

K_L^0 – THIS IS PART 2 OF 4

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

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ENERGY DEPENDENCE OF K_L^0 DALITZ PLOT

For discussion, see note on Dalitz plot parameters in the K^\pm section of the Particle Listings above. For definitions of a_v , a_t , a_u , and a_y , see the earlier version of the same note in the 1982 edition of this *Review* published in Physics Letters **111B** 70 (1982).

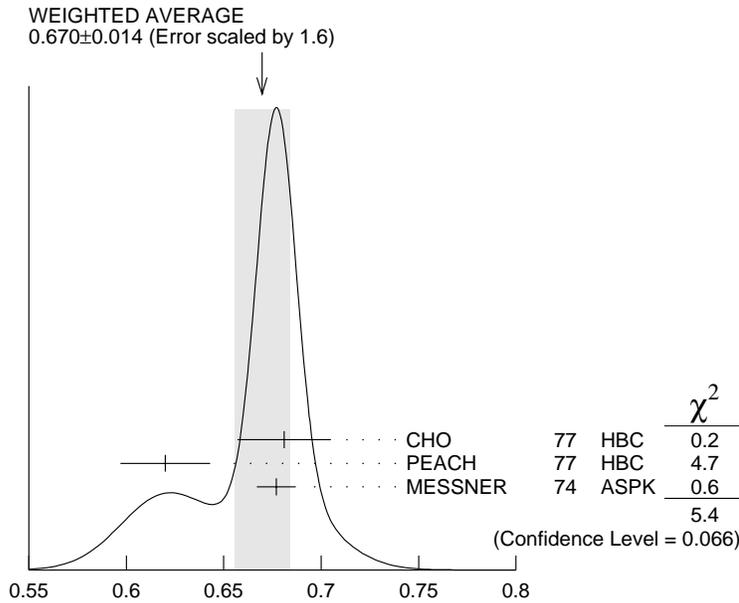
$$|\text{matrix element}|^2 = 1 + gu + hu^2 + jv + kv^2$$

where $u = (s_3 - s_0) / m_\pi^2$ and $v = (s_1 - s_2) / m_\pi^2$

LINEAR COEFFICIENT g FOR $K_L^0 \rightarrow \pi^+ \pi^- \pi^0$

<u>VALUE</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
0.670±0.014 OUR AVERAGE		Error includes scale factor of 1.6. See the ideogram below.		
0.681±0.024	6499	CHO	77	HBC
0.620±0.023	4709	PEACH	77	HBC
0.677±0.010	509k	MESSNER	74	ASPK $a_y = -0.917 \pm 0.013$
● ● ● We do not use the following data for averages, fits, limits, etc. ● ● ●				
0.69 ±0.07	192	⁶⁴ BALDO-...	75	HLBC
0.590±0.022	56k	⁶⁴ BUCHANAN	75	SPEC $a_u = -0.277 \pm 0.010$
0.619±0.027	20k	^{64,65} BISI	74	ASPK $a_t = -0.282 \pm 0.011$
0.612±0.032		⁶⁴ ALEXANDER	73B	HBC
0.73 ±0.04	3200	⁶⁴ BRANDENB...	73	HBC
0.50 ±0.11	180	⁶⁴ JAMES	72	HBC
0.608±0.043	1486	⁶⁴ KRENZ	72	HLBC $a_t = -0.277 \pm 0.018$
0.688±0.074	384	⁶⁴ METCALF	72	ASPK $a_t = -0.31 \pm 0.03$
0.650±0.012	29k	⁶⁴ ALBROW	70	ASPK $a_y = -0.858 \pm 0.015$
0.593±0.022	36k	^{64,66} BUCHANAN	70	SPEC $a_u = -0.278 \pm 0.010$
0.664±0.056	4400	⁶⁴ SMITH	70	OSPK $a_t = -0.306 \pm 0.024$
0.400±0.045	2446	⁶⁴ BASILE	68B	OSPK $a_t = -0.188 \pm 0.020$
0.649±0.044	1350	⁶⁴ HOPKINS	67	HBC $a_t = -0.294 \pm 0.018$
0.428±0.055	1198	⁶⁴ NEFKENS	67	OSPK $a_u = -0.204 \pm 0.025$
0.64 ±0.17	280	⁶⁴ ANIKINA	66	CC $a_v = -8.2^{+0.9}_{-1.3}$
0.70 ±0.12	126	⁶⁴ HAWKINS	66	HBC $a_v = -8.6 \pm 0.7$
0.32 ±0.13	66	⁶⁴ ASTBURY	65	CC $a_v = -5.5 \pm 1.5$
0.51 ±0.09	310	⁶⁴ ASTBURY	65B	CC $a_v = -7.3^{+0.6}_{-0.8}$
0.55 ±0.23	79	⁶⁴ ADAIR	64	HBC $a_v = -7.6 \pm 1.7$
0.51 ±0.20	77	⁶⁴ LUERS	64	HBC $a_v = -7.3 \pm 1.6$

- ⁶⁴ Quadratic dependence required by some experiments. (See sections on "QUADRATIC COEFFICIENT *h*" and "QUADRATIC COEFFICIENT *k*" below.) Correlations prevent us from averaging results of fits not including *g*, *h*, and *k* terms.
- ⁶⁵ BISI 74 value comes from quadratic fit with quad. term consistent with zero. *g* error is thus larger than if linear fit were used.
- ⁶⁶ BUCHANAN 70 result revised by BUCHANAN 75 to include radiative correlations and to use more reliable K_L^0 momentum spectrum of second experiment (had same beam).



Linear coeff. *g* for $K_L^0 \rightarrow \pi^+ \pi^- \pi^0$ matrix element squared

QUADRATIC COEFFICIENT *h* FOR $K_L^0 \rightarrow \pi^+ \pi^- \pi^0$

VALUE	EVTS	DOCUMENT ID	TECN
0.079±0.007 OUR AVERAGE			
0.095±0.032	6499	CHO	77 HBC
0.048±0.036	4709	PEACH	77 HBC
0.079±0.007	509k	MESSNER	74 ASPK

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

-0.011±0.018	29k	⁶⁷ ALBROW	70 ASPK
0.043±0.052	4400	⁶⁷ SMITH	70 OSPK

See notes in section "LINEAR COEFFICIENT *g* FOR $K_L^0 \rightarrow \pi^+ \pi^- \pi^0$ | MATRIX ELEMENT|²" above.

- ⁶⁷ Quadratic coefficients *h* and *k* required by some experiments. (See section on "QUADRATIC COEFFICIENT *k*" below.) Correlations prevent us from averaging results of fits not including *g*, *h*, and *k* terms.

QUADRATIC COEFFICIENT k FOR $K_L^0 \rightarrow \pi^+ \pi^- \pi^0$

<u>VALUE</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>
0.0098 ± 0.0018 OUR AVERAGE			
0.024 ± 0.010	6499	CHO	77 HBC
-0.008 ± 0.012	4709	PEACH	77 HBC
0.0097 ± 0.0018	509k	MESSNER	74 ASPK

LINEAR COEFFICIENT j FOR $K_L^0 \rightarrow \pi^+ \pi^- \pi^0$ (CP -VIOLATING TERM)Listed in CP -violation section below.**QUADRATIC COEFFICIENT h FOR $K_L^0 \rightarrow \pi^0 \pi^0 \pi^0$**

<u>VALUE (units 10^{-3})</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>
-3.3 ± 1.1 ± 0.7	5M	⁶⁸ SOMALWAR	92 E731

⁶⁸SOMALWAR 92 chose m_{π^+} as normalization to make it compatible with the Particle Data Group $K_L^0 \rightarrow \pi^+ \pi^- \pi^0$ definitions.

 K_L^0 FORM FACTORS

For discussion, see note on form factors in the K^\pm section of the Particle Listings above.

In the form factor comments, the following symbols are used.

f_+ and f_- are form factors for the vector matrix element.

f_S and f_T refer to the scalar and tensor term.

$f_0 = f_+ + f_- t / (m_K^2 - m_\pi^2)$.

λ_+ , λ_- , and λ_0 are the linear expansion coefficients of f_+ , f_- , and f_0 .

λ_+ refers to the $K_{\mu 3}^0$ value except in the $K_{e 3}^0$ sections.

$d\xi(0)/d\lambda_+$ is the correlation between $\xi(0)$ and λ_+ in $K_{\mu 3}^0$.

$d\lambda_0/d\lambda_+$ is the correlation between λ_0 and λ_+ in $K_{\mu 3}^0$.

t = momentum transfer to the π in units of m_π^2 .

DP = Dalitz plot analysis.

PI = π spectrum analysis.

MU = μ spectrum analysis.

POL = μ polarization analysis.

BR = $K_{\mu 3}^0 / K_{e 3}^0$ branching ratio analysis.

E = positron or electron spectrum analysis.

RC = radiative corrections.

 λ_+ (LINEAR ENERGY DEPENDENCE OF f_+ IN K_{e3}^0 DECAY)

 For radiative correction of K_{e3}^0 DP, see GINSBERG 67 and BECHERRAWY 70.

VALUE	EVTS	DOCUMENT ID	TECN	COMMENT
0.0300±0.0016 OUR AVERAGE		Error includes scale factor of 1.2.		
0.0306±0.0034	74k	BIRULEV	81	SPEC DP
0.025 ±0.005	12k	⁶⁹ ENGLER	78B	HBC DP
0.0348±0.0044	18k	HILL	78	STRC DP
0.0312±0.0025	500k	GJESDAL	76	SPEC DP
0.0270±0.0028	25k	BLUMENTHAL	75	SPEC DP
0.044 ±0.006	24k	BUCHANAN	75	SPEC DP
0.040 ±0.012	2171	WANG	74	OSPK DP
0.045 ±0.014	5600	ALBROW	73	ASPK DP
0.019 ±0.013	1871	BRANDENB...	73	HBC PI transv.
0.022 ±0.014	1910	NEUHOFER	72	ASPK PI
0.023 ±0.005	42k	BISI	71	ASPK DP
0.05 ±0.01	16k	CHIEN	71	ASPK DP, no RC
0.02 ±0.013	1000	ARONSON	68	OSPK PI
+0.023 ±0.012	4800	BASILE	68	OSPK DP, no RC
-0.01 ±0.02	762	FIRESTONE	67	HBC DP, no RC
+0.01 ±0.015	531	KADYK	67	HBC e,PI, no RC
+0.08 ^{+0.10} _{-0.08}	240	LOWYS	67	FBC PI
+0.15 ±0.08	577	FISHER	65	OSPK DP, no RC
+0.07 ±0.06	153	LUERS	64	HBC DP, no RC

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

0.029 ±0.005	19k	⁶⁹ CHO	80	HBC DP
0.0286±0.0049	26k	BIRULEV	79	SPEC Repl. by BIRULEV 81
0.032 ±0.0042	48k	BIRULEV	76	SPEC Repl. by BIRULEV 81

⁶⁹ ENGLER 78B uses an unique K_{e3}^0 subset of CHO 80 events and is less subject to systematic effects.

 $\xi_a = f_-/f_+$ (determined from $K_{\mu 3}^0$ spectra)

 The parameter ξ is redundant with λ_0 below and is not put into the Meson Summary Table.

VALUE	$d\xi(0)/d\lambda_+$	EVTS	DOCUMENT ID	TECN	COMMENT
-0.11±0.09 OUR EVALUATION		Error includes scale factor of 2.3. Correlation is $d\xi(0)/d\lambda_+ = -14$. From a fit discussed in note on $K_{\ell 3}$ form factors in 1982 edition, PL 111B (April 1982).			
-0.10±0.09	-12	150k	⁷⁰ BIRULEV	81	SPEC DP
+0.26±0.16	-13	14k	⁷¹ CHO	80	HBC DP
+0.13±0.23	-20	16k	⁷¹ HILL	79	STRC DP
-0.25±0.22	-5.9	32k	⁷² BUCHANAN	75	SPEC DP
-0.11±0.07	-17	1.6M	⁷³ DONALDSON	74B	SPEC DP
-1.00±0.45	-20	1385	⁷⁴ PEACH	73	HLBC DP
-1.5 ±0.7	-28	9086	⁷⁵ ALBROW	72	ASPK DP
+1.2 ±0.8	-18	1341	⁷⁶ CARPENTER	66	OSPK DP

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

$+0.50 \pm 0.61$	unknown	16k	⁷⁷ DALLY	72	ASPK	DP
-3.9 ± 0.4		3140	⁷⁸ BASILE	70	OSPK	DP, indep of λ_+
$-0.68^{+0.12}_{-0.20}$	-26	16k	⁷⁷ CHIEN	70	ASPK	DP

⁷⁰ BIRULEV 81 error, $d\xi(0)/d\lambda_+$ calculated by us from λ_0, λ_+ . $d\lambda_0/d\lambda_+ = 0$ used.

⁷¹ HILL 79 and CHO 80 calculated by us from λ_0, λ_+ , and $d\lambda_0/d\lambda_+$.

⁷² BUCHANAN 75 is calculated by us from λ_0, λ_+ and $d\lambda_0/d\lambda_+$ because their appendix A value -0.20 ± 22 assumes $\xi(t)$ constant, i.e. $\lambda_- = \lambda_+$.

⁷³ DONALDSON 74B gives $\xi = -0.11 \pm 0.02$ not including systematics. Above error and $d\xi(0)/d\lambda_+$ were calculated by us from λ_0 and λ_+ errors (which include systematics) and $d\lambda_0/d\lambda_+$.

⁷⁴ PEACH 73 gives $\xi(0) = -0.95 \pm 0.45$ for $\lambda_+ = \lambda_- = 0.025$. The above value is for $\lambda_- = 0$. K.Peach, private communication (1974).

⁷⁵ ALBROW 72 fit has λ_- free, gets $\lambda_- = -0.030 \pm 0.060$ or $\Lambda = +0.15^{+0.17}_{-0.11}$.

⁷⁶ CARPENTER 66 $\xi(0)$ is for $\lambda_+ = 0$. $d\xi(0)/d\lambda_+$ is from figure 9.

⁷⁷ CHIEN 70 errors are statistical only. $d\xi(0)/d\lambda_+$ from figure 4. DALLY 72 is a reanalysis of CHIEN 70. The DALLY 72 result is not compatible with assumption $\lambda_- = 0$ so not included in our fit. The nonzero λ_- value and the relatively large λ_+ value found by DALLY 72 come mainly from a single low t bin (figures 1,2). The (f_+, ξ) correlation was ignored. We estimate from figure 2 that fixing $\lambda_- = 0$ would give $\xi(0) = -1.4 \pm 0.3$ and would add 10 to χ^2 . $d\xi(0)/d\lambda_+$ is not given.

⁷⁸ BASILE 70 is incompatible with all other results. Authors suggest that efficiency estimates might be responsible.

$\xi_b = f_-/f_+$ (determined from $K_{\mu 3}^0/K_{e 3}^0$)

The $K_{\mu 3}^0/K_{e 3}^0$ branching ratio fixes a relationship between $\xi(0)$ and λ_+ . We quote the author's $\xi(0)$ and associated λ_+ but do not average because the λ_+ values differ. The fit result and scale factor given below are not obtained from these ξ_b values. Instead they are obtained directly from the authors $K_{\mu 3}^0/K_{e 3}^0$ branching ratio via the fitted $K_{\mu 3}^0/K_{e 3}^0$ ratio ($\Gamma(\pi^\pm \mu^\mp \nu)/\Gamma(\pi^\pm e^\mp \nu_e)$). The parameter ξ is redundant with λ_0 below and is not put into the Meson Summary Table.

<u>VALUE</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
-0.11 ± 0.09 OUR EVALUATION		Error includes scale factor of 2.3. Correlation is $d\xi(0)/d\lambda_+ = -14$. From a fit discussed in note on $K_{\mu 3}$ form factors in 1982 edition, PL 111B (April 1982).		

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

0.5 ± 0.4	6700	BRANDENB...	73	HBC	BR, $\lambda_+ = 0.019 \pm 0.013$
-0.08 ± 0.25	1309	⁷⁹ EVANS	73	HLBC	BR, $\lambda_+ = 0.02$
-0.5 ± 0.5	3548	BASILE	70	OSPK	BR, $\lambda_+ = 0.02$
$+0.45 \pm 0.28$	569	BEILLIERE	69	HLBC	BR, $\lambda_+ = 0$
-0.22 ± 0.30	1309	⁷⁹ EVANS	69	HLBC	
$+0.2^{+0.8}_{-1.2}$		KULYUKINA	68	CC	BR, $\lambda_+ = 0$
$+1.1 \pm 1.1$	389	ADAIR	64	HBC	BR, $\lambda_+ = 0$
$+0.66^{+0.9}_{-1.3}$		LUERS	64	HBC	BR, $\lambda_+ = 0$

⁷⁹ EVANS 73 replaces EVANS 69.

$\xi_c = f_-/f_+$ (determined from μ polarization in $K_{\mu 3}^0$)

The μ polarization is a measure of $\xi(t)$. No assumptions on λ_{+-} necessary, t (weighted by sensitivity to $\xi(t)$) should be specified. In λ_+ , $\xi(0)$ parametrization this is $\xi(0)$ for $\lambda_+ = 0$. $d\xi/d\lambda = \xi t$. For radiative correction to μ polarization in $K_{\mu 3}^0$, see GINSBERG 73. The parameter ξ is redundant with λ_0 below and is not put into the Meson Summary Table.

VALUE	EVTS	DOCUMENT ID	TECN	COMMENT
-0.11 ± 0.09	OUR EVALUATION	Error includes scale factor of 2.3. Correlation is $d\xi(0)/d\lambda_+ = -14$. From a fit discussed in note on $K_{\ell 3}$ form factors in 1982 edition, PL 111B (April 1982).		
+0.178 ± 0.105	207k	⁸⁰ CLARK	77 SPEC	POL, $d\xi(0)/d\lambda_+ = +0.68$
-0.385 ± 0.105	2.2M	⁸¹ SANDWEISS	73 CNTR	POL, $d\xi(0)/d\lambda_+ = -6$
-1.81 ^{+0.50} / _{-0.26}		⁸² LONGO	69 CNTR	POL, $t=3.3$

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

-1.6 ± 0.5	638	⁸³ ABRAMS	68B OSPK	Polarization
-1.2 ± 0.5	2608	⁸³ AUERBACH	66B OSPK	Polarization

⁸⁰ CLARK 77 $t = +3.80$, $d\xi(0)/d\lambda_+ = \xi(t)t = 0.178 \times 3.80 = +0.68$.

⁸¹ SANDWEISS 73 is for $\lambda_+ = 0$ and $t = 0$.

⁸² LONGO 69 $t = 3.3$ calculated from $d\xi(0)/d\lambda_+ = -6.0$ (table 1) divided by $\xi = -1.81$.

⁸³ t value not given.

$\text{Im}(\xi)$ in $K_{\mu 3}^0$ DECAY (from transverse μ pol.)

Test of T reversal invariance.

VALUE	EVTS	DOCUMENT ID	TECN	COMMENT
-0.007 ± 0.026	OUR AVERAGE			
0.009 ± 0.030	12M	MORSE	80 CNTR	Polarization
0.35 ± 0.30	207k	⁸⁴ CLARK	77 SPEC	POL, $t=0$
-0.085 ± 0.064	2.2M	⁸⁵ SANDWEISS	73 CNTR	POL, $t=0$
-0.02 ± 0.08		LONGO	69 CNTR	POL, $t=3.3$
-0.2 ± 0.6		ABRAMS	68B OSPK	Polarization

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

0.012 ± 0.026 SCHMIDT 79 CNTR Repl. by MORSE 80

⁸⁴ CLARK 77 value has additional $\xi(0)$ dependence $+0.21\text{Re}[\xi(0)]$.

⁸⁵ SANDWEISS 73 value corrected from value quoted in their paper due to new value of $\text{Re}(\xi)$. See footnote 4 of SCHMIDT 79.

λ_+ (LINEAR ENERGY DEPENDENCE OF f_+ IN $K_{\mu 3}^0$ DECAY)

See also the corresponding entries and notes in section " $\xi_A = f_-/f_+$ " above and section " λ_0 (LINEAR ENERGY DEPENDENCE OF f_0 IN $K_{\mu 3}^0$ DECAY)" below. For radiative correction of $K_{\mu 3}^0$ Dalitz plot see GINSBERG 70 and BECHERRAWY 70.

VALUE	EVTS	DOCUMENT ID	TECN	COMMENT
0.034 ± 0.005	OUR EVALUATION	From a fit discussed in note on $K_{\ell 3}$ form factors in 1982 edition, PL 111B (April 1982).		
0.0427 ± 0.0044	150k	BIRULEV	81 SPEC	DP
0.028 ± 0.010	14k	CHO	80 HBC	DP
0.028 ± 0.011	16k	HILL	79 STRC	DP

0.046 ±0.030	32k	BUCHANAN	75	SPEC	DP
0.030 ±0.003	1.6M	DONALDSON	74B	SPEC	DP
0.085 ±0.015	9086	ALBROW	72	ASPK	DP
● ● ● We do not use the following data for averages, fits, limits, etc. ● ● ●					
0.0337 ±0.0033	129k	DZHORD...	77	SPEC	Repl. by BIRULEV 81
0.046 ±0.008	82k	ALBRECHT	74	WIRE	Repl. by BIRULEV 81
0.11 ±0.04	16k	DALLY	72	ASPK	DP
0.07 ±0.02	16k	CHIEN	70	ASPK	Repl. by DALLY 72

λ_0 (LINEAR ENERGY DEPENDENCE OF f_0 IN $K_{\mu 3}^0$ DECAY)

Wherever possible, we have converted the above values of $\xi(0)$ into values of λ_0 using the associated λ_+^μ and $d\xi(0)/d\lambda_+$.

VALUE	$d\lambda_0/d\lambda_+$	EVTS	DOCUMENT ID	TECN	COMMENT
0.025 ±0.006	OUR EVALUATION		Error includes scale factor of 2.3. Correlation is $d\lambda_0/d\lambda_+ = -0.16$. From a fit discussed in note on $K_{\ell 3}$ form factors in 1982 edition, PL 111B (April 1982).		
0.0341 ±0.0067	unknown	150k	⁸⁶ BIRULEV	81	SPEC DP
+0.050 ±0.008	-0.11	14k	CHO	80	HBC DP
+0.039 ±0.010	-0.67	16k	HILL	79	STRC DP
+0.047 ±0.009	1.06	207k	⁸⁷ CLARK	77	SPEC POL
+0.025 ±0.019	+0.5	32k	⁸⁸ BUCHANAN	75	SPEC DP
+0.019 ±0.004	-0.47	1.6M	⁸⁹ DONALDSON	74B	SPEC DP
-0.060 ±0.038	-0.71	1385	⁹⁰ PEACH	73	HLBC DP
-0.018 ±0.009	+0.49	2.2M	⁸⁷ SANDWEISS	73	CNTR POL
-0.043 ±0.052	-1.39	9086	⁹¹ ALBROW	72	ASPK DP
-0.140 ^{+0.043} -0.022	+0.49		⁸⁷ LONGO	69	CNTR POL
+0.08 ±0.07	-0.54	1371	⁸⁷ CARPENTER	66	OSPK DP
● ● ● We do not use the following data for averages, fits, limits, etc. ● ● ●					
0.041 ±0.008		14k	⁹² CHO	80	HBC BR, $\lambda_+ = 0.028$
+0.0485 ±0.0076		47k	DZHORD...	77	SPEC In BIRULEV 81
+0.024 ±0.011		82k	ALBRECHT	74	WIRE In BIRULEV 81
+0.06 ±0.03		6700	⁹³ BRANDENB...	73	HBC BR, $\lambda_+ = 0.019 \pm 0.013$
-0.067 ±0.227	unknown	16k	⁹⁴ DALLY	72	ASPK DP
-0.333 ±0.034	+1.	3140	⁹⁵ BASILE	70	OSPK DP

⁸⁶ BIRULEV 81 gives $d\lambda_0/d\lambda_+ = -1.5$, giving an unreasonably narrow error ellipse which dominates all other results. We use $d\lambda_0/d\lambda_+ = 0$.

⁸⁷ λ_0 value is for $\lambda_+ = 0.03$ calculated by us from $\xi(0)$ and $d\xi(0)/d\lambda_+$.

⁸⁸ BUCHANAN 75 value is from their appendix A and uses only $K_{\mu 3}$ data. $d\lambda_0/d\lambda_+$ was obtained by private communication, C. Buchanan, 1976.

⁸⁹ DONALDSON 74B $d\lambda_0/d\lambda_+$ obtained from figure 18.

⁹⁰ PEACH 73 assumes $\lambda_+ = 0.025$. Calculated by us from $\xi(0)$ and $d\xi(0)/d\lambda_+$.

⁹¹ ALBROW 72 λ_0 is calculated by us from ξ_A , λ_+ and $d\xi(0)/d\lambda_+$. They give $\lambda_0 = -0.043 \pm 0.039$ for $\lambda_- = 0$. We use our larger calculated error.

⁹² CHO 80 BR result not independent of their Dalitz plot result.

⁹³ Fit for λ_0 does not include this value but instead includes the $K_{\mu 3}/K_{e 3}$ result from this experiment.

⁹⁴ DALLY 72 gives $f_0 = 1.20 \pm 0.35$, $\lambda_0 = -0.080 \pm 0.272$, $\lambda_0' = -0.006 \pm 0.045$, but with a different definition of λ_0 . Our quoted λ_0 is his λ_0/f_0 . We cannot calculate true λ_0 error without his (λ_0, f_0) correlations. See also note on DALLY 72 in section ξ_A .

⁹⁵ BASILE 70 λ_0 is for $\lambda_+ = 0$. Calculated by us from ξ_A with $d\xi(0)/d\lambda_+ = 0$. BASILE 70 is incompatible with all other results. Authors suggest that efficiency estimates might be responsible.

$|f_S/f_+|$ FOR K_{e3}^0 DECAY

Ratio of scalar to f_+ couplings.

VALUE	CL%	EVTS	DOCUMENT ID	TECN	COMMENT
<0.04	68	25k	BLUMENTHAL75	SPEC	
● ● ● We do not use the following data for averages, fits, limits, etc. ● ● ●					
<0.095	95	18k	HILL	78	STRC
<0.07	68	48k	BIRULEV	76	SPEC See also BIRULEV 81
<0.19	95	5600	ALBROW	73	ASPK
<0.15	68		KULYUKINA	67	CC

$|f_T/f_+|$ FOR K_{e3}^0 DECAY

Ratio of tensor to f_+ couplings.

VALUE	CL%	EVTS	DOCUMENT ID	TECN	COMMENT
<0.23	68	25k	BLUMENTHAL75	SPEC	
● ● ● We do not use the following data for averages, fits, limits, etc. ● ● ●					
<0.40	95	18k	HILL	78	STRC
<0.34	68	48k	BIRULEV	76	SPEC See also BIRULEV 81
<1.0	95	5600	ALBROW	73	ASPK
<1.0	68		KULYUKINA	67	CC

$|f_T/f_+|$ FOR $K_{\mu 3}^0$ DECAY

Ratio of tensor to f_+ couplings.

VALUE	DOCUMENT ID	TECN
0.12 ± 0.12	BIRULEV	81 SPEC

α_{K^*} DECAY FORM FACTOR FOR $K_L \rightarrow e^+ e^- \gamma$

α_{K^*} is the constant in the model of BERGSTROM 83 which measures the relative strength of the vector-vector transition $K_L \rightarrow K^* \gamma$ with $K^* \rightarrow \rho, \omega, \phi \rightarrow \gamma^*$ and the pseudoscalar-pseudoscalar transition $K_L \rightarrow \pi, \eta, \eta' \rightarrow \gamma \gamma^*$.

VALUE	DOCUMENT ID	TECN
-0.28 ± 0.08 OUR AVERAGE		
-0.28 ± 0.13	BARR	90B NA31
-0.280 ^{+0.099} _{-0.090}	OHL	90B B845

DECAY FORM FACTORS FOR $K_L^0 \rightarrow \pi^\pm \pi^0 e^\mp \nu_e$

Given in MAKOFF 93.