^-$	17.4 ± 1.5	$17.9 \pm 0.9 \pm 0.7$	$18.5 \pm 1.0 \pm 0.7$	$18.0^{+2.3+1.2}_{-2.1-0.9}$	18.2 ± 0.8
89	$K^0\pi^0$	$10.7^{+2.7}_{-2.5}$	$11.4 \pm 0.9 \pm 0.6$	$11.7 \pm 2.3^{+1.2}_{-1.3}$	$12.8^{+4.0+1.7}_{-3.3-1.4}$	11.5 ± 1.0
90	$\eta'K^0$	58^{+14}_{-13}	$60.6 \pm 5.6 \pm 4.6$	$68 \pm 10^{+9}_{-8}$	$89^{+18}_{-16} \pm 9$	$65.2^{+6.0}_{-5.9}$
91	$\eta'K^{*0}$	< 24	< 7.6	< 20	< 24	< 7.6
92	ηK^{*0}	14^{+6}_{-5}	$18.6 \pm 2.3 \pm 1.2$	$19.8^{+2.1}_{-2.0} \pm 1.4$	$13.8^{+5.5}_{-4.6} \pm 1.6$	18.7 ± 1.7
93	ηK^0	< 9.3	$2.5 \pm 0.8 \pm 0.1$	< 2.0	< 9.3	2.5 ± 0.8
-	$\eta K^+\pi^-$	New		$33.4^{+3.5+2.1}_{-3.3-1.9}$		$33.4^{+4.1}_{-3.8}$
-	$a_0^-(980)K^+\dagger$	New	< 2.1	< 2.9		< 2.1
-	$a_0^0(980)K^0\dagger$	New	< 7.8			< 7.8
94	ωK^0	< 13	$5.9^{+1.6}_{-1.3} \pm 0.5$	$4.0^{+1.9}_{-1.6} \pm 0.5$	$10.0^{+5.4}_{-4.2} \pm 1.4$	$5.5^{+1.2}_{-1.1}$
96	ωK^{*0}	< 23	< 6.1	< 6.1	< 23	< 6.1
97	K^+K^-	< 1.9	< 0.6	< 0.7	< 0.8	< 0.6
98	$K^0\bar{K}^0$	< 17	$1.19^{+0.40}_{-0.35} \pm 0.13$	< 1.5	< 3.3	$1.19^{+0.42}_{-0.37}$
99	$K^+\rho^-$	< 32	$8.6 \pm 1.4 \pm 1.0$	$15.1^{+3.4+2.4}_{-3.3-2.6}$	$16^{+8}_{-6} \pm 3$	$9.9^{+1.6}_{-1.5}$
-	$K^+\rho(1450)^-\dagger$	New	< 3.2			< 3.2
-	$K^+\rho(1700)^-\dagger$	New	< 1.7			< 1.7
100	$K^0\pi^+\pi^-$	< 440	$43.7 \pm 3.8 \pm 3.4$	$45.4 \pm 5.2 \pm 5.9$	$50^{+10}_{-9} \pm 7$	44.9 ± 4.0
-	$K^+\pi^-\pi^0$	New	$34.9 \pm 2.1 \pm 3.9$	$36.6^{+4.2}_{-4.1} \pm 3.0$	< 40	$35.6^{+3.4}_{-3.3}$
-	$K^+\pi^-\pi^0(NR)$	New	< 4.6	< 9.4		< 4.6
-	$K_0^*(1430)^+\pi^-\dagger$	New	$11.2 \pm 1.5 \pm 3.5$			11.2 ± 3.8
-	$K_0^*(1430)^0\pi^0\dagger$	New	$7.9 \pm 1.5 \pm 2.7$			7.9 ± 3.1
-	$K_2^*(1430)^+\pi^-$	New	< 13.2			< 13.2
-	$K_2^*(1430)^0\pi^0$	New	< 3.6			< 3.6
-	$K_2^*(1680)^+\pi^-$	New	< 20.0			< 20.0
-	$K_2^*(1680)^0\pi^0$	New	< 5.2			< 5.2
101	$K^0\rho^0$	< 39		< 12.4	< 39	< 12.4
102	$K^0f_0(980)\dagger$	< 360	$6.0 \pm 0.9 \pm 1.3$	< 14		6.0 ± 1.6
103	$K^{*+}\pi^-$	< 72	$11.8 \pm 1.7 \pm 1.1$	$14.8^{+4.6+2.8}_{-4.4-1.3}$	$16^{+6}_{-5} \pm 2$	$12.6^{+1.8}_{-1.7}$
104	$K^{*0}\pi^0$	< 3.6	$3.0 \pm 0.9 \pm 0.5$	< 3.5	< 3.6	3.0 ± 1.0
-	$K^+K^-\pi^0$	New			< 19	< 19
-	$K^+K^0\pi^-$	New		< 18	< 21	< 18
106	$K^+K^-K^0$	< 1300	$23.8 \pm 2.0 \pm 1.6$	$28.3 \pm 3.3 \pm 4.0$		24.7 ± 2.3
-	$K_S K_S K_S$	New	$6.5 \pm 0.8 \pm 0.8$	$4.2^{+1.6}_{-1.3} \pm 0.8$		5.8 ± 1.0
107	ϕK^0	$8.1^{+3.2}_{-2.6}$	$8.4^{+1.5}_{-1.3} \pm 0.5$	$9.0^{+2.2}_{-1.8} \pm 0.7$	$5.4^{+3.7}_{-2.7} \pm 0.7$	$8.3^{+1.2}_{-1.0}$
110	$K^{*0}\rho^0$	< 34		< 2.6	< 34	< 2.6
115	ϕK^{*0}	$9.5^{+2.4}_{-2.0}$	$9.2 \pm 0.9 \pm 0.5$	$10.0^{+1.6+0.7}_{-1.5-0.8}$	$11.5^{+4.5+1.8}_{-3.7-1.7}$	9.5 ± 0.9
116	$K^{*0}\bar{K}^{*0}$	< 22			< 22	< 22
118	$K^{*+}K^{*-}$	< 141			< 141	< 141
133	$\pi^+\pi^-$	4.4 ± 0.9	$4.7 \pm 0.6 \pm 0.2$	$4.4 \pm 0.6 \pm 0.3$	$4.5^{+1.4+0.5}_{-1.2-0.4}$	4.6 ± 0.4
134	$\pi^0\pi^0$	< 5.7	$1.17 \pm 0.32 \pm 0.10$	$2.32^{+0.44+0.22}_{-0.48-0.18}$	< 4.4	1.51 ± 0.28
135	$\eta\pi^0$	< 2.9	< 2.5	< 2.5	< 2.9	< 2.5
136	$\eta\eta$	< 18	< 2.8	< 2.0	< 18	< 2.0
137	$\eta'\pi^0$	< 5.7	< 3.7		< 5.7	< 3.7
138	$\eta'\eta'$	< 47	< 10		< 47	< 10
139	$\eta'\eta$	< 27	< 4.6		< 27	< 4.6
140	$\eta'\rho^0$	< 12	< 4.3	< 14	< 12	< 4.3
141	$\eta\rho^0$	< 10	< 1.5	< 5.5	< 10	< 1.5
-	$\eta\pi^+\pi^-$	New		$16.6^{+3.5+1.4}_{-3.2-1.0}$		$16.6^{+3.8}_{-3.4}$
-	$a_0^-(980)\pi^+\dagger$	New	< 5.1	< 3.8		< 3.8
142	$\omega\eta$	< 12	< 2.3		< 12	< 2.3
143	$\omega\eta'$	< 60	< 2.8		< 60	< 2.8
144	$\omega\rho^0$	< 11	< 3.3		< 11	< 3.3
146	$\phi\pi^0$	< 5	< 1.0		< 5	< 1.0
147	$\phi\eta$	< 9	< 1.0		< 9	< 1.0
148	$\phi\eta'$	< 31	< 4.5		< 31	< 4.5
149	$\phi\rho^0$	< 13			< 13	< 13
151	$\phi\phi$	< 12	< 1.5		< 12	< 1.5
153	$\rho^0\pi^0$	< 5.5	< 2.9	$5.1 \pm 1.6 \pm 0.9$	< 5.5	5.1 ± 1.8
154	$\rho^+\pi^-$	28 ± 9	$22.6 \pm 1.8 \pm 2.2$	$29.1^{+5.0}_{-4.9} \pm 4.0$	$27.6^{+8.4}_{-7.4} \pm 4.2$	24.0 ± 2.5
156	$\rho^0\rho^0$	< 18	< 1.1		< 18	< 1.1
157	$a_1^-\pi^+$	< 490	$42.6 \pm 4.2 \pm 4.1$			42.6 ± 5.9
160	$\rho^+\rho^-$	< 2200	$30 \pm 4 \pm 5$			30 ± 6
162	$\omega\pi^0$	< 3	< 1.2	< 1.9	< 5.5	< 1.2

†Product BF - daughter BF taken to be 100%