B^0 – THIS IS PART 3 OF 3

To reduce the size of this section's PostScript file, we have divided it into three PostScript files. We present the following index:

PART 1

PART 2

PART 3

$\Gamma(K_1(1270)^0\gamma)/\Gamma_{\text{total}}$ Γ_{89}/Γ

VALUE	*CL%*	*DOCUMENT ID*		*TECN*	*COMMENT*
<0.0070	90	[182] ALBRECHT	89G	ARG	$e^+e^- \rightarrow \Upsilon(4S)$

[182] ALBRECHT 89G reports < 0.0078 assuming the $\Upsilon(4S)$ decays 45% to $B^0\overline{B}^0$. We rescale to 50%.

$\Gamma(K_1(1400)^0\gamma)/\Gamma_{\text{total}}$ Γ_{90}/Γ

VALUE	*CL%*	*DOCUMENT ID*		*TECN*	*COMMENT*
<0.0043	90	[183] ALBRECHT	89G	ARG	$e^+e^- \rightarrow \Upsilon(4S)$

[183] ALBRECHT 89G reports < 0.0048 assuming the $\Upsilon(4S)$ decays 45% to $B^0\overline{B}^0$. We rescale to 50%.

$\Gamma(K_2^*(1430)^0\gamma)/\Gamma_{\text{total}}$ Γ_{91}/Γ

VALUE	*CL%*	*DOCUMENT ID*		*TECN*	*COMMENT*
$<4.0 \times 10^{-4}$	90	[184] ALBRECHT	89G	ARG	$e^+e^- \rightarrow \Upsilon(4S)$

[184] ALBRECHT 89G reports $< 4.4 \times 10^{-4}$ assuming the $\Upsilon(4S)$ decays 45% to $B^0\overline{B}^0$. We rescale to 50%.

$\Gamma(K^*(1680)^0\gamma)/\Gamma_{\text{total}}$ Γ_{92}/Γ

VALUE	*CL%*	*DOCUMENT ID*		*TECN*	*COMMENT*
<0.0020	90	[185] ALBRECHT	89G	ARG	$e^+e^- \rightarrow \Upsilon(4S)$

[185] ALBRECHT 89G reports < 0.0022 assuming the $\Upsilon(4S)$ decays 45% to $B^0\overline{B}^0$. We rescale to 50%.

$\Gamma(K_3^*(1780)^0\gamma)/\Gamma_{\text{total}}$ Γ_{93}/Γ

VALUE	*CL%*	*DOCUMENT ID*		*TECN*	*COMMENT*
<0.010	90	[186] ALBRECHT	89G	ARG	$e^+e^- \rightarrow \Upsilon(4S)$

[186] ALBRECHT 89G reports < 0.011 assuming the $\Upsilon(4S)$ decays 45% to $B^0\overline{B}^0$. We rescale to 50%.

$\Gamma(K_4^*(2045)^0\gamma)/\Gamma_{\text{total}}$ Γ_{94}/Γ

VALUE	*CL%*	*DOCUMENT ID*		*TECN*	*COMMENT*
<0.0043	90	[187] ALBRECHT	89G	ARG	$e^+e^- \rightarrow \Upsilon(4S)$

[187] ALBRECHT 89G reports < 0.0048 assuming the $\Upsilon(4S)$ decays 45% to $B^0\overline{B}^0$. We rescale to 50%.

$\Gamma(\phi\phi)/\Gamma_{\text{total}}$ Γ_{95}/Γ

VALUE	*CL%*	*DOCUMENT ID*		*TECN*	*COMMENT*
$<3.9 \times 10^{-5}$	90	ASNER	96	CLE2	$e^+e^- \rightarrow \Upsilon(4S)$

$\Gamma(\pi^+\pi^-)/\Gamma_{\text{total}}$ Γ_{96}/Γ

VALUE	*CL%*	*EVTS*	*DOCUMENT ID*		*TECN*	*COMMENT*
$<2.0 \times 10^{-5}$	90		ASNER	96	CLE2	$e^+e^- \rightarrow \Upsilon(4S)$

• • • We do not use the following data for averages, fits, limits, etc. • • •

$<4.1 \times 10^{-5}$	90		[188] BUSKULIC	96V	ALEP	$e^+e^- \rightarrow Z$
$<5.5 \times 10^{-5}$	90		[189] ABREU	95N	DLPH	$e^+e^- \rightarrow Z$
$<4.7 \times 10^{-5}$	90		[190] AKERS	94L	OPAL	$e^+e^- \rightarrow Z$
$<2.9 \times 10^{-5}$	90		[191] BATTLE	93	CLE2	$e^+e^- \rightarrow \Upsilon(4S)$
$<1.3 \times 10^{-4}$	90		[191] ALBRECHT	90B	ARG	$e^+e^- \rightarrow \Upsilon(4S)$
$<7.7 \times 10^{-5}$	90		[192] BORTOLETTO	89	CLEO	$e^+e^- \rightarrow \Upsilon(4S)$
$<2.6 \times 10^{-4}$	90		[192] BEBEK	87	CLEO	$e^+e^- \rightarrow \Upsilon(4S)$
$<5 \times 10^{-4}$	90	4	GILES	84	CLEO	$e^+e^- \rightarrow \Upsilon(4S)$

[188] BUSKULIC 96V assumes PDG 96 production fractions for B^0, B^+, B_s, b baryons.
[189] Assumes a B^0, B^- production fraction of 0.39 and a B_s production fraction of 0.12.
[190] Assumes B($Z \rightarrow b\overline{b}$) = 0.217 and B^0_d (B^0_s) fraction 39.5% (12%).
[191] Assumes equal production of $B^0\overline{B}^0$ and B^+B^- at $\Upsilon(4S)$.
[192] Paper assumes the $\Upsilon(4S)$ decays 43% to $B^0\overline{B}^0$. We rescale to 50%.

$\Gamma(\pi^0\pi^0)/\Gamma_{\text{total}}$ — Γ_{97}/Γ

VALUE	*CL%*	*DOCUMENT ID*		*TECN*	*COMMENT*
$<0.91 \times 10^{-5}$	90	ASNER	96	CLE2	$e^+e^- \rightarrow \Upsilon(4S)$
• • • We do not use the following data for averages, fits, limits, etc. • • •					
$<6.0 \times 10^{-5}$	90	[193] ACCIARRI	95H	L3	$e^+e^- \rightarrow Z$

[193] ACCIARRI 95H assumes $f_{B^0} = 39.5 \pm 4.0$ and $f_{B_s} = 12.0 \pm 3.0$%.

$\Gamma(\eta\pi^0)/\Gamma_{\text{total}}$ — Γ_{98}/Γ

VALUE	*CL%*	*DOCUMENT ID*		*TECN*	*COMMENT*
$<2.5 \times 10^{-4}$	90	[194] ACCIARRI	95H	L3	$e^+e^- \rightarrow Z$
• • • We do not use the following data for averages, fits, limits, etc. • • •					
$<1.8 \times 10^{-3}$	90	[195] ALBRECHT	90B	ARG	$e^+e^- \rightarrow \Upsilon(4S)$

[194] ACCIARRI 95H assumes $f_{B^0} = 39.5 \pm 4.0$ and $f_{B_s} = 12.0 \pm 3.0$%.
[195] ALBRECHT 90B limit assumes equal production of $B^0\overline{B}^0$ and B^+B^- at $\Upsilon(4S)$.

$\Gamma(\eta\eta)/\Gamma_{\text{total}}$ — Γ_{99}/Γ

VALUE	*CL%*	*DOCUMENT ID*		*TECN*	*COMMENT*
$<4.1 \times 10^{-4}$	90	[196] ACCIARRI	95H	L3	$e^+e^- \rightarrow Z$

[196] ACCIARRI 95H assumes $f_{B^0} = 39.5 \pm 4.0$ and $f_{B_s} = 12.0 \pm 3.0$%.

$\Gamma(\pi^+\pi^-\pi^0)/\Gamma_{\text{total}}$ — Γ_{100}/Γ

VALUE	*CL%*	*DOCUMENT ID*		*TECN*	*COMMENT*
$<7.2 \times 10^{-4}$	90	[197] ALBRECHT	90B	ARG	$e^+e^- \rightarrow \Upsilon(4S)$

[197] ALBRECHT 90B limit assumes equal production of $B^0\overline{B}^0$ and B^+B^- at $\Upsilon(4S)$.

$\Gamma(\rho^0\pi^0)/\Gamma_{\text{total}}$ — Γ_{101}/Γ

VALUE	*CL%*	*DOCUMENT ID*		*TECN*	*COMMENT*
$<2.4 \times 10^{-5}$	90	ASNER	96	CLE2	$e^+e^- \rightarrow \Upsilon(4S)$
• • • We do not use the following data for averages, fits, limits, etc. • • •					
$<4.0 \times 10^{-4}$	90	[198] ALBRECHT	90B	ARG	$e^+e^- \rightarrow \Upsilon(4S)$

[198] ALBRECHT 90B limit assumes equal production of $B^0\overline{B}^0$ and B^+B^- at $\Upsilon(4S)$.

$\Gamma(\rho^{\mp}\pi^{\pm})/\Gamma_{total}$ — Γ_{102}/Γ

VALUE	CL%	DOCUMENT ID		TECN	COMMENT
<8.8 × 10⁻⁵	90	ASNER	96	CLE2	$e^+e^- \to \Upsilon(4S)$
• • • We do not use the following data for averages, fits, limits, etc. • • •					
$<5.2 \times 10^{-4}$	90	[199] ALBRECHT	90B	ARG	$e^+e^- \to \Upsilon(4S)$
$<5.2 \times 10^{-3}$	90	[200] BEBEK	87	CLEO	$e^+e^- \to \Upsilon(4S)$

[199] ALBRECHT 90B limit assumes equal production of $B^0\overline{B}^0$ and B^+B^- at $\Upsilon(4S)$.
[200] BEBEK 87 reports $< 6.1 \times 10^{-3}$ assuming the $\Upsilon(4S)$ decays 43% to $B^0\overline{B}^0$. We rescale to 50%.

$\Gamma(\pi^+\pi^-\pi^+\pi^-)/\Gamma_{total}$ — Γ_{103}/Γ

VALUE	CL%	DOCUMENT ID		TECN	COMMENT
$<2.8 \times 10^{-4}$	90	[201] ABREU	95N	DLPH	$e^+e^- \to Z$
• • • We do not use the following data for averages, fits, limits, etc. • • •					
$<6.7 \times 10^{-4}$	90	[202] ALBRECHT	90B	ARG	$e^+e^- \to \Upsilon(4S)$

[201] Assumes a B^0, B^- production fraction of 0.39 and a B_s production fraction of 0.12.
[202] ALBRECHT 90B limit assumes equal production of $B^0\overline{B}^0$ and B^+B^- at $\Upsilon(4S)$.

$\Gamma(\rho^0\rho^0)/\Gamma_{total}$ — Γ_{104}/Γ

VALUE	CL%	DOCUMENT ID		TECN	COMMENT
$<2.8 \times 10^{-4}$	90	[203] ALBRECHT	90B	ARG	$e^+e^- \to \Upsilon(4S)$
• • • We do not use the following data for averages, fits, limits, etc. • • •					
$<2.9 \times 10^{-4}$	90	[204] BORTOLETTO	89	CLEO	$e^+e^- \to \Upsilon(4S)$
$<4.3 \times 10^{-4}$	90	[204] BEBEK	87	CLEO	$e^+e^- \to \Upsilon(4S)$

[203] ALBRECHT 90B limit assumes equal production of $B^0\overline{B}^0$ and B^+B^- at $\Upsilon(4S)$.
[204] Paper assumes the $\Upsilon(4S)$ decays 43% to $B^0\overline{B}^0$. We rescale to 50%.

$\Gamma(a_1(1260)^{\mp}\pi^{\pm})/\Gamma_{total}$ — Γ_{105}/Γ

VALUE	CL%	DOCUMENT ID		TECN	COMMENT
$<4.9 \times 10^{-4}$	90	[205] BORTOLETTO	89	CLEO	$e^+e^- \to \Upsilon(4S)$
• • • We do not use the following data for averages, fits, limits, etc. • • •					
$<6.3 \times 10^{-4}$	90	[206] ALBRECHT	90B	ARG	$e^+e^- \to \Upsilon(4S)$
$<1.0 \times 10^{-3}$	90	[205] BEBEK	87	CLEO	$e^+e^- \to \Upsilon(4S)$

[205] Paper assumes the $\Upsilon(4S)$ decays 43% to $B^0\overline{B}^0$. We rescale to 50%.
[206] ALBRECHT 90B limit assumes equal production of $B^0\overline{B}^0$ and B^+B^- at $\Upsilon(4S)$.

$\Gamma(a_2(1320)^{\mp}\pi^{\pm})/\Gamma_{total}$ — Γ_{106}/Γ

VALUE	CL%	DOCUMENT ID		TECN	COMMENT
$<3.0 \times 10^{-4}$	90	[207] BORTOLETTO	89	CLEO	$e^+e^- \to \Upsilon(4S)$
• • • We do not use the following data for averages, fits, limits, etc. • • •					
$<1.4 \times 10^{-3}$	90	[207] BEBEK	87	CLEO	$e^+e^- \to \Upsilon(4S)$

[207] Paper assumes the $\Upsilon(4S)$ decays 43% to $B^0\overline{B}^0$. We rescale to 50%.

$\Gamma(\pi^+\pi^-\pi^0\pi^0)/\Gamma_{total}$ — Γ_{107}/Γ

VALUE	CL%	DOCUMENT ID		TECN	COMMENT
$<3.1 \times 10^{-3}$	90	[208] ALBRECHT	90B	ARG	$e^+e^- \to \Upsilon(4S)$

[208] ALBRECHT 90B limit assumes equal production of $B^0\overline{B}^0$ and B^+B^- at $\Upsilon(4S)$.

$\Gamma(\rho^+ \rho^-)/\Gamma_{\rm total}$ — Γ_{108}/Γ

VALUE	CL%	DOCUMENT ID	TECN	COMMENT
$<2.2 \times 10^{-3}$	90	[209] ALBRECHT 90B	ARG	$e^+ e^- \to \Upsilon(4S)$

[209] ALBRECHT 90B limit assumes equal production of $B^0 \overline{B}{}^0$ and $B^+ B^-$ at $\Upsilon(4S)$.

$\Gamma(a_1(1260)^0 \pi^0)/\Gamma_{\rm total}$ — Γ_{109}/Γ

VALUE	CL%	DOCUMENT ID	TECN	COMMENT
$<1.1 \times 10^{-3}$	90	[210] ALBRECHT 90B	ARG	$e^+ e^- \to \Upsilon(4S)$

[210] ALBRECHT 90B limit assumes equal production of $B^0 \overline{B}{}^0$ and $B^+ B^-$ at $\Upsilon(4S)$.

$\Gamma(\omega \pi^0)/\Gamma_{\rm total}$ — Γ_{110}/Γ

VALUE	CL%	DOCUMENT ID	TECN	COMMENT
$<4.6 \times 10^{-4}$	90	[211] ALBRECHT 90B	ARG	$e^+ e^- \to \Upsilon(4S)$

[211] ALBRECHT 90B limit assumes equal production of $B^0 \overline{B}{}^0$ and $B^+ B^-$ at $\Upsilon(4S)$.

$\Gamma(\pi^+ \pi^+ \pi^- \pi^- \pi^0)/\Gamma_{\rm total}$ — Γ_{111}/Γ

VALUE	CL%	DOCUMENT ID	TECN	COMMENT
$<9.0 \times 10^{-3}$	90	[212] ALBRECHT 90B	ARG	$e^+ e^- \to \Upsilon(4S)$

[212] ALBRECHT 90B limit assumes equal production of $B^0 \overline{B}{}^0$ and $B^+ B^-$ at $\Upsilon(4S)$.

$\Gamma(a_1(1260)^+ \rho^-)/\Gamma_{\rm total}$ — Γ_{112}/Γ

VALUE	CL%	DOCUMENT ID	TECN	COMMENT
$<3.4 \times 10^{-3}$	90	[213] ALBRECHT 90B	ARG	$e^+ e^- \to \Upsilon(4S)$

[213] ALBRECHT 90B limit assumes equal production of $B^0 \overline{B}{}^0$ and $B^+ B^-$ at $\Upsilon(4S)$.

$\Gamma(a_1(1260)^0 \rho^0)/\Gamma_{\rm total}$ — Γ_{113}/Γ

VALUE	CL%	DOCUMENT ID	TECN	COMMENT
$<2.4 \times 10^{-3}$	90	[214] ALBRECHT 90B	ARG	$e^+ e^- \to \Upsilon(4S)$

[214] ALBRECHT 90B limit assumes equal production of $B^0 \overline{B}{}^0$ and $B^+ B^-$ at $\Upsilon(4S)$.

$\Gamma(\pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^-)/\Gamma_{\rm total}$ — Γ_{114}/Γ

VALUE	CL%	DOCUMENT ID	TECN	COMMENT
$<3.0 \times 10^{-3}$	90	[215] ALBRECHT 90B	ARG	$e^+ e^- \to \Upsilon(4S)$

[215] ALBRECHT 90B limit assumes equal production of $B^0 \overline{B}{}^0$ and $B^+ B^-$ at $\Upsilon(4S)$.

$\Gamma(a_1(1260)^+ a_1(1260)^-)/\Gamma_{\rm total}$ — Γ_{115}/Γ

VALUE	CL%	DOCUMENT ID	TECN	COMMENT
$<2.8 \times 10^{-3}$	90	[216] BORTOLETTO 89	CLEO	$e^+ e^- \to \Upsilon(4S)$
• • • We do not use the following data for averages, fits, limits, etc. • • •				
$<6.0 \times 10^{-3}$	90	[217] ALBRECHT 90B	ARG	$e^+ e^- \to \Upsilon(4S)$

[216] BORTOLETTO 89 reports $< 3.2 \times 10^{-3}$ assuming the $\Upsilon(4S)$ decays 43% to $B^0 \overline{B}{}^0$. We rescale to 50%.

[217] ALBRECHT 90B limit assumes equal production of $B^0 \overline{B}{}^0$ and $B^+ B^-$ at $\Upsilon(4S)$.

$\Gamma(\pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^0)/\Gamma_{\rm total}$ — Γ_{116}/Γ

VALUE	CL%	DOCUMENT ID	TECN	COMMENT
$<1.1 \times 10^{-2}$	90	[218] ALBRECHT 90B	ARG	$e^+ e^- \to \Upsilon(4S)$

[218] ALBRECHT 90B limit assumes equal production of $B^0 \overline{B}{}^0$ and $B^+ B^-$ at $\Upsilon(4S)$.

$\Gamma(p\overline{p})/\Gamma_{total}$ Γ_{117}/Γ

VALUE	CL%	DOCUMENT ID		TECN	COMMENT
<1.8 × 10⁻⁵	90	[219] BUSKULIC	96V	ALEP	$e^+e^- \rightarrow Z$
• • • We do not use the following data for averages, fits, limits, etc. • • •					
$<3.5 \times 10^{-4}$	90	[220] ABREU	95N	DLPH	$e^+e^- \rightarrow Z$
$<3.4 \times 10^{-5}$	90	[221] BORTOLETTO	89	CLEO	$e^+e^- \rightarrow \Upsilon(4S)$
$<1.2 \times 10^{-4}$	90	[222] ALBRECHT	88F	ARG	$e^+e^- \rightarrow \Upsilon(4S)$
$<1.7 \times 10^{-4}$	90	[221] BEBEK	87	CLEO	$e^+e^- \rightarrow \Upsilon(4S)$

[219] BUSKULIC 96V assumes PDG 96 production fractions for B^0, B^+, B_s, b baryons.
[220] Assumes a B^0, B^- production fraction of 0.39 and a B_s production fraction of 0.12.
[221] Paper assumes the $\Upsilon(4S)$ decays 43% to $B^0\overline{B}^0$. We rescale to 50%.
[222] ALBRECHT 88F reports $< 1.3 \times 10^{-4}$ assuming the $\Upsilon(4S)$ decays 45% to $B^0\overline{B}^0$. We rescale to 50%.

$\Gamma(p\overline{p}\pi^+\pi^-)/\Gamma_{total}$ Γ_{118}/Γ

VALUE (units 10^{-4})	CL%	DOCUMENT ID		TECN	COMMENT
<2.5	90	[223] BEBEK	89	CLEO	$e^+e^- \rightarrow \Upsilon(4S)$
• • • We do not use the following data for averages, fits, limits, etc. • • •					
<9.5	90	[224] ABREU	95N	DLPH	$e^+e^- \rightarrow Z$
$5.4 \pm 1.8 \pm 2.0$		[225] ALBRECHT	88F	ARG	$e^+e^- \rightarrow \Upsilon(4S)$

[223] BEBEK 89 reports $< 2.9 \times 10^{-4}$ assuming the $\Upsilon(4S)$ decays 43% to $B^0\overline{B}^0$. We rescale to 50%.
[224] Assumes a B^0, B^- production fraction of 0.39 and a B_s production fraction of 0.12.
[225] ALBRECHT 88F reports $6.0 \pm 2.0 \pm 2.2$ assuming the $\Upsilon(4S)$ decays 45% to $B^0\overline{B}^0$. We rescale to 50%.

$\Gamma(p\overline{\Lambda}\pi^-)/\Gamma_{total}$ Γ_{119}/Γ

VALUE	CL%	DOCUMENT ID		TECN	COMMENT
<1.8 × 10⁻⁴	90	[226] ALBRECHT	88F	ARG	$e^+e^- \rightarrow \Upsilon(4S)$

[226] ALBRECHT 88F reports $< 2.0 \times 10^{-4}$ assuming the $\Upsilon(4S)$ decays 45% to $B^0\overline{B}^0$. We rescale to 50%.

$\Gamma(\Delta^0\overline{\Delta}^0)/\Gamma_{total}$ Γ_{120}/Γ

VALUE	CL%	DOCUMENT ID		TECN	COMMENT
<0.0015	90	[227] BORTOLETTO	89	CLEO	$e^+e^- \rightarrow \Upsilon(4S)$

[227] BORTOLETTO 89 reports < 0.0018 assuming $\Upsilon(4S)$ decays 43% to $B^0\overline{B}^0$. We rescale to 50%.

$\Gamma(\Delta^{++}\Delta^{--})/\Gamma_{total}$ Γ_{121}/Γ

VALUE	CL%	DOCUMENT ID		TECN	COMMENT
<1.1 × 10⁻⁴	90	[228] BORTOLETTO	89	CLEO	$e^+e^- \rightarrow \Upsilon(4S)$

[228] BORTOLETTO 89 reports $< 1.3 \times 10^{-4}$ assuming $\Upsilon(4S)$ decays 43% to $B^0\overline{B}^0$. We rescale to 50%.

$\Gamma(\overline{\Sigma}_c^{--}\Delta^{++})/\Gamma_{total}$ Γ_{122}/Γ

VALUE	CL%	DOCUMENT ID		TECN	COMMENT
<0.0010	90	[229] PROCARIO	94	CLE2	$e^+e^- \rightarrow \Upsilon(4S)$

[229] PROCARIO 94 reports < 0.0012 for $B(\Lambda_c^+ \rightarrow pK^-\pi^+) = 0.043$. We rescale to our best value $B(\Lambda_c^+ \rightarrow pK^-\pi^+) = 0.050$.

$\Gamma(\gamma\gamma)/\Gamma_{total}$ — Γ_{123}/Γ

Test for $\Delta B = 1$ weak neutral current. Allowed by higher-order electroweak interactions.

VALUE	CL%	DOCUMENT ID		TECN	COMMENT
$<3.9 \times 10^{-5}$	90	[230] ACCIARRI	95I	L3	$e^+e^- \rightarrow Z$

[230] ACCIARRI 95I assumes $f_{B^0} = 39.5 \pm 4.0$ and $f_{B_s} = 12.0 \pm 3.0\%$.

$\Gamma(e^+e^-)/\Gamma_{total}$ — Γ_{124}/Γ

Test for $\Delta B = 1$ weak neutral current. Allowed by higher-order electroweak interactions.

VALUE	CL%	DOCUMENT ID		TECN	COMMENT
$<5.9 \times 10^{-6}$	90	AMMAR	94	CLE2	$e^+e^- \rightarrow \Upsilon(4S)$
• • • We do not use the following data for averages, fits, limits, etc. • • •					
$<2.6 \times 10^{-5}$	90	[231] AVERY	89B	CLEO	$e^+e^- \rightarrow \Upsilon(4S)$
$<7.6 \times 10^{-5}$	90	[232] ALBRECHT	87D	ARG	$e^+e^- \rightarrow \Upsilon(4S)$
$<6.4 \times 10^{-5}$	90	[233] AVERY	87	CLEO	$e^+e^- \rightarrow \Upsilon(4S)$
$<3 \times 10^{-4}$	90	GILES	84	CLEO	Repl. by AVERY 87

[231] AVERY 89B reports $< 3 \times 10^{-5}$ assuming the $\Upsilon(4S)$ decays 43% to $B^0\overline{B}^0$. We rescale to 50%.

[232] ALBRECHT 87D reports $< 8.5 \times 10^{-5}$ assuming the $\Upsilon(4S)$ decays 45% to $B^0\overline{B}^0$. We rescale to 50%.

[233] AVERY 87 reports $< 8 \times 10^{-5}$ assuming the $\Upsilon(4S)$ decays 40% to $B^0\overline{B}^0$. We rescale to 50%.

$\Gamma(\mu^+\mu^-)/\Gamma_{total}$ — Γ_{125}/Γ

Test for $\Delta B = 1$ weak neutral current. Allowed by higher-order electroweak interactions.

VALUE	CL%	DOCUMENT ID		TECN	COMMENT
$<1.6 \times 10^{-6}$	90	[234] ABE	96L	CDF	$p\overline{p}$ at 1.8 TeV
• • • We do not use the following data for averages, fits, limits, etc. • • •					
$<5.9 \times 10^{-6}$	90	AMMAR	94	CLE2	$e^+e^- \rightarrow \Upsilon(4S)$
$<8.3 \times 10^{-6}$	90	[235] ALBAJAR	91C	UA1	$E_{cm}^{p\overline{p}} = 630$ GeV
$<1.2 \times 10^{-5}$	90	[236] ALBAJAR	91C	UA1	$E_{cm}^{p\overline{p}} = 630$ GeV
$<4.3 \times 10^{-5}$	90	[237] AVERY	89B	CLEO	$e^+e^- \rightarrow \Upsilon(4S)$
$<4.5 \times 10^{-5}$	90	[238] ALBRECHT	87D	ARG	$e^+e^- \rightarrow \Upsilon(4S)$
$<7.7 \times 10^{-5}$	90	[239] AVERY	87	CLEO	$e^+e^- \rightarrow \Upsilon(4S)$
$<2 \times 10^{-4}$	90	GILES	84	CLEO	Repl. by AVERY 87

[234] ABE 96L assumes equal B^0 and B^+ production. They normalize to their measured $\sigma(B^+, p_T(B) > 6\ \text{GeV}/c, |y| < 1) = 2.39 \pm 0.54\ \mu$b.

[235] B^0 and B_s^0 are not separated.

[236] Obtained from unseparated B^0 and B_s^0 measurement by assuming a B^0:B_s^0 ratio 2:1.

[237] AVERY 89B reports $< 5 \times 10^{-3}$ assuming the $\Upsilon(4S)$ decays 43% to $B^0\overline{B}^0$. We rescale to 50%.

[238] ALBRECHT 87D reports $< 5 \times 10^{-5}$ assuming the $\Upsilon(4S)$ decays 45% to $B^0\overline{B}^0$. We rescale to 50%.

[239] AVERY 87 reports $< 9 \times 10^{-5}$ assuming the $\Upsilon(4S)$ decays 40% to $B^0\overline{B}^0$. We rescale to 50%.

$\Gamma(K^0 e^+ e^-)/\Gamma_{total}$ Γ_{126}/Γ

Test for $\Delta B = 1$ weak neutral current. Allowed by higher-order electroweak interactions.

VALUE	*CL%*	*DOCUMENT ID*		*TECN*	*COMMENT*
<3.0 × 10^{-4}	90	ALBRECHT	91E	ARG	$e^+ e^- \rightarrow \Upsilon(4S)$
• • • We do not use the following data for averages, fits, limits, etc. • • •					
$<5.2 \times 10^{-4}$	90	[240] AVERY	87	CLEO	$e^+ e^- \rightarrow \Upsilon(4S)$

[240] AVERY 87 reports $< 6.5 \times 10^{-4}$ assuming the $\Upsilon(4S)$ decays 40% to $B^0 \overline{B}^0$. We rescale to 50%.

$\Gamma(K^0 \mu^+ \mu^-)/\Gamma_{total}$ Γ_{127}/Γ

Test for $\Delta B = 1$ weak neutral current. Allowed by higher-order electroweak interactions.

VALUE	*CL%*	*DOCUMENT ID*		*TECN*	*COMMENT*
<3.6 × 10^{-4}	90	[241] AVERY	87	CLEO	$e^+ e^- \rightarrow \Upsilon(4S)$
• • • We do not use the following data for averages, fits, limits, etc. • • •					
$<5.2 \times 10^{-4}$	90	ALBRECHT	91E	ARG	$e^+ e^- \rightarrow \Upsilon(4S)$

[241] AVERY 87 reports $< 4.5 \times 10^{-4}$ assuming the $\Upsilon(4S)$ decays 40% to $B^0 \overline{B}^0$. We rescale to 50%.

$\Gamma(K^*(892)^0 e^+ e^-)/\Gamma_{total}$ Γ_{128}/Γ

Test for $\Delta B = 1$ weak neutral current. Allowed by higher-order electroweak interactions.

VALUE	*CL%*	*DOCUMENT ID*		*TECN*	*COMMENT*
<2.9 × 10^{-4}	90	ALBRECHT	91E	ARG	$e^+ e^- \rightarrow \Upsilon(4S)$

$\Gamma(K^*(892)^0 \mu^+ \mu^-)/\Gamma_{total}$ Γ_{129}/Γ

VALUE	*CL%*	*DOCUMENT ID*		*TECN*	*COMMENT*
<2.3 × 10^{-5}	90	[242] ALBAJAR	91C	UA1	$E^{p\overline{p}}_{cm}$= 630 GeV
• • • We do not use the following data for averages, fits, limits, etc. • • •					
$<2.5 \times 10^{-5}$	90	[243] ABE	96L	CDF	$p\overline{p}$ at 1.8 TeV
$<3.4 \times 10^{-4}$	90	ALBRECHT	91E	ARG	$e^+ e^- \rightarrow \Upsilon(4S)$

[242] ALBAJAR 91C assumes 36% of $\overline{b}$ quarks give B^0 mesons.
[243] ABE 96L measured relative to $B^0 \rightarrow J/\psi(1S) K^*(892)^0$ using PDG 94 branching ratios.

$\Gamma(e^\pm \mu^\mp)/\Gamma_{total}$ Γ_{130}/Γ

Test of lepton family number conservation.

VALUE	*CL%*	*DOCUMENT ID*		*TECN*	*COMMENT*
<5.9 × 10^{-6}	90	AMMAR	94	CLE2	$e^+ e^- \rightarrow \Upsilon(4S)$
• • • We do not use the following data for averages, fits, limits, etc. • • •					
$<3.4 \times 10^{-5}$	90	[244] AVERY	89B	CLEO	$e^+ e^- \rightarrow \Upsilon(4S)$
$<4.5 \times 10^{-5}$	90	[245] ALBRECHT	87D	ARG	$e^+ e^- \rightarrow \Upsilon(4S)$
$<7.7 \times 10^{-5}$	90	[246] AVERY	87	CLEO	$e^+ e^- \rightarrow \Upsilon(4S)$
$<3 \times 10^{-4}$	90	GILES	84	CLEO	Repl. by AVERY 87

[244] Paper assumes the $\Upsilon(4S)$ decays 43% to $B^0 \overline{B}^0$. We rescale to 50%.
[245] ALBRECHT 87D reports $< 5 \times 10^{-5}$ assuming the $\Upsilon(4S)$ decays 45% to $B^0 \overline{B}^0$. We rescale to 50%.
[246] AVERY 87 reports $< 9 \times 10^{-5}$ assuming the $\Upsilon(4S)$ decays 40% to $B^0 \overline{B}^0$. We rescale to 50%.

$\Gamma(e^{\pm}\tau^{\mp})/\Gamma_{\text{total}}$ — Γ_{131}/Γ

Test of lepton family number conservation.

VALUE	CL%	DOCUMENT ID		TECN	COMMENT
$<5.3 \times 10^{-4}$	90	AMMAR	94	CLE2	$e^+e^- \rightarrow \Upsilon(4S)$

$\Gamma(\mu^{\pm}\tau^{\mp})/\Gamma_{\text{total}}$ — Γ_{132}/Γ

Test of lepton family number conservation.

VALUE	CL%	DOCUMENT ID		TECN	COMMENT
$<8.3 \times 10^{-4}$	90	AMMAR	94	CLE2	$e^+e^- \rightarrow \Upsilon(4S)$

POLARIZATION IN B^0 DECAY

Γ_L/Γ in $B^0 \rightarrow J/\psi(1S)K^*(892)^0$

$\Gamma_L/\Gamma = 1[0]$ would indicate that $B^0 \rightarrow J/\psi(1S)K^*(892)^0$ followed by $K^*(892)^0 \rightarrow K^0_S\pi^0$ is a pure CP eigenstate with $CP = -1[+1]$.

VALUE	EVTS	DOCUMENT ID		TECN	COMMENT
0.76±0.07 OUR AVERAGE					
0.65±0.10±0.04	65	ABE	95Z	CDF	$p\overline{p}$ at 1.8 TeV
0.80±0.08±0.05	42	[247] ALAM	94	CLE2	$e^+e^- \rightarrow \Upsilon(4S)$
0.97±0.16±0.15	13	[247] ALBRECHT	94G	ARG	$e^+e^- \rightarrow \Upsilon(4S)$

[247] Averaged over an admixture of B^0 and B^+ decays.

Γ_L/Γ in $B^0 \rightarrow D^{*-}\rho^+$

VALUE	EVTS	DOCUMENT ID		TECN	COMMENT
0.93±0.05±0.05	76	ALAM	94	CLE2	$e^+e^- \rightarrow \Upsilon(4S)$

B^0-$\overline{B}^0$ MIXING

For a discussion of B^0-$\overline{B}^0$ mixing see the note on "B^0-$\overline{B}^0$ Mixing and CP Violation in B Decay" below.

χ_d

This B^0-$\overline{B}^0$ mixing parameter is the the probability (integrated over time) that a produced B^0 (or $\overline{B}^0$) decays as a $\overline{B}^0$ (or B^0), e.g. for inclusive lepton decays

$$\chi_d = \Gamma(B^0 \rightarrow \ell^- X \text{ (via } \overline{B}^0))/\Gamma(B^0 \rightarrow \ell^{\pm} X)$$
$$= \Gamma(\overline{B}^0 \rightarrow \ell^+ X \text{ (via } B^0))/\Gamma(\overline{B}^0 \rightarrow \ell^{\pm} X)$$

Where experiments have measured the parameter $r = \chi/(1-\chi)$, we have converted to χ. Mixing violates the $\Delta B \neq 2$ rule.

Note that the measurement of χ at energies higher than the $\Upsilon(4S)$ have not separated χ_d from χ_s where the subscripts indicate $B^0(\overline{b}d)$ or $B^0_s(\overline{b}s)$. They are listed in the B^0_s-$\overline{B}^0_s$ MIXING section.

The experiments at $\Upsilon(4S)$ make an assumption about the $B^0\overline{B}^0$ fraction and about the ratio of the $B^{\pm}$ and B^0 semileptonic branching ratios (usually that it equals one).

OUR EVALUATION includes χ_d calculated from Δm_{B^0} and τ_{B^0}.

VALUE	CL%	DOCUMENT ID		TECN	COMMENT
0.179±0.013 OUR EVALUATION					
0.156±0.024 OUR AVERAGE					
0.16 ±0.04 ±0.04		[248] ALBRECHT	94	ARG	$e^+e^- \to \Upsilon(4S)$
0.149±0.023±0.022		[249] BARTELT	93	CLE2	$e^+e^- \to \Upsilon(4S)$
0.171±0.048		[250] ALBRECHT	92L	ARG	$e^+e^- \to \Upsilon(4S)$
• • • We do not use the following data for averages, fits, limits, etc. • • •					
0.20 ±0.13 ±0.12		[251] ALBRECHT	96D	ARG	$e^+e^- \to \Upsilon(4S)$
0.19 ±0.07 ±0.09		[252] ALBRECHT	96D	ARG	$e^+e^- \to \Upsilon(4S)$
0.24 ±0.12		[253] ELSEN	90	JADE	e^+e^- 35–44 GeV
$0.158^{+0.052}_{-0.059}$		ARTUSO	89	CLEO	$e^+e^- \to \Upsilon(4S)$
0.17 ±0.05		[254] ALBRECHT	87I	ARG	$e^+e^- \to \Upsilon(4S)$
<0.19	90	[255] BEAN	87B	CLEO	$e^+e^- \to \Upsilon(4S)$
<0.27	90	[256] AVERY	84	CLEO	$e^+e^- \to \Upsilon(4S)$

[248] ALBRECHT 94 reports r=0.194 ± 0.062 ± 0.054. We convert to χ for comparison. Uses tagged events (lepton + pion from D^*).

[249] BARTELT 93 analysis performed using tagged events (lepton+pion from D^*). Using dilepton events they obtain $0.157 \pm 0.016^{+0.033}_{-0.028}$.

[250] ALBRECHT 92L is a combined measurement employing several lepton-based techniques. It uses all previous ARGUS data in addition to new data and therefore supersedes ALBRECHT 87I. A value of r = 20.6 ± 7.0% is directly measured. The value can be used to measure $x = \Delta M/\Gamma = 0.72 \pm 0.15$ for the B_d meson. Assumes $f_{+-}/f_0 = 1.0 \pm 0.05$ and uses $\tau_{B^\pm}/\tau_{B^0} = (0.95 \pm 0.14)\ (f_{+-}/f_0)$.

[251] Uses $D^{*+} K^\pm$ correlations.

[252] Uses $(D^{*+}\ell^-)\ K^\pm$ correlations.

[253] These experiments see a combination of B_s and B_d mesons.

[254] ALBRECHT 87I is inclusive measurement with like-sign dileptons, with tagged B decays plus leptons, and one fully reconstructed event. Measures r=0.21 ± 0.08. We convert to χ for comparison. Superseded by ALBRECHT 92L.

[255] BEAN 87B measured $r <$ 0.24; we converted to χ.

[256] Same-sign dilepton events. Limit assumes semileptonic BR for B^+ and B^0 equal. If $B^0/B^\pm$ ratio <0.58, no limit exists. The limit was corrected in BEAN 87B from $r <$ 0.30 to $r <$ 0.37. We converted this limit to χ.

$\Delta m_{B^0} = m_{B^0_H} - m_{B^0_L}$

Δm_{B^0} is the B^0-$\overline{B}^0$ oscillation frequency in time-dependent mixing experiments.

OUR EVALUATION includes Δm_{B^0} calculated from χ_d and τ_{B^0}.

VALUE ($10^{12}\ \hbar\ s^{-1}$)	EVTS	DOCUMENT ID		TECN	COMMENT
0.484±0.026 OUR EVALUATION					
0.503±0.031 OUR AVERAGE					
$0.531^{+0.050}_{-0.046} \pm 0.078$		[257] ABREU	96Q	DLPH	$e^+e^- \to Z$
$0.496^{+0.055}_{-0.051} \pm 0.043$		[258] ACCIARRI	96E	L3	$e^+e^- \to Z$
0.496±0.046		[259] AKERS	95J	OPAL	$e^+e^- \to Z$
0.50 ±0.12 ±0.06		[260] ABREU	94M	DLPH	$e^+e^- \to Z$
$0.50\ ^{+0.07}_{-0.06}\ ^{+0.11}_{-0.10}$		[258] BUSKULIC	94B	ALEP	$e^+e^- \to Z$
$0.52\ ^{+0.10}_{-0.11}\ ^{+0.04}_{-0.03}$		[261] BUSKULIC	93K	ALEP	$e^+e^- \to Z$

• • • We do not use the following data for averages, fits, limits, etc. • • •

$0.462^{+0.040}_{-0.053}{}^{+0.052}_{-0.035}$		[258] AKERS	95J	OPAL	$e^+e^- \rightarrow Z$
$0.508 \pm 0.075 \pm 0.025$		[262] AKERS	94C	OPAL	$e^+e^- \rightarrow Z$
$0.57 \pm 0.11 \pm 0.02$	153	[261] AKERS	94H	OPAL	$e^+e^- \rightarrow Z$

[257] ABREU 96Q analysis performed using lepton, kaon, and jet-charge tags.
[258] Uses dileptons.
[259] This AKERS 95J value combines the jet charge measurement, $D^{*\pm}$ lepton correlation measurement, and dilepton measurement from OPAL taking into account common systematic errors.
[260] ABREU 94M uses $D^{*\pm}$ and hemisphere charges.
[261] Uses $D^{*\pm}$ lepton correlations.
[262] AKERS 94C uses $D^{*\pm}\ell^{\mp}$ events and jet charge.

$x_d = \Delta m_{B^0}/\Gamma_{B^0}$

This section combines results from the previous two sections.

Time integrated mixing measurements of χ determine this quantity directly via

$$\frac{\Delta m_{B^0}}{\Gamma_{B^0}} = \left(\frac{\chi}{0.5-\chi}\right)^{1/2}$$

while time-dependent mixing measurements determine $\Delta m_{B^0} = m_{B^0_H} - m_{B^0_L}$ which are combined with τ_{B^0} to give

$$\frac{\Delta m_{B^0}}{\Gamma_{B^0}} = \frac{(m_{B^0_H} - m_{B^0_L})\ \tau_{B^0}}{\hbar} .$$

The averaging takes into account the common systematic errors on the LEP experiments due to τ_{B^0}.

VALUE	*DOCUMENT ID*		*TECN*	*COMMENT*
0.75±0.04 OUR AVERAGE				
$0.82 \pm 0.14 \pm 0.02$	[263] ABREU	96Q	DLPH	$e^+e^- \rightarrow Z$
$0.77^{+0.11}_{-0.10} \pm 0.02$	[263] ACCIARRI	96E	L3	$e^+e^- \rightarrow Z$
$0.77 \pm 0.07 \pm 0.02$	[263] AKERS	95J	OPAL	$e^+e^- \rightarrow Z$
$0.78 \pm 0.21 \pm 0.02$	[263] ABREU	94M	DLPH	$e^+e^- \rightarrow Z$
0.69 ± 0.18	[264] ALBRECHT	94	ARG	$e^+e^- \rightarrow \Upsilon(4S)$
$0.78^{+0.20}_{-0.18} \pm 0.02$	[263] BUSKULIC	94B	ALEP	$e^+e^- \rightarrow Z$
0.65 ± 0.10	[264] BARTELT	93	CLE2	$e^+e^- \rightarrow \Upsilon(4S)$
$0.81^{+0.17}_{-0.18} \pm 0.02$	[263] BUSKULIC	93K	ALEP	$e^+e^- \rightarrow Z$
0.72 ± 0.15	[264] ALBRECHT	92L	ARG	$e^+e^- \rightarrow \Upsilon(4S)$

[263] Value is their Δm_{B^0} measurement combined with $\tau_{B^0} = (1.55 \pm 0.04)$ ps, the average from this edition. The systematic error on τ_B and is common to experiments bearing this footnote. The averaging takes this into account.
[264] Derived from time-integrated mixing parameter χ.

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CP VIOLATION PARAMETERS

$\left|\mathrm{Re}(\epsilon_{B^0})\right|$

CP Impurity in B^0_d system. It is obtained from $a_{\ell\ell}$, the charge asymmetry in like-sign dilepton events at the $\Upsilon(4S)$.

$$\mathrm{Re}(\epsilon_{B^0}) \simeq \frac{1}{4}a_{\ell\ell} = \frac{1}{4}\,\frac{N(\ell^+\ell^+)-N(\ell^-\ell^-)}{N(\ell^+\ell^+)+N(\ell^-\ell^-)} .$$

VALUE	*DOCUMENT ID*		*TECN*	*COMMENT*
<0.045	[265] BARTELT	93	CLE2	$e^+e^- \rightarrow \Upsilon(4S)$

[265] BARTELT 93 finds $a_{\ell\ell} = 0.031 \pm 0.096 \pm 0.032$ which corresponds to $\left|a_{\ell\ell}\right| < 0.18$, which yields the above $\mathrm{Re}(\epsilon_{B^0})$.

$B^0 \rightarrow D^{*-}\ell^+\nu_\ell$ FORM FACTORS

See the review "Semileptonic decays of *B* mesons" for the definition of these parameters.

R_1 (form factor ratio $\sim V/A_1$)

VALUE	*DOCUMENT ID*		*TECN*	*COMMENT*
1.18±0.30±0.12	DUBOSCQ	96	CLE2	$e^+e^- \rightarrow \Upsilon(4S)$

R_2 (form factor ratio $\sim A_2/A_1$)

VALUE	*DOCUMENT ID*		*TECN*	*COMMENT*
0.71±0.22±0.07	DUBOSCQ	96	CLE2	$e^+e^- \rightarrow \Upsilon(4S)$

$\rho^2_{A_1}$ (form factor slope)

VALUE	*DOCUMENT ID*		*TECN*	*COMMENT*
0.91±0.15±0.06	DUBOSCQ	96	CLE2	$e^+e^- \rightarrow \Upsilon(4S)$

B^0 REFERENCES

ABE	97J	PRL 79 590	+Akagi, Allen+	(SLD Collab.)
ABREU	97F	ZPHY C74 19	+Adam, Adye, Agasi+	(DELPHI Collab.)
ABE	96B	PR D53 3496	+Albrow, Amendolia, Amidei+	(CDF Collab.)
ABE	96C	PRL 76 4462	+Akimoto, Akopian, Albrow+	(CDF Collab.)
ABE	96H	PRL 76 2015	+Albrow, Amendolia, Amidei+	(CDF Collab.)
ABE	96L	PRL 76 4675	+Akimoto, Akopian, Albrow+	(CDF Collab.)
ABE	96Q	PR D54 6596	+Akimoto, Akopian, Albrow+	(CDF Collab.)
ABREU	96P	ZPHY C71 539	+Adam, Adye, Agasi+	(DELPHI Collab.)
ABREU	96Q	ZPHY C72 17	+Adam, Adye, Agasi+	(DELPHI Collab.)
ACCIARRI	96E	PL B383 487	+Adriani, Aguilar-Benitez, Ahlen+	(L3 Collab.)
ALBRECHT	96D	PL B374 256	+Hamacher, Hofmann, Kirchhoff+	(ARGUS Collab.)
ALEXANDER	96T	PRL 77 5000	+Bebek, Berger, Berkelman+	(CLEO Collab.)
ASNER	96	PR D53 1039	+Athanas, Bliss, Brower+	(CLEO Collab.)
BISHAI	96	PL B369 186	+Fast, Gerndt, Hinson+	(CLEO Collab.)
BUSKULIC	96G	ZPHY C (submitted)	+De Bonis, Decamp, Ghez+	(ALEPH Collab.)
CERN-PPE/96-14				
BUSKULIC	96J	ZPHY C71 31	+De Bonis, Decamp, Ghez+	(ALEPH Collab.)
BUSKULIC	96V	PL B384 471	+De Bonis, Decamp, Ghez+	(ALEPH Collab.)
DUBOSCQ	96	PRL 76 3898	+Fulton, Fujino, Gan+	(CLEO Collab.)
GIBAUT	96	PR D53 4734	+Kinoshita, Pomianowski, Barish+	(CLEO Collab.)
PDG	96	PR D54 1		
ABE	95Z	PRL 75 3068	+Albrow, Amendolia, Amidei+	(CDF Collab.)
ABREU	95N	PL B357 255	+Adam, Adye, Agasi+	(DELPHI Collab.)
ABREU	95Q	ZPHY C68 13	+Adam, Adye, Agasi+	(DELPHI Collab.)
ACCIARRI	95H	PL B363 127	+Adam, Adriani, Aguilar-Benitez+	(L3 Collab.)
ACCIARRI	95I	PL B363 137	+Adam, Adriani, Aguilar-Benitez+	(L3 Collab.)

ADAM	95	ZPHY C68 363	+Adye, Agasi, Ajinenko+	(DELPHI Collab.)
AKERS	95J	ZPHY C66 555	+Alexander, Allison, Ametewee+	(OPAL Collab.)
AKERS	95T	ZPHY C67 379	+Alexander, Allison, Ametewee+	(OPAL Collab.)
ALEXANDER	95	PL B341 435	+Bebek, Berkelman, Bloom+	(CLEO Collab.)
Also	95C	PL B347 469 (erratum)	Alexander, Bebek, Berkelman, Bloom+	(CLEO Collab.)
BARISH	95	PR D51 1014	+Chadha, Chan, Cowen+	(CLEO Collab.)
BUSKULIC	95N	PL B359 236	+Casper, De Bonis, Decamp+	(ALEPH Collab.)
ABE	94D	PRL 72 3456	+Albrow, Amidei, Anway-Wiese, Apollinari	(CDF Collab.)
ABREU	94M	PL B338 409	+Adam, Adye, Agasi, Ajinenko+	(DELPHI Collab.)
AKERS	94C	PL B327 411	+Alexander, Allison, Anderson, Arcelli+	(OPAL Collab.)
AKERS	94H	PL B336 585	+Alexander, Allison, Anderson, Arcelli+	(OPAL Collab.)
AKERS	94J	PL B337 196	+Alexander, Allison, Anderson, Arcelli+	(OPAL Collab.)
AKERS	94L	PL B337 393	+Alexander, Allison, Anderson, Arcelli+	(OPAL Collab.)
ALAM	94	PR D50 43	+Kim, Nemati, O'Neill, Severini+	(CLEO Collab.)
ALBRECHT	94	PL B324 249	+Ehrlichmann, Hamacher+	(ARGUS Collab.)
ALBRECHT	94G	PL B340 217	+Hamacher, Hofmann, Kirchhoff, Mankel+	(ARGUS Collab.)
AMMAR	94	PR D49 5701	+Ball, Baringer, Bean, Besson, Coppage+	(CLEO Collab.)
ATHANAS	94	PRL 73 3503	+Brower, Masek, Paar, Gronberg+	(CLEO Collab.)
Also	95	PRL 74 3090 (erratum)	Athanas, Brower, Masek, Paar+	(CLEO Collab.)
BUSKULIC	94B	PL B322 441	+De Bonis, Decamp, Ghez, Goy, Lees+	(ALEPH Collab.)
PDG	94	PR D50 1173	Montanet+	(CERN, LBL, BOST, IFIC+)
PROCARIO	94	PRL 73 1306	+Balest, Cho, Daoudi, Ford+	(CLEO Collab.)
STONE	94	HEPSY 93-11		
ABREU	93D	ZPHY C57 181	+Adam, Adye, Agasi, Alekseev+	(DELPHI Collab.)
ABREU	93G	PL B312 253	+Adam, Adye, Agasi, Ajinenko+	(DELPHI Collab.)
ACTON	93C	PL B307 247	+Alexander, Allison, Allport, Anderson+	(OPAL Collab.)
ALBRECHT	93	ZPHY C57 533	+Ehrlichmann, Hamacher, Hofmann+	(ARGUS Collab.)
ALBRECHT	93E	ZPHY C60 11	+Ehrlichmann, Hamacher, Hofmann+	(ARGUS Collab.)
ALEXANDER	93B	PL B319 365	+Bebek, Berkelman, Bloom, Browder+	(CLEO Collab.)
AMMAR	93	PRL 71 674	+Ball, Baringer, Coppage, Copty+	(CLEO Collab.)
BARTELT	93	PRL 71 1680	+Csorna, Egyed, Jain, Sheldon+	(CLEO Collab.)
BATTLE	93	PRL 71 3922	+Ernst, Kroha, Kwon, Roberts+	(CLEO Collab.)
BEAN	93B	PRL 70 2681	+Gronberg, Kutschke, Menary, Morrison+	(CLEO Collab.)
BUSKULIC	93D	PL B307 194	+Decamp, Goy, Lees, Minard+	(ALEPH Collab.)
Also	94H	PL B325 537 (errata)		
BUSKULIC	93K	PL B313 498	+De Bonis, Decamp, Ghez, Goy+	(ALEPH Collab.)
SANGHERA	93	PR D47 791	+Skwarnicki, Stroynowski, Artuso, Goldberg+	(CLEO Collab.)
ALBRECHT	92C	PL B275 195	+Ehrlichmann, Hamacher, Krueger, Nau+	(ARGUS Collab.)
ALBRECHT	92G	ZPHY C54 1	+Ehrlichmann, Hamacher, Krueger, Nau+	(ARGUS Collab.)
ALBRECHT	92L	ZPHY C55 357	+Ehrlichmann, Hamacher, Krueger, Nau+	(ARGUS Collab.)
BORTOLETTO	92	PR D45 21	+Brown, Dominick, McIlwain+	(CLEO Collab.)
HENDERSON	92	PR D45 2212	+Kinoshita, Pipkin, Procario+	(CLEO Collab.)
KRAMER	92	PL B279 181	+Palmer	(HAMB, OSU)
ALBAJAR	91C	PL B262 163	+Albrow, Allkofer, Ankoviak, Apsimon+	(UA1 Collab.)
ALBAJAR	91E	PL B273 540	+Albrow, Allkofer, Ankoviak+	(UA1 Collab.)
ALBRECHT	91B	PL B254 288	+Glaeser, Harder, Krueger, Nippe+	(ARGUS Collab.)
ALBRECHT	91C	PL B255 297	+Ehrlichmann, Glaeser, Harder, Krueger+	(ARGUS Collab.)
ALBRECHT	91E	PL B262 148	+Glaeser, Harder, Krueger, Nippe+	(ARGUS Collab.)
BERKELMAN	91	ARNPS 41 1	+Stone	(CORN, SYRA)
"Decays of B Mesons"				
FULTON	91	PR D43 651	+Jensen, Johnson, Kagan, Kass+	(CLEO Collab.)
ALBRECHT	90B	PL B241 278	+Glaeser, Harder, Krueger, Nilsson+	(ARGUS Collab.)
ALBRECHT	90J	ZPHY C48 543	+Ehrlichmann, Harder, Krueger+	(ARGUS Collab.)
ANTREASYAN	90B	ZPHY C48 553	+Bartels, Bieler, Bienlein, Bizzeti+	(Crystal Ball Collab.)
BORTOLETTO	90	PRL 64 2117	+Goldberg, Horwitz, Jain, Mestayer+	(CLEO Collab.)
ELSEN	90	ZPHY C46 349	+Allison, Ambrus, Barlow, Bartel+	(JADE Collab.)
ROSNER	90	PR D42 3732		
WAGNER	90	PRL 64 1095	+Hinshaw, Ong, Snyder+	(Mark II Collab.)
ALBRECHT	89C	PL B219 121	+Boeckmannn, Glaeser, Harder+	(ARGUS Collab.)
ALBRECHT	89G	PL B229 304	+Glaeser, Harder, Krueger+	(ARGUS Collab.)
ALBRECHT	89J	PL B229 175	+Glaser, Harder+	(ARGUS Collab.)
ALBRECHT	89L	PL B232 554	+Glaeser, Harder, Krueger, Nippe, Oest+	(ARGUS Collab.)
ARTUSO	89	PRL 62 2233	+Bebek, Berkelman, Blucher+	(CLEO Collab.)
AVERILL	89	PR D39 123	+Blockus, Brabson+	(HRS Collab.)
AVERY	89B	PL B223 470	+Besson, Garren, Yelton+	(CLEO Collab.)
BEBEK	89	PRL 62 8	+Berkelman, Blucher+	(CLEO Collab.)
BORTOLETTO	89	PRL 62 2436	+Goldberg, Horwitz, Mestayer+	(CLEO Collab.)
BORTOLETTO	89B	PRL 63 1667	+Goldberg, Horwitz, Mestayer+	(CLEO Collab.)

ALBRECHT	88F	PL B209 119	+Boeckmann, Glaeser+	(ARGUS Collab.)
ALBRECHT	88K	PL B215 424	+Boeckmann, Glaeser+	(ARGUS Collab.)
ALBRECHT	87C	PL B185 218	+Binder, Boeckmann, Glaser+	(ARGUS Collab.)
ALBRECHT	87D	PL B199 451	+Andam, Binder, Boeckmann+	(ARGUS Collab.)
ALBRECHT	87I	PL B192 245	+Andam, Binder, Boeckmann+	(ARGUS Collab.)
ALBRECHT	87J	PL B197 452	+Andam, Binder, Boeckmann+	(ARGUS Collab.)
AVERY	87	PL B183 429	+Besson, Bowcock, Giles+	(CLEO Collab.)
BEAN	87B	PRL 58 183	+Bobbink, Brock, Engler+	(CLEO Collab.)
BEBEK	87	PR D36 1289	+Berkelman, Blucher, Cassel+	(CLEO Collab.)
ALAM	86	PR D34 3279	+Katayama, Kim, Sun+	(CLEO Collab.)
ALBRECHT	86F	PL B182 95	+Binder, Boeckmann, Glaser+	(ARGUS Collab.)
PDG	86	PL 170B	Aguilar-Benitez, Porter+	(CERN, CIT+)
CHEN	85	PR D31 2386	+Goldberg, Horwitz, Jawahery+	(CLEO Collab.)
HAAS	85	PRL 55 1248	+Hempstead, Jensen, Kagan+	(CLEO Collab.)
AVERY	84	PRL 53 1309	+Bebek, Berkelman, Cassel+	(CLEO Collab.)
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