[81] HAIDT 71 table 8 (Dalitz plot analysis) gives $d\xi(0)/d\lambda_+ = (-1.1+0.5)/(0.050-0.029) = -29$, error raised from 0.50 to agree with $d\xi(0) = 0.20$ for fixed λ_+.

[82] KIJEWSKI 69 figure 17 was used to obtain $d\xi(0)/d\lambda_+$ and errors.

[83] CALLAHAN 66 table 1 (π analysis) gives $d\xi(0)/d\lambda_+ = (0.72–0.05)/(0–0.04) = -17$, error raised from 0.80 to agree with $d\xi(0) = 0.37$ for fixed λ_+. t unknown.

[84] JENSEN 64 gives $\lambda_+^{\mu} = \lambda_+^{e} = -0.020 \pm 0.027$. $d\xi(0)/d\lambda_+$ unknown. Includes SHAKLEE 64 $\xi_B(K_{\mu3}/K_{e3})$.

$\xi_B = f_-/f_+$ (determined from $K^{\pm}_{\mu3}/K^{\pm}_{e3}$)

The $K^{\pm}_{\mu3}/K^{\pm}_{e3}$ 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 fitted $K^{\pm}_{\mu3}/K^{\pm}_{e3}$ ratio $\Gamma(\pi^0\mu^+\nu_\mu)/\Gamma(\pi^0 e^+\nu_e)$, with the exception of HEINTZE 77. The parameter ξ is redundant with λ_0 below and is not put into the Meson Summary Table.

VALUE	EVTS	DOCUMENT ID	TECN	CHG	COMMENT
-0.35 ± 0.15 OUR EVALUATION					From a fit discussed in note on $K_{\ell3}$ form factors in 1982 edition, PL **111B** (April 1982).
-0.12 ± 0.12	55k	[85] HEINTZE	77 CNTR	+	λ_+=0.029
• • • We do not use the following data for averages, fits, limits, etc. • • •					
$0.0\ \pm0.15$	5825	CHIANG	72 OSPK	+	λ_+=0.03, fig.10
-0.81 ± 0.27	1505	[86] HAIDT	71 HLBC	+	λ_+=0.028, fig.8
-0.35 ± 0.22		[87] BOTTERILL	70 OSPK	+	λ_+=0.045 ± 0.015
$+0.91\pm0.82$		ZELLER	69 ASPK	+	λ_+=0.023
-0.08 ± 0.15	5601	[87] BOTTERILL	68B ASPK	+	λ_+=0.023 ± 0.008
-0.60 ± 0.20	1398	[86] EICHTEN	68 HLBC	+	See note
$+1.0\ \pm0.6$	986	GARLAND	68 OSPK	+	λ_+=0
$+0.75\pm0.50$	306	AUERBACH	67 OSPK	+	λ_+=0
$+0.4\ \pm0.4$	636	CALLAHAN	66B FBC	+	λ_+=0
$+0.6\ \pm0.5$		BISI	65B HBC	+	λ_+=0
$+0.8\ \pm0.6$	500	CUTTS	65 OSPK	+	λ_+=0
$-0.17^{+0.75}_{-0.99}$		SHAKLEE	64 XEBC	+	λ_+=0

[85] Calculated by us from λ_0 and λ_+ given below.

[86] EICHTEN 68 has $\lambda_+ = 0.023 \pm 0.008$, $t = 4$, independent of λ_-. Replaced by HAIDT 71.

[87] BOTTERILL 70 is re-evaluation of BOTTERILL 68B with different λ_+.

$\xi_C = f_-/f_+$ (determined from μ polarization in $K^{\pm}_{\mu3}$)

The μ polarization is a measure of $\xi(t)$. No assumptions on $\lambda_{+\_}$ necessary, t (weighted by sensitivity to $\xi(t)$) should be specified. In λ_+, $\xi(0)$ parametrization this is $\xi(0)$ for λ_+=0. $d\xi/d\lambda = \xi t$. For radiative correction to muon polarization in $K^{\pm}_{\mu3}$, see GINSBERG 71. The parameter ξ is redundant with λ_0 below and is not put into the Meson Summary Table.

VALUE	EVTS	DOCUMENT ID	TECN	CHG	COMMENT
-0.35 ± 0.15 OUR EVALUATION					From a fit discussed in note on $K_{\ell3}$ form factors in 1982 edition, PL **111B** (April 1982).
-0.25 ± 1.20	1585	[88] BRAUN	75 HLBC	+	POL, t=4.2
-0.95 ± 0.3	3133	[89] CUTTS	69 OSPK	+	Total pol. t=4.0
$-1.0\ \pm0.3$	6000	[90] BETTELS	68 HLBC	+	Total pol. t=4.9
• • • We do not use the following data for averages, fits, limits, etc. • • •					
-0.64 ± 0.27	40k	[91] MERLAN	74 ASPK	+	POL, $d\xi(0)/d\lambda_+ = +1.7$
$-1.4\ \pm1.8$	397	[92] CALLAHAN	66B FBC	+	Total pol.
$-0.7\ ^{+0.9}_{-3.3}$	2950	[92] CALLAHAN	66B FBC	+	Long. pol.
$+1.2\ ^{+2.4}_{-1.8}$	2100	[92] BORREANI	65 HLBC	+	Polarization
-4.0 to $+1.7$	500	[92] CUTTS	65 OSPK	+	Long. pol.

[88] BRAUN 75 $d\xi(0)/d\lambda_+ = \xi t = -0.25\times4.2 = -1.0$.

[89] CUTTS 69 $t = 4.0$ was calculated from figure 8. $d\xi(0)/d\lambda_+ = \xi t = -0.95\times4 = -3.8$.

[90] BETTELS 68 $d\xi(0)/d\lambda_+ = \xi t = -1.0\times4.9 = -4.9$.

[91] MERLAN 74 polarization result (figure 5) not possible. See discussion of polarization experiments in note on "$K_{\ell3}$ Form Factors" in the 1982 edition of this *Review* [Physics Letters **111B** (1982)].

[92] t value not given.

Im(ξ) in $K^{\pm}_{\mu3}$ DECAY (from transverse μ pol.)

Test of T reversal invariance.

VALUE	EVTS	DOCUMENT ID	TECN	CHG	COMMENT
-0.017 ± 0.025 OUR AVERAGE					
-0.016 ± 0.025	20M	CAMPBELL	81 CNTR	+	Pol.
$-0.3\ \ ^{+0.3}_{-0.4}$	3133	CUTTS	69 OSPK	+	Total pol. fig.7
$-0.1\ \ \pm0.3$	6000	BETTELS	68 HLBC	+	Total pol.
$0.0\ \ \pm1.0$	2648	CALLAHAN	66B FBC	+	MU
$+1.6\ \ \pm1.3$	397	CALLAHAN	66B FBC	+	Total pol.
$0.5\ \ ^{+1.4}_{-0.5}$	2950	CALLAHAN	66B FBC	+	Long. pol.
• • • We do not use the following data for averages, fits, limits, etc. • • •					
-0.010 ± 0.019	32M	[93] BLATT	83 CNTR		Polarization

[93] Combined result of MORSE 80 ($K^0_{\mu3}$) and CAMPBELL 81 ($K^+_{\mu3}$).

λ_+ (LINEAR ENERGY DEPENDENCE OF f_+ IN $K^{\pm}_{\mu3}$ DECAY)

See also the corresponding entries and footnotes in sections ξ_A, ξ_C, and λ_0. For radiative correction of $K^{\pm}_{\mu3}$ Dalitz plot, see GINSBERG 70 and BECHERRAWY 70.

VALUE	EVTS	DOCUMENT ID	TECN	CHG	COMMENT
0.033 ± 0.008 OUR EVALUATION					From a fit discussed in note on $K_{\ell3}$ form factors in 1982 edition, PL **111B** (April 1982).
$+0.050\pm0.013$	3973	WHITMAN	80 SPEC	+	DP
0.025 ± 0.030	490	ARNOLD	74 HLBC	+	DP
0.027 ± 0.019	6527	MERLAN	74 ASPK	+	DP
0.025 ± 0.017	1897	BRAUN	73C HLBC	+	DP
0.024 ± 0.019	4025	[94] ANKENBRA...	72 ASPK	+	PI
-0.006 ± 0.015	3480	CHIANG	72 OSPK	+	DP
0.050 ± 0.018	3240	HAIDT	71 HLBC	+	DP
0.009 ± 0.026	2041	KIJEWSKI	69 OSPK	+	PI
$0.0\ \ \pm0.05$	444	CALLAHAN	66B FBC	+	PI

[94] ANKENBRANDT 72 λ_+ from figure 3 to match $d\xi(0)/d\lambda_+$. Text gives 0.024 ± 0.022.

λ_0 (LINEAR ENERGY DEPENDENCE OF f_0 IN $K^{\pm}_{\mu3}$ DECAY)

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

VALUE	$d\lambda_0/d\lambda_+$	EVTS	DOCUMENT ID	TECN	CHG	COMMENT
0.004 ± 0.007 OUR EVALUATION						From a fit discussed in note on $K_{\ell3}$ form factors in 1982 edition, PL **111B** (April 1982).
$+0.029\pm0.011$	-0.37	3973	WHITMAN	80 SPEC	+	DP
$+0.019\pm0.010$	$+0.03$	55k	[95] HEINTZE	77 SPEC	+	BR
$+0.008\pm0.097$	$+0.92$	1585	[96] BRAUN	75 HLBC	+	POL
-0.040 ± 0.040	-0.62	490	ARNOLD	74 HLBC	+	DP
-0.019 ± 0.015	$+0.27$	6527	[97] MERLAN	74 ASPK	+	DP
-0.008 ± 0.020	-0.53	1897	[98] BRAUN	73C HLBC	+	DP
-0.026 ± 0.013	$+0.03$	4025	[99] ANKENBRA...	72 ASPK	+	PI
$+0.030\pm0.014$	-0.21	3480	[99] CHIANG	72 OSPK	+	DP
-0.039 ± 0.029	-1.34	3240	[99] HAIDT	71 HLBC	+	DP
-0.056 ± 0.024	$+0.69$	3133	[96] CUTTS	69 OSPK	+	POL
-0.031 ± 0.045	-1.10	2041	[99] KIJEWSKI	69 OSPK	+	PI
-0.063 ± 0.024	$+0.60$	6000	[96] BETTELS	68 HLBC	+	POL
$+0.058\pm0.036$	-0.37	444	[99] CALLAHAN	66B FBC	+	PI
• • • We do not use the following data for averages, fits, limits, etc. • • •						
-0.017 ± 0.011			[100] BRAUN	74 HLBC	+	$K_{\mu3}/K_{e3}$ vs. t

[95] HEINTZE 77 uses $\lambda_+ = 0.029 \pm 0.003$. $d\lambda_0/d\lambda_+$ estimated by us.

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

[97] MERLAN 74 λ_0 and $d\lambda_0/d\lambda_+$ were calculated by us from ξ_A, λ_+^{μ}, and $d\xi(0)/d\lambda_+$. Their figure 6 gives $\lambda_0 = -0.025 \pm 0.012$ and no $d\lambda_0/d\lambda_+$.

[98] This value and error are taken from BRAUN 75 but correspond to the BRAUN 73C λ_+^{μ} result. $d\lambda_0/d\lambda_+$ is from BRAUN 73C $d\xi(0)/d\lambda_+$ in ξ_A above.

[99] λ_0 calculated by us from $\xi(0)$, λ_+^{μ}, and $d\xi(0)/d\lambda_+$.

[100] BRAUN 74 is a combined $K_{\mu3}$-K_{e3} result. It is not independent of BRAUN 73C ($K_{\mu3}$) and BRAUN 73B (K_{e3}) form factor results.

$\left|f_S/f_+\right|$ FOR $K^{\pm}_{e3}$ DECAY

Ratio of scalar to f_+ couplings.

VALUE	CL%	EVTS	DOCUMENT ID	TECN	CHG	COMMENT
0.084 ± 0.023 OUR AVERAGE			Error includes scale factor of 1.2.			
$0.070\pm0.016\pm0.016$		32k	AKIMENKO	91 SPEC		λ_+, f_S, f_T, ϕ fit
$0.00\ \ \pm0.10$		2827	BRAUN	75 HLBC	+	
$0.14\ \ ^{+0.03}_{-0.04}$		2707	STEINER	71 HLBC	+	λ_+, f_S, f_T, ϕ fit
• • • We do not use the following data for averages, fits, limits, etc. • • •						
<0.13	90	4017	CHIANG	72 OSPK	+	
<0.23	90		BOTTERILL	68C ASPK		
<0.18	90		BELLOTTI	67B HLBC		
<0.30	95		KALMUS	67 HLBC	+	

$\left|f_T/f_+\right|$ FOR $K^{\pm}_{e3}$ DECAY

Ratio of tensor to f_+ couplings.

VALUE	CL%	EVTS	DOCUMENT ID	TECN	CHG	COMMENT
0.38 ± 0.11 OUR AVERAGE			Error includes scale factor of 1.1.			
$0.53\ ^{+0.09}_{-0.10}\pm0.10$		32k	AKIMENKO	91 SPEC		λ_+, f_S, f_T, ϕ fit
0.07 ± 0.37		2827	BRAUN	75 HLBC	+	
$0.24\ ^{+0.16}_{-0.14}$		2707	STEINER	71 HLBC	+	λ_+, f_S, f_T, ϕ fit
• • • We do not use the following data for averages, fits, limits, etc. • • •						
<0.75	90	4017	CHIANG	72 OSPK	+	
<0.58	90		BOTTERILL	68C ASPK		
<0.58	90		BELLOTTI	67B HLBC		
<1.1	95		KALMUS	67 HLBC	+	

f_T/f_+ FOR $K^{\pm}_{\mu3}$ DECAY

Ratio of tensor to f_+ couplings.

VALUE	EVTS	DOCUMENT ID	TECN
0.02 ± 0.12	1585	BRAUN	75 HLBC