ξ'' PARAMETER

VALUE	EVTS	DOCUMENT ID		TECN	CHG	COMMENT
0.65±0.36	326k	[35] BURKARD	85	CNTR	+	Bhabha + annihil

[35] BURKARD 85 measure $(\xi''\text{-}\xi\xi')/\xi$ and ξ' and set $\xi = 1$.

TRANSVERSE e^+ POLARIZATION IN PLANE OF μ SPIN, e^+ MOMENTUM

VALUE	EVTS	DOCUMENT ID		TECN	CHG	COMMENT
• • • We do not use the following data for averages, fits, limits, etc. • • •						
0.016±0.021±0.01	5.3M	BURKARD	85B	CNTR	+	Annihil 9–53 MeV

TRANSVERSE e^+ POLARIZATION NORMAL TO PLANE OF μ SPIN, e^+ MOMENTUM

Zero if T invariance holds.

VALUE	EVTS	DOCUMENT ID		TECN	CHG	COMMENT
0.007±0.022±0.007	5.3M	BURKARD	85B	CNTR	+	Annihil 9–53 MeV

α/A

VALUE (units 10^{-3})	EVTS	DOCUMENT ID		TECN	CHG	COMMENT
0.4± 4.3		[36] BURKARD	85B	FIT		
• • • We do not use the following data for averages, fits, limits, etc. • • •						
15 ±50 ±14	5.3M	BURKARD	85B	CNTR	+	9–53 MeV e^+

[36] Global fit to all measured parameters. Correlation coefficients are given in BURKARD 85B.

α'/A

Zero if T invariance holds.

VALUE (units 10^{-3})	EVTS	DOCUMENT ID		TECN	CHG	COMMENT
− 0.2± 4.3		[37] BURKARD	85B	FIT		
• • • We do not use the following data for averages, fits, limits, etc. • • •						
−47 ±50 ±14	5.3M	[38] BURKARD	85B	CNTR	+	9–53 MeV e^+

[37] Global fit to all measured parameters. Correlation coefficients are given in BURKARD 85B.
[38] BURKARD 85B measure e^+ polarizations P_{T_1} and P_{T_2} versus e^+ energy.

β/A

VALUE (units 10^{-3})	EVTS	DOCUMENT ID		TECN	CHG	COMMENT
3.9± 6.2		[39] BURKARD	85B	FIT		
• • • We do not use the following data for averages, fits, limits, etc. • • •						
2 ±17 ±6	5.3M	BURKARD	85B	CNTR	+	9–53 MeV e^+

[39] Global fit to all measured parameters. Correlation coefficients are given in BURKARD 85B.

β'/A

Zero if T invariance holds.

VALUE (units 10^{-3})	EVTS	DOCUMENT ID		TECN	CHG	COMMENT
1.5± 6.3		[40] BURKARD	85B	FIT		
• • • We do not use the following data for averages, fits, limits, etc. • • •						
17 ±17 ±6	5.3M	[41] BURKARD	85B	CNTR	+	9–53 MeV e^+

[40] Global fit to all measured parameters. Correlation coefficients are given in BURKARD 85B.
[41] BURKARD 85B measure e^+ polarizations P_{T_1} and P_{T_2} versus e^+ energy.

a/A

This comes from an alternative parameterization to that used in the Summary Table (see the "Note on Muon Decay Parameters" above).

VALUE (units 10^{-3})	CL%	DOCUMENT ID		TECN
• • • We do not use the following data for averages, fits, limits, etc. • • •				
<15.9	90	[42] BURKARD	85B	FIT

[42] Global fit to all measured parameters. Correlation coefficients are given in BURKARD 85B.

a'/A

This comes from an alternative parameterization to that used in the Summary Table (see the "Note on Muon Decay Parameters" above).

VALUE (units 10^{-3})	DOCUMENT ID		TECN
• • • We do not use the following data for averages, fits, limits, etc. • • •			
5.3±4.1	[43] BURKARD	85B	FIT

[43] Global fit to all measured parameters. Correlation coefficients are given in BURKARD 85B.

$(b'+b)/A$

This comes from an alternative parameterization to that used in the Summary Table (see the "Note on Muon Decay Parameters" above).

VALUE (units 10^{-3})	CL%	DOCUMENT ID		TECN
• • • We do not use the following data for averages, fits, limits, etc. • • •				
<1.04	90	[44] BURKARD	85B	FIT

[44] Global fit to all measured parameters. Correlation coefficients are given in BURKARD 85B.

c/A

This comes from an alternative parameterization to that used in the Summary Table (see the "Note on Muon Decay Parameters" above).

VALUE (units 10^{-3})	CL%	DOCUMENT ID		TECN
• • • We do not use the following data for averages, fits, limits, etc. • • •				
<6.4	90	[45] BURKARD	85B	FIT

[45] Global fit to all measured parameters. Correlation coefficients are given in BURKARD 85B.

c'/A

This comes from an alternative parameterization to that used in the Summary Table (see the "Note on Muon Decay Parameters" above).

VALUE (units 10^{-3})	DOCUMENT ID		TECN
• • • We do not use the following data for averages, fits, limits, etc. • • •			
3.5±2.0	[46] BURKARD	85B	FIT

[46] Global fit to all measured parameters. Correlation coefficients are given in BURKARD 85B.

$\overline{\eta}$ PARAMETER

$(V-A)$ theory predicts $\overline{\eta} = 0$. $\overline{\eta}$ affects spectrum of radiative muon decay.

VALUE	DOCUMENT ID		TECN	CHG	COMMENT
0.02 ±0.08 OUR AVERAGE					
−0.014±0.090	EICHENBER...	84	ELEC	+	ρ free
+0.09 ±0.14	BOGART	67	CNTR	+	
• • • We do not use the following data for averages, fits, limits, etc. • • •					
−0.035±0.098	EICHENBER...	84	ELEC	+	ρ=0.75 assumed

μ REFERENCES

DOHMEN	93	PL B317 631	+Groth, Heer+	(PSI SINDRUM-II Collab.)
FREEDMAN	93	PR D47 811	+Fujikawa, Napolitano, Nelson+	(LAMPF E645 Collab.)
GORDEEV	93	JETPL 57 270	+Savchenko, Abazov+	(PNPI, JINR)
		Translated from ZETFP 57 262.		
NI	93	PR D48 1976	+Arnold, Chmely+	(LAMPF Crystal-Box Collab.)
IMAZATO	92	PRL 69 877	+Kawashima, Tanaka+	(KEK, INUS, TOKY, TOKMS)
BARANOV	91	SJNP 53 802	+Vanko, Glazov, Evtukhovich+	(JINR)
		Translated from YAF 53 1302.		
KRAKAUER	91B	PL B263 534	+Talaga, Allen, Chen, Doe+	(UMD, UCI, LANL)
MATTHIAS	91	PRL 66 2716	+Ahn+	(YALE, HEIDP, WILL, GSI, VILL, BNL)
Also	91B	PRL 67 932 erratum	Matthias, Ahn+	(YALE, HEIDP, WILL, GSI, VILL, BNL)
HUBER	90B	PR D41 2709	+	(WYOM, VICT, ARIZ, ROCH, TRIU, SFRA, BRCO)
AHMAD	88	PR D38 2102	+Azuelos+	(TRIU, VICT, VPI, BRCO, MONT, CNRC)
Also	87	PRL 59 970	Ahmad+	(TRIU, VPI, VICT, BRCO, MONT, CNRC)
BALKE	88	PR D37 587	+Gidal, Jodidio+	(LBL, UCB, COLO, NWES, TRIU)
BELLGARDT	88	NP B299 1	+Otter, Eichler+	(SINDRUM Collab.)
BOLTON	88	PR D38 2077	+Cooper, Frank, Hallin+	(LANL, STAN, CHIC, TEMP)
Also	86	PRL 56 2461	Bolton, Bowman, Cooper+	(LANL, STAN, CHIC, TEMP)
Also	86	PRL 57 3241	Grosnick, Wright, Bolton+	(CHIC, LANL, STAN, TEMP)
HUBER	88	PRL 61 2189	+Beer+	(WYOM, VICT, ARIZ, ROCH, TRIU, BRCO)
BELTRAMI	87	PL B194 326	+Burkard, Von Dincklage+	(ETH, SIN, MANZ)
COHEN	87	RMP 59 1121	+Taylor	(RISC, NBS)
NI	87	PRL 59 2716	+Arnold, Chmely+	(YALE, LANL, WILL, MISS, HEIDP)
BEER	86	PRL 57 671	+Marshall, Mason+	(VICT, TRIU, WYOM)
BELTRAMI	86	NP A451 679	+Aas, Beer, Dechambrier, Goudsmit+	(ETH, FRIB)
JODIDIO	86	PR D34 1967	+Balke, Carr, Gidal, Shinsky+	(LBL, NWES, TRIU)
Also	88	PR D37 237 erratum	Jodidio, Balke, Carr+	(LBL, NWES, TRIU)
BERTL	85	NP B260 1	+Egli, Eichler+	(SINDRUM Collab.)
BRYMAN	85	PRL 55 465	+	(TRIU, CNRC, BRCO, LANL, CHIC, CARL+)
BURKARD	85	PL 150B 242	+Corriveau, Egger+	(ETH, SIN, MANZ)
BURKARD	85B	PL 160B 343	+Corriveau, Egger+	(ETH, SIN, MANZ)
Also	81B	PR D24 2004	Corriveau, Egger, Fetscher+	(ETH, SIN, MANZ)
Also	83B	PL 129B 260	Corriveau, Egger, Fetscher+	(ETH, SIN, MANZ)
HUGHES	85	CNPP 14 341	+Kinoshita	(YALE, CORN)
STOKER	85	PRL 54 1887	+Balke, Carr, Gidal+	(LBL, NWES, TRIU)
BARDIN	84	PL 137B 135	+Duclos, Magnon+	(SACL, CERN, BGNA, FIRZ)
BERTL	84	PL 140B 299	+Eichler, Felawka+	(SINDRUM Collab.)
BOLTON	84	PRL 53 1415	+Bowman, Carlini+	(LANL, CHIC, STAN, TEMP)
EICHENBER...	84	NP A412 523	Eichenberger, Engfer, VanderSchaff	(ZURI)
GIOVANETTI	84	PR D29 343	+Dey, Eckhause, Hart+	(WILL)
KINOSHITA	84	PRL 52 717	+Nizic, Okamoto	(CORN)
AZUELOS	83	PRL 51 164	+Depommier, Leroy, Martin+	(MONT, TRIU, BRCO)
Also	77	PRL 39 1113	Depommier+	(MONT, BRCO, TRIU, VICT, MELB)
BERGSMA	83	PL 122B 465	+Dorenbosch, Jonker+	(CHARM Collab.)
CARR	83	PRL 51 627	+Gidal, Gobbi, Jodidio, Oram+	(LBL, NWES, TRIU)
KINNISON	82	PR D25 2846	+Anderson, Matis, Wright+	(EFI, STAN, LANL)
Also	79	PRL 42 556	Bowman, Cooper, Hamm+	(LASL, EFI, STAN)
KLEMPT	82	PR D25 652	+Schulze, Wolf, Camani, Gygax+	(MANZ, ETH)
MARIAM	82	PRL 49 993	+Beer, Bolton, Egan, Gardner+	(YALE, HEIDH, BERN)
MARSHALL	82	PR D25 1174	+Warren, Oram, Kiefl	(BRCO)
COMBLEY	81	PRPL 68 93	+Farley, Picasso	(SHEF, RMCS, CERN)
NEMETHY	81	CNPP 10 147	+Hughes	(LBL, YALE)
ABELA	80	PL 95B 318	+Backenstoss, Simons, Wuest+	(BASL, KARLK, KARLE)
BADERT...	80	LNC 28 401	Badertscher, Borer, Czapek, Flueckiger+	(BERN)
Also	82	NP A377 406	Badertscher, Borer, Czapek, Flueckiger+	(BERN)
JONKER	80	PL 93B 203	+Panman, Udo, Allaby+	(CHARM Collab.)
SCHAAF	80	NP A340 249	+Engfer, Povel, Dey+	(ZURI, ETH, SIN)
Also	77	PL 72B 183	Povel, Dey, Walter, Pfeiffer+	(ZURI, ETH, SIN)
WILLIS	80	PRL 44 522	+Hughes+	(YALE, LBL, LASL, SACL, SIN, CNRC+)
Also	80B	PRL 45 1370	Willis+	(YALE, LBL, LASL, SACL, SIN, CNRC+)
BAILEY	79	NP B150 1		(CERN, DARE, MANZ)
FARLEY	79	ARNPS 29 243	+Picasso	(RMCS, CERN)
BADERT...	78	PL 79B 371	Badertscher, Borer, Czapek, Flueckiger+	(BERN)
BAILEY	78	JPG 4 345		(DARE, BERN, SHEF, MANZ, RMCS, CERN, BIRM)
Also	79	NP B150 1	Bailey	(CERN, DARE, MANZ)
BLIETSCHAU	78	NP B133 205	+Deden, Hasert, Krenz+	(Gargamelle Collab.)
BOWMAN	78	PRL 41 442	+Cheng, Li, Matis	(LASL, IAS, CMU, EFI)
CAMANI	78	PL 77B 326	+Gygax, Klempt, Schenck, Schulze+	(ETH, MANZ)
BADERT...	77	PRL 39 1385	Badertscher, Borer, Czapek, Flueckiger+	(BERN)
BAILEY	77	PL 67B 225	+	(CERN Muon Storage Ring Collab.)
Also	77C	PL 68B 191	Bailey+	(CERN, DARE, BERN, SHEF, MANZ+)
Also	75	PL 55B 420	Bailey+	(CERN Muon Storage Ring Collab., BIRM)
CALMET	77	RMP 49 21	+Narison, Perrottet+	(CNRS)
CASPERSON	77	PRL 38 956	+Crane+	(BERN, HEIDH, LASL, WYOM, YALE)
DEPOMMIER	77	PRL 39 1113	+	(MONT, BRCO, TRIU, VICT, MELB)
BALANDIN	74	JETP 40 811	+Grebenyuk, Zinov, Konin, Ponomarev	(JINR)
		Translated from ZETF 67 1631.		