$\pi^+\pi^-\pi^0$ SEXTANT ASYMMETRY PARAMETER

Measurements with an error $> 2.0 \times 10^{-2}$ have been omitted.

VALUE (units 10^{-2})	EVTS	DOCUMENT ID		TECN
0.18 ± 0.16 OUR AVERAGE				
0.20 ± 0.25	165k	JANE	74	OSPK
0.10 ± 0.22	220k	LAYTER	72	ASPK
0.5 ± 0.5	37k	GORMLEY	68C	WIRE

$\pi^+\pi^-\pi^0$ QUADRANT ASYMMETRY PARAMETER

VALUE (units 10^{-2})	EVTS	DOCUMENT ID		TECN
−0.17 ± 0.17 OUR AVERAGE				
−0.30 ± 0.25	165k	JANE	74	OSPK
−0.07 ± 0.22	220k	LAYTER	72	ASPK

$\pi^+\pi^-\gamma$ LEFT-RIGHT ASYMMETRY PARAMETER

Measurements with an error $> 2.0 \times 10^{-2}$ have been omitted.

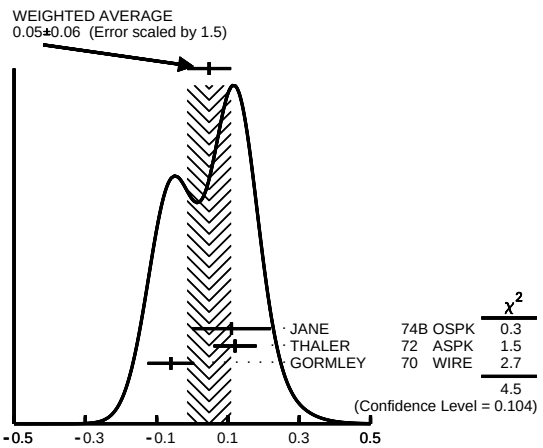
VALUE (units 10^{-2})	EVTS	DOCUMENT ID		TECN
0.9 ± 0.4 OUR AVERAGE				
1.2 ± 0.6	35k	JANE	74B	OSPK
0.5 ± 0.6	36k	THALER	72	ASPK
1.22 ± 1.56	7257	GORMLEY	70	ASPK

$\pi^+\pi^-\gamma$ PARAMETER β (D-wave)

Sensitive to a D-wave contribution: $dN/d\cos\theta = \sin^2\theta\ (1 + \beta\ \cos^2\theta)$

VALUE	EVTS	DOCUMENT ID		TECN
0.05 ± 0.06 OUR AVERAGE		Error includes scale factor of 1.5. See the ideogram below.		
0.11 ± 0.11	35k	JANE	74B	OSPK
0.12 ± 0.06		[6] THALER	72	ASPK
−0.060 ± 0.065	7250	GORMLEY	70	WIRE

[6] The authors don't believe this indicates D-wave because the dependence of β on the γ energy is inconsistent with theoretical prediction. A $\cos^2\theta$ dependence may also come from P- and F-wave interference.



$\eta \rightarrow \pi^+\pi^-\gamma$ parameter β (D-wave)

ENERGY DEPENDENCE OF $\eta \rightarrow \pi^+\pi^-\pi^0$ DALITZ PLOT

See the Note on η Decay Parameters above. The following experiments fit to one or more of the coefficients a, b, c, d, or e for $|\text{matrix element}|^2 = 1 + ay + by^2 + cx + dx^2 + exy$.

VALUE	EVTS	DOCUMENT ID		TECN
• • • We do not use the following data for averages, fits, limits, etc. • • •				
	81k	LAYTER	73	ASPK
	220k	LAYTER	72	ASPK
	1138	CARPENTER	70	HBC
	349	DANBURG	70	DBC
	7250	GORMLEY	70	WIRE
	526	BAGLIN	69	HLBC
	7170	CNOPS	68	OSPK
	37k	GORMLEY	68C	WIRE
	1300	CLPWY	66	HBC
	705	LARRIBE	66	HBC

α PARAMETER FOR $\eta \rightarrow 3\pi^0$

See the Note on η Decay Parameters above. The value here is of α in $|\text{matrix element}|^2 = 1 + 2\alpha z$.

VALUE	EVTS	DOCUMENT ID		TECN
−0.022 ± 0.023	50k	ALDE	84	GAM2
• • • We do not use the following data for averages, fits, limits, etc. • • •				
−0.32 ± 0.37	192	BAGLIN	70	HLBC

η REFERENCES

We have omitted some papers that have been superseded by later experiments. The omitted papers may be found in our 1988 edition Physics Letters **B204** (1988).

AMSLER	93	ZPHY C58 175	+Armstrong, Augustin+ (Crystal Barrel Collab.)
KESSLER	93	PRL 70 892	+Abegg, Baldisseri+ (SPES-II Collab.)
PLOUIN	92	PL B276 526	+ (SACL, EPOL, IPN, SACL, GWU, UCLA, BGUN, LOUC)
BARU	90	ZPHY C48 581	+Blinov, Blinov+ (MD-1 Collab.)
ROE	90	PR D41 17	+Bartha, Burke, Garbincius+ (ASP Collab.)
PDG	88	PL B204	Yost, Barnett+ (LBL+)
WILLIAMS	88	PR D38 1365	+Antreasyan, Bartels, Besset+ (Crystal Ball Collab.)
AIHARA	86	PR D33 844	+Alston-Garnjost+ (TPC-2γ Collab.)
BARTEL	85E	PL 160B 421	+Becker, Cords, Felst+ (JADE Collab.)
LANDSBERG	85	PRPL 128 310	(SERP)
ALDE	84	ZPHY C25 225	+Binon, Bricman, Donskov+ (SERP, BELG, LAPP)
Also	84B	SJNP 40 918	Alde, Binon, Bricman+ (SERP, BELG, LAPP)
		Translated from YAF 40 1447.	
WEINSTEIN	83	PR D28 2896	+Antreasyan, Gu, Kollman+ (Crystal Ball Collab.)
BINON	82	SJNP 36 391	+Bricman, Gouanere+ (SERP, BELG, LAPP, CERN)
		Translated from YAF 36 670.	
Also	82B	NC 71A 497	Binon, Bricman+ (SERP, BELG, LAPP, CERN)
DAVYDOV	81	LNC 32 45	+Donskov, Inyakin+ (SERP, BELG, LAPP, CERN)
Also	81B	SJNP 33 825	Davydov, Binon+ (SERP, BELG, LAPP, CERN)
		Translated from YAF 33 1534.	
DZHELYADIN	81	PL 105B 239	+Golovkin, Konstantinov, Kubarovski+ (SERP)
Also	81C	SJNP 33 822	Dzhelyadin, Viktorov, Golovkin+ (SERP)
		Translated from YAF 33 1529.	
ABROSIMOV	80	SJNP 31 195	+Ilina, Niszcz, Okhrimenko+ (JINR)
		Translated from YAF 31 371.	
DZHELYADIN	80	PL 94B 548	+Viktorov, Golovkin+ (SERP)
Also	80C	SJNP 32 516	Dzhelyadin, Golovkin, Kachanov+ (SERP)
		Translated from YAF 32 998.	
DZHELYADIN	80B	PL 97B 471	+Viktorov, Golovkin+ (SERP)
Also	80D	SJNP 32 518	Dzhelyadin, Golovkin, Kachanov+ (SERP)
		Translated from YAF 32 1002.	
BUSHNIN	78	PL 79B 147	+Dzhelyadin, Golovkin, Gritsuk+ (SERP)
Also	78B	SJNP 28 775	Bushnin, Golovkin, Gritsuk, Dzhelyadin+ (SERP)
		Translated from YAF 28 1507.	
MARTYNOV	76	SJNP 23 48	+Saltykov, Tarasov, Uzhinskii (JINR)
		Translated from YAF 23 93.	
JANE	75	PL 59B 99	+Grannis, Jones, Lipman, Owen+ (RHEL, LOWC)
JANE	75B	PL 59B 103	+Grannis, Jones, Lipman, Owen+ (RHEL, LOWC)
Also	78B	PL 73B 503	Jane
		Erratum in private communication.	
BROWMAN	74B	PRL 32 1067	+Dewire, Gittelman, Hanson, Loh+ (CORN, BING)
DAVIES	74	NC 24A 324	+Guy, Zia (BIRM, RHEL, SHMP)
DUANE	74	PRL 32 425	+Binnie, Camilleri, Carr+ (LOIC, SHMP)
JANE	74	PL 48B 260	+Jones, Lipman, Owen+ (RHEL, LOWC, SUSS)
JANE	74B	PL 48B 265	+Jones, Lipman, Owen+ (RHEL, LOWC, SUSS)
KENDALL	74	NC 21A 387	+Lanou, Massimo, Shapiro+ (BROW, BARI, MIT)
LAYTER	73	PR D7 2565	+Appel, Kotlewski, Lee, Stein, Thaler (COLU)
THALER	73	PR D7 2569	+Appel, Kotlewski, Layter, Lee, Stein (COLU)
AGUILAR-...	72B	PR D6 29	Aguilar-Benitez, Chung, Eisner, Samios (BNL)
BLOODWO...	72B	NP B39 525	Bloodworth, Jackson, Prentice, Yoon (TNTO)
LAYTER	72	PRL 29 316	+Appel, Kotlewski, Lee, Stein, Thaler (COLU)
THALER	72	PRL 29 313	+Appel, Kotlewski, Layter, Lee, Stein (COLU)
BASILE	71D	NC 3A 796	+Bollini, Dalpiaz, Frabetti+ (CERN, BGNA, STRB)
STRUGALSKI	71	NP B27 429	+Chuvilo, Gemesy, Ivanovskaya+ (JINR)
BAGLIN	70	NP B22 66	+Bezaguet, Degrange+ (EPOL, MADR, STRB)
BUTTRAM	70	PRL 25 1358	+Kreisler, Mischke (PRIN)
CARPENTER	70	PR D1 1303	+Binkley, Chapman, Cox, Dagan+ (DUKE)
COX	70B	PRL 24 534	+Fortney, Golson (DUKE)
DANBURG	70	PR D2 2564	+Abolins, Dahl, Davies, Hoch, Kirz+ (LRL)
DEVONS	70	PR D1 1936	+Grunhaus, Kozlowski, Nemethy+ (COLU, SYRA)
GORMLEY	70	PR D2 501	+Hyman, Lee, Nash, Peoples+ (COLU, BNL)
Also	70B	Nevis 181 Thesis	Gormley (COLU)
BAGLIN	69	PL 29B 445	+Bezaguet+ (EPOL, UCB, MADR, STRB)
Also	70	NP B22 66	Baglin, Bezaguet, Degrange+ (EPOL, MADR, STRB)
HYAMS	69	PL 29B 128	+Koch, Potter, VonLindern+ (CERN, MPIM)
ARNOLD	68	PL 27B 466	+Paty, Baglin, Bingham+ (STRB, MADR, EPOL, UCB)
BAZIN	68	PRL 20 895	+Goshaw, Zacher+ (PRIN, QUKI)
BULLOCK	68	PL 27B 402	+Esten, Fleming, Govan, Henderson+ (LOUC)
CNOPS	68	PRL 21 1609	+Hough, Cohn+ (BNL, ORNL, UCND, TENN, PENN)
GORMLEY	68C	PRL 21 402	+Hyman, Lee, Nash, Peoples+ (COLU, BNL)
WEHMANN	68	PRL 20 748	+Engels+ (HARV, CASE, SLAC, CORN, MCGI)
BAGLIN	67	PL 24B 637	+Bezaguet, Degrange+ (EPOL, UCB)
BAGLIN	67B	BAPS 12 567	+Bezaguet, Degrange+ (EPOL, UCB)
BALTAY	67B	PRL 19 1498	+Franzini, Kim, Newman+ (COLU, STON)
BALTAY	67D	PRL 19 1495	+Franzini, Kim, Newman+ (COLU, BRAN)
BEMPORAD	67	PL 25B 380	+Braccini, Foa, Lubelsmey+ (PISA, BONN)
Also	67	Private Comm.	Ion
BILLING	67	PL 25B 435	+Bullock, Esten, Govan+ (LOUC, OXF)
BUNIATOV	67	PL 25B 560	+Zavattini, Deinet+ (CERN, KARL)
CENCE	67	PRL 19 1393	+Peterson, Stenger, Chiu+ (HAWA, LRL)
ESTEN	67	PL 24B 115	+Govan, Knight, Miller, Tovey+ (LOUC, OXF)
FELDMAN	67	PRL 18 868	+Frati, Gleeson, Halpern+ (PENN)
FLATTE	67	PRL 18 976	(LRL)
FLATTE	67B	PR 163 1441	+Wohl (LRL)
LITCHFIELD	67	PL 24B 486	+Rangan, Segar, Smith+ (RHEL, SACL)
PRICE	67	PRL 18 1207	+Crawford (LRL)
ALFF-...	66	PR 145 1072	Alff-Steinberger, Berley+ (COLU, RUTG)
CLPWY	66	PR 149 1044	(SCUC, LRL, PURD, WISC, YALE)
CRAWFORD	66	PRL 16 333	+Price (LRL)
DIGIUGNO	66	PRL 16 767	+Giorgi, Silvestri+ (NAPL, TRST, FRAS)
GROSSMAN	66	PR 146 993	+Price, Crawford (LRL)
GRUNHAUS	66	Thesis	(COLU)
JAMES	66	PR 142 896	+Kraybill (YALE, BNL)
JONES	66	PL 23 597	+Binnie, Duane, Horsey, Mason+ (LOIC, RHEL)
LARRIBE	66	PL 23 600	+Leveque, Muller, Pauli+ (SACL, RHEL)
FOSTER	65	PR 138B 652	+Peters, Meer, Loeffler+ (WISC, PURD)
FOSTER	65B	Athens Conf.	+Good, Meer (WISC)
FOSTER	65C	Thesis	(WISC)
PRICE	65	PRL 15 123	+Crawford (LRL)
RITTENBERG	65	PRL 15 556	+Kalbfleisch (LRL, BNL)
FOELSCHE	64	PR 134B 1138	+Kraybill (YALE)
KRAEMER	64	PR 136B 496	+Madansky, Fields+ (JHU, NWES, WOOD)
PAULI	64	PL 13 351	+Muller (SACL)
BACCI	63	PRL 11 37	+Penso, Salvini+ (ROMA, FRAS)
CRAWFORD	63	PRL 10 546	+Lloyd, Fowler (LRL, DUKE)
Also	66B	PRL 16 907	Crawford, Lloyd, Fowler (LRL, DUKE)
DELCOURT	63	PL 7 215	+Lefrancois, Perez-y-Jorba+ (ORSAY)
ALFF-...	62	PRL 9 322	Alff-Steinberger, Berley, Colley+ (COLU, RUTG)
BASTIEN	62	PRL 8 114	+Berge, Dahl, Ferro-Luzzi+ (LRL)
PICKUP	62	PRL 8 329	+Robinson, Salant (CNRC, BNL)