

$f_0(1370)$

$$I^G(J^{PC}) = 0^+(0^{++})$$

See also the mini-reviews on scalar mesons under $f_0(600)$ and on non- $q\bar{q}$ candidates. (See the index for the page number.)

 $f_0(1370)$ T-MATRIX POLE POSITION

Note that $\Gamma \approx 2 \operatorname{Im}(\sqrt{s_{\text{pole}}})$.

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
(1200–1500)–i(150–250) OUR ESTIMATE			
● ● ● We do not use the following data for averages, fits, limits, etc. ● ● ●			
$(1373 \pm 15) - i(137 \pm 10)$	¹² BARGIOTTI	03 OBLX	$\bar{p}p$
$(1302 \pm 17) - i(166 \pm 18)$	¹ BARBERIS	00C	450 $pp \rightarrow p_f 4\pi p_S$
$(1312 \pm 25 \pm 10) - i(109 \pm 22 \pm 15)$	BARBERIS	99D OMEG	450 $pp \rightarrow K^+ K^-, \pi^+ \pi^-$
$(1406 \pm 19) - i(80 \pm 6)$	² KAMINSKI	99 RVUE	$\pi\pi \rightarrow \pi\pi, K\bar{K}, \sigma\sigma$
$(1300 \pm 20) - i(120 \pm 20)$	ANISOVICH	98B RVUE	Compilation
$(1290 \pm 15) - i(145 \pm 15)$	BARBERIS	97B OMEG	450 $pp \rightarrow pp2(\pi^+ \pi^-)$
$(1548 \pm 40) - i(560 \pm 40)$	BERTIN	97C OBLX	0.0 $\bar{p}p \rightarrow \pi^+ \pi^- \pi^0$
$(1380 \pm 40) - i(180 \pm 25)$	ABELE	96B CBAR	0.0 $\bar{p}p \rightarrow \pi^0 K_L^0 K_L^0$
$(1300 \pm 15) - i(115 \pm 8)$	BUGG	96 RVUE	
$(1330 \pm 50) - i(150 \pm 40)$	³ AMSLER	95B CBAR	$\bar{p}p \rightarrow 3\pi^0$
$(1360 \pm 35) - i(150-300)$	³ AMSLER	95C CBAR	$\bar{p}p \rightarrow \pi^0 \eta \eta$
$(1390 \pm 30) - i(190 \pm 40)$	⁴ AMSLER	95D CBAR	$\bar{p}p \rightarrow 3\pi^0, \pi^0 \eta \eta, \pi^0 \pi^0 \eta$
1346 – i 249	^{5,6} JANSSEN	95 RVUE	$\pi\pi \rightarrow \pi\pi, K\bar{K}$
1214 – i 168	^{6,7} TORNQVIST	95 RVUE	$\pi\pi \rightarrow \pi\pi, K\bar{K}, K\pi, \eta\pi$
1364 – i 139	AMSLER	94D CBAR	$\bar{p}p \rightarrow \pi^0 \pi^0 \eta$
$(1365^{+20}_{-55}) - i(134 \pm 35)$	ANISOVICH	94 CBAR	$\bar{p}p \rightarrow 3\pi^0, \pi^0 \eta \eta$
$(1340 \pm 40) - i(127^{+30}_{-20})$	⁸ BUGG	94 RVUE	$\bar{p}p \rightarrow 3\pi^0, \eta \eta \pi^0, \eta \pi^0 \pi^0$
$(1430 \pm 5) - i(73 \pm 13)$	⁹ KAMINSKI	94 RVUE	$\pi\pi \rightarrow \pi\pi, K\bar{K}$
1515 – i 214	^{6,10} ZOU	93 RVUE	$\pi\pi \rightarrow \pi\pi, K\bar{K}$
1420 – i 220	¹¹ AU	87 RVUE	$\pi\pi \rightarrow \pi\pi, K\bar{K}$

¹ Average between $\pi^+ \pi^- 2\pi^0$ and $2(\pi^+ \pi^-)$.

² T-matrix pole on sheet – – –.

³ Supersedes ANISOVICH 94.

⁴ Coupled-channel analysis of $\bar{p}p \rightarrow 3\pi^0, \pi^0 \eta \eta$, and $\pi^0 \pi^0 \eta$ on sheet IV. Demonstrates explicitly that $f_0(600)$ and $f_0(1370)$ are two different poles.

⁵ Analysis of data from FALVARD 88.

⁶ The pole is on Sheet III. Demonstrates explicitly that $f_0(600)$ and $f_0(1370)$ are two different poles.

⁷ Uses data from BEIER 72B, OCHS 73, HYAMS 73, GRAYER 74, ROSSELET 77, CA-SON 83, ASTON 88, and ARMSTRONG 91B. Coupled channel analysis with flavor symmetry and all light two-pseudoscalars systems.

⁸ Reanalysis of ANISOVICH 94 data.

⁹T-matrix pole on sheet III.

¹⁰Analysis of data from OCHS 73, GRAYER 74, and ROSSELET 77.

¹¹Analysis of data from OCHS 73, GRAYER 74, BECKER 79, and CASON 83.

¹²Coupled channel analysis of $\pi^+\pi^-\pi^0$, $K^+K^-\pi^0$, and $K^\pm K_S^0 \pi^\mp$.

$f_0(1370)$ BREIT-WIGNER MASS OR K-MATRIX POLE PARAMETER

VALUE (MeV)
1200 to 1500 OUR ESTIMATE

DOCUMENT ID

$\pi\pi$ MODE

<u>VALUE (MeV)</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
● ● ● We do not use the following data for averages, fits, limits, etc. ● ● ●				
1434 ± 18 ± 9	848	AITALA	01A E791	$D_S^+ \rightarrow \pi^-\pi^+\pi^+$
1308 ± 10		BARBERIS	99B OMEG	450 $pp \rightarrow p_S p_f \pi^+\pi^-$
1315 ± 50		BELLAZZINI	99 GAM4	450 $pp \rightarrow pp\pi^0\pi^0$
1315 ± 30		ALDE	98 GAM4	100 $\pi^-p \rightarrow \pi^0\pi^0n$
1280 ± 55		BERTIN	98 OBLX	0.05–0.405 $\bar{n}p \rightarrow$ $\pi^+\pi^+\pi^-$
1186	13,14	TORNQVIST	95 RVUE	$\pi\pi \rightarrow \pi\pi, K\bar{K}, K\pi,$ $\eta\pi$
1472 ± 12		ARMSTRONG	91 OMEG	300 $pp \rightarrow pp\pi\pi,$ $ppK\bar{K}$
1275 ± 20		BREAKSTONE	90 SFM	62 $pp \rightarrow pp\pi^+\pi^-$
1420 ± 20		AKESSON	86 SPEC	63 $pp \rightarrow pp\pi^+\pi^-$
1256		FROGGATT	77 RVUE	$\pi^+\pi^-$ channel

¹³Uses data from BEIER 72B, OCHS 73, HYAMS 73, GRAYER 74, ROSSELET 77, CASON 83, ASTON 88, and ARMSTRONG 91B. Coupled channel analysis with flavor symmetry and all light two-pseudoscalars systems.

¹⁴Also observed by ASNER 00 in $\tau^- \rightarrow \pi^-\pi^0\pi^0\nu_\tau$ decays

$K\bar{K}$ MODE

<u>VALUE (MeV)</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
● ● ● We do not use the following data for averages, fits, limits, etc. ● ● ●			
1440 ± 50	BOLONKIN	88 SPEC	40 $\pi^-p \rightarrow K_S^0 K_S^0 n$
1463 ± 9	ETKIN	82B MPS	23 $\pi^-p \rightarrow n2K_S^0$
1425 ± 15	WICKLUND	80 SPEC	6 $\pi N \rightarrow K^+K^-N$
~ 1300	POLYCHRO...	79 STRC	7 $\pi^-p \rightarrow n2K_S^0$

4π MODE $2(\pi\pi)_S + \rho\rho$

<u>VALUE (MeV)</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
● ● ● We do not use the following data for averages, fits, limits, etc. ● ● ●			
1395 ± 40	ABELE	01 CBAR	0.0 $\bar{p}d \rightarrow \pi^-4\pi^0p$
1374 ± 38	AMSLER	94 CBAR	0.0 $\bar{p}p \rightarrow \pi^+\pi^-3\pi^0$
1345 ± 12	ADAMO	93 OBLX	$\bar{n}p \rightarrow 3\pi^+2\pi^-$
1386 ± 30	GASPERO	93 DBC	0.0 $\bar{p}n \rightarrow 2\pi^+3\pi^-$

$\eta\eta$ MODE

<u>VALUE (MeV)</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
• • • We do not use the following data for averages, fits, limits, etc. • • •			
1430	AMSLER	92 CBAR	0.0 $\bar{p}p \rightarrow \pi^0 \eta\eta$
1220 ± 40	ALDE	86D GAM4	100 $\pi^- p \rightarrow n 2\eta$

 $f_0(1370)$ BREIT-WIGNER WIDTH

<u>VALUE (MeV)</u>	<u>DOCUMENT ID</u>
200 to 500 OUR ESTIMATE	

 $\pi\pi$ MODE

<u>VALUE (MeV)</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
• • • We do not use the following data for averages, fits, limits, etc. • • •				
173 ± 32 ± 6	848	AITALA	01A E791	$D_s^+ \rightarrow \pi^- \pi^+ \pi^+$
222 ± 20		BARBERIS	99B OMEG	450 $pp \rightarrow p_s p_f \pi^+ \pi^-$
255 ± 60		BELLAZZINI	99 GAM4	450 $pp \rightarrow pp \pi^0 \pi^0$
190 ± 50		ALDE	98 GAM4	100 $\pi^- p \rightarrow \pi^0 \pi^0 n$
323 ± 13		BERTIN	98 OBLX	0.05–0.405 $\bar{n}p \rightarrow$ $\pi^+ \pi^+ \pi^-$
350	15,16	TORNQVIST	95 RVUE	$\pi\pi \rightarrow \pi\pi, K\bar{K}, K\pi,$ $\eta\pi$
195 ± 33		ARMSTRONG	91 OMEG	300 $pp \rightarrow pp\pi\pi,$ $ppK\bar{K}$
285 ± 60		BREAKSTONE	90 SFM	62 $pp \rightarrow pp\pi^+ \pi^-$
460 ± 50		AKESSON	86 SPEC	63 $pp \rightarrow pp\pi^+ \pi^-$
~ 400	17	FROGGATT	77 RVUE	$\pi^+ \pi^-$ channel

¹⁵ Uses data from BEIER 72B, OCHS 73, HYAMS 73, GRAYER 74, ROSSELET 77, CA-SON 83, ASTON 88, and ARMSTRONG 91B. Coupled channel analysis with flavor symmetry and all light two-pseudoscalars systems.

¹⁶ Also observed by ASNER 00 in $\tau^- \rightarrow \pi^- \pi^0 \pi^0 \nu_\tau$ decays

¹⁷ Width defined as distance between 45 and 135° phase shift.

 $K\bar{K}$ MODE

<u>VALUE (MeV)</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
• • • We do not use the following data for averages, fits, limits, etc. • • •			
250 ± 80	BOLONKIN	88 SPEC	40 $\pi^- p \rightarrow K_S^0 K_S^0 n$
118 ⁺¹³⁸ ₋₁₆	ETKIN	82B MPS	23 $\pi^- p \rightarrow n 2K_S^0$
160 ± 30	WICKLUND	80 SPEC	6 $\pi N \rightarrow K^+ K^- N$
~ 150	POLYCHRO...	79 STRC	7 $\pi^- p \rightarrow n 2K_S^0$

 4π MODE $2(\pi\pi)_S + \rho\rho$

<u>VALUE (MeV)</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
• • • We do not use the following data for averages, fits, limits, etc. • • •			
275 ± 55	ABELE	01 CBAR	0.0 $\bar{p}d \rightarrow \pi^- 4\pi^0 p$
375 ± 61	AMSLER	94 CBAR	0.0 $\bar{p}p \rightarrow \pi^+ \pi^- 3\pi^0$
398 ± 26	ADAMO	93 OBLX	$\bar{n}p \rightarrow 3\pi^+ 2\pi^-$
310 ± 50	GASPERO	93 DBC	0.0 $\bar{p}n \rightarrow 2\pi^+ 3\pi^-$

$\eta\eta$ MODE

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
••• We do not use the following data for averages, fits, limits, etc. •••			
250	AMSLER	92 CBAR	$0.0 \bar{p}p \rightarrow \pi^0 \eta\eta$
320 ± 40	ALDE	86D GAM4	$100 \pi^- p \rightarrow n 2\eta$

$f_0(1370)$ DECAY MODES

Mode	Fraction (Γ_i/Γ)
$\Gamma_1 \quad \pi\pi$	seen
$\Gamma_2 \quad 4\pi$	seen
$\Gamma_3 \quad 4\pi^0$	seen
$\Gamma_4 \quad 2\pi^+ 2\pi^-$	seen
$\Gamma_5 \quad \pi^+ \pi^- 2\pi^0$	seen
$\Gamma_6 \quad \rho\rho$	dominant
$\Gamma_7 \quad 2(\pi\pi)_S\text{-wave}$	seen
$\Gamma_8 \quad \pi(1300)\pi$	
$\Gamma_9 \quad a_1(1260)\pi$	
$\Gamma_{10} \quad \eta\eta$	seen
$\Gamma_{11} \quad K\bar{K}$	seen
$\Gamma_{12} \quad \gamma\gamma$	seen
$\Gamma_{13} \quad e^+ e^-$	not seen

$f_0(1370)$ PARTIAL WIDTHS

$\Gamma(\gamma\gamma)$ Γ_{12}
 See $\gamma\gamma$ widths under $f_0(600)$ and MORGAN 90.

$\Gamma(e^+ e^-)$ Γ_{13}

VALUE (eV)	CL%	DOCUMENT ID	TECN	COMMENT
<20	90	VOROBYEV	88 ND	$e^+ e^- \rightarrow \pi^0 \pi^0$

$f_0(1370)$ BRANCHING RATIOS

$\Gamma(\pi\pi)/\Gamma_{\text{total}}$ Γ_1/Γ

VALUE	DOCUMENT ID	TECN	COMMENT
••• We do not use the following data for averages, fits, limits, etc. •••			
0.26 ± 0.09	BUGG	96 RVUE	
<0.15	¹⁸ AMSLER	94 CBAR	$\bar{p}p \rightarrow \pi^+ \pi^- 3\pi^0$
<0.20	GASPERO	93 DBC	$0.0 \bar{p}n \rightarrow \text{hadrons}$

¹⁸ Using AMSLER 95B ($3\pi^0$).

$\Gamma(4\pi)/\Gamma_{\text{total}}$ $\Gamma_2/\Gamma = (\Gamma_3 + \Gamma_4 + \Gamma_5)/\Gamma$

VALUE	DOCUMENT ID	TECN	COMMENT
••• We do not use the following data for averages, fits, limits, etc. •••			
0.80 ± 0.04	GASPERO	93 DBC	$0.0 \bar{p}n \rightarrow \text{hadrons}$

$\Gamma(4\pi^0)/\Gamma_{\text{total}}$ Γ_3/Γ

<u>VALUE</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
• • • We do not use the following data for averages, fits, limits, etc. • • •			
seen	ABELE	96	CBAR 0.0 $\bar{p}p \rightarrow 5\pi^0$

$\Gamma(2\pi^+2\pi^-)/\Gamma(4\pi)$ $\Gamma_4/\Gamma_2 = \Gamma_4/(\Gamma_3+\Gamma_4+\Gamma_5)$

<u>VALUE</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
• • • We do not use the following data for averages, fits, limits, etc. • • •			
0.420 ± 0.014	¹⁹ GASPERO	93	DBC 0.0 $\bar{p}n \rightarrow 2\pi^+3\pi^-$
¹⁹ Model-dependent evaluation.			

$\Gamma(\pi^+\pi^-2\pi^0)/\Gamma(4\pi)$ $\Gamma_5/\Gamma_2 = \Gamma_5/(\Gamma_3+\Gamma_4+\Gamma_5)$

<u>VALUE</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
• • • We do not use the following data for averages, fits, limits, etc. • • •			
0.512 ± 0.019	²⁰ GASPERO	93	DBC 0.0 $\bar{p}n \rightarrow$ hadrons
²⁰ Model-dependent evaluation.			

$\Gamma(\rho\rho)/\Gamma(2(\pi\pi)_{\text{S-wave}})$ Γ_6/Γ_7

<u>VALUE</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
• • • We do not use the following data for averages, fits, limits, etc. • • •			
large	BARBERIS	00C	450 $pp \rightarrow p_f 4\pi p_S$
1.6 ± 0.2	AMSLER	94	CBAR $\bar{p}p \rightarrow \pi^+\pi^-3\pi^0$
0.58 ± 0.16	GASPERO	93	DBC 0.0 $\bar{p}n \rightarrow 2\pi^+3\pi^-$

$\Gamma(2(\pi\pi)_{\text{S-wave}})/\Gamma(4\pi)$ Γ_7/Γ_2

<u>VALUE</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
• • • We do not use the following data for averages, fits, limits, etc. • • •			
5.6 ± 2.6	²¹ ABELE	01	CBAR 0.0 $\bar{p}d \rightarrow \pi^-4\pi^0 p$

$\Gamma(2(\pi\pi)_{\text{S-wave}})/\Gamma(4\pi)$ Γ_7/Γ_2

<u>VALUE</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
• • • We do not use the following data for averages, fits, limits, etc. • • •			
0.51 ± 0.09	ABELE	01B	CBAR 0.0 $\bar{p}n \rightarrow 5\pi$

$\Gamma(\rho\rho)/\Gamma(4\pi)$ Γ_6/Γ_2

<u>VALUE</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
• • • We do not use the following data for averages, fits, limits, etc. • • •			
0.26 ± 0.07	ABELE	01B	CBAR 0.0 $\bar{p}n \rightarrow 5\pi$

$\Gamma(\pi(1300)\pi)/\Gamma(4\pi)$ Γ_8/Γ_2

<u>VALUE</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
• • • We do not use the following data for averages, fits, limits, etc. • • •			
0.17 ± 0.06	ABELE	01B	CBAR 0.0 $\bar{p}n \rightarrow 5\pi$

$\Gamma(a_1(1260)\pi)/\Gamma(4\pi)$ Γ_9/Γ_2

<u>VALUE</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
• • • We do not use the following data for averages, fits, limits, etc. • • •			
0.06 ± 0.02	ABELE	01B	CBAR 0.0 $\bar{p}n \rightarrow 5\pi$

BUGG	94	PR D50 4412	D.V. Bugg <i>et al.</i>	(LOQM)
KAMINSKI	94	PR D50 3145	R. Kaminski, L. Lesniak, J.P. Maillet	(CRAC+)
ADAMO	93	NP A558 13C	A. Adamo <i>et al.</i>	(OBELIX Collab.) JPC
GASPERO	93	NP A562 407	M. Gaspero	(ROMA) JPC
ZOU	93	PR D48 R3948	B.S. Zou, D.V. Bugg	(LOQM)
AMSLER	92	PL B291 347	C. Amsler <i>et al.</i>	(Crystal Barrel Collab.)
ARMSTRONG	91	ZPHY C51 351	T.A. Armstrong <i>et al.</i>	(ATHU, BARI, BIRM+)
ARMSTRONG	91B	ZPHY C52 389	T.A. Armstrong <i>et al.</i>	(ATHU, BARI, BIRM+)
BREAKSTONE	90	ZPHY C48 569	A.M. Breakstone <i>et al.</i>	(ISU, BGNA, CERN+)
MORGAN	90	ZPHY C48 623	D. Morgan, M.R. Pennington	(RAL, DURH)
ASTON	88	NP B296 493	D. Aston <i>et al.</i>	(SLAC, NAGO, CINC, INUS)
BOLONKIN	88	NP B309 426	B.V. Bolonkin <i>et al.</i>	(ITEP, SERP)
FALVARD	88	PR D38 2706	A. Falvard <i>et al.</i>	(CLER, FRAS, LALO+)
VOROBYEV	88	SJNP 48 273	P.V. Vorobiev <i>et al.</i>	(NOVO)
AU	87	PR D35 1633	K.L. Au, D. Morgan, M.R. Pennington	(DURH, RAL)
AKESSON	86	NP B264 154	T. Akesson <i>et al.</i>	(Axial Field Spec. Collab.)
ALDE	86D	NP B269 485	D.M. Alde <i>et al.</i>	(BELG, LAPP, SERP, CERN+)
CASON	83	PR D28 1586	N.M. Cason <i>et al.</i>	(NDAM, ANL)
ETKIN	82B	PR D25 1786	A. Etkin <i>et al.</i>	(BNL, CUNY, TUFTS, VAND)
WICKLUND	80	PRL 45 1469	A.B. Wicklund <i>et al.</i>	(ANL)
BECKER	79	NP B151 46	H. Becker <i>et al.</i>	(MPIM, CERN, ZEEM, CRAC)
POLYCHRO...	79	PR D19 1317	V.A. Polychronakos <i>et al.</i>	(NDAM, ANL)
FROGGATT	77	NP B129 89	C.D. Froggatt, J.L. Petersen	(GLAS, NORD)
ROSSELET	77	PR D15 574	L. Rosselet <i>et al.</i>	(GEVA, SACL)
GRAYER	74	NP B75 189	G. Grayer <i>et al.</i>	(CERN, MPIM)
HYAMS	73	NP B64 134	B.D. Hyams <i>et al.</i>	(CERN, MPIM)
OCHS	73	Thesis	W. Ochs	(MPIM, MUNI)
BEIER	72B	PRL 29 511	E.W. Beier <i>et al.</i>	(PENN)

OTHER RELATED PAPERS

GARMASH	02	PR D65 092005	A. Garmash <i>et al.</i>	(BELLE Collab.)
JIN	02	PR D66 057505	H. Jin, X. Zhang	
KLEEFELD	02	PR D66 034007	F. Kleefeld, E. van Beveren, G. Rupp	
RUPP	02	PR D65 078501	G. Rupp, E. vanBeveren, M.D. Scadron	
SHAKIN	02	PR D65 078502	C.M. Shakin, H. Wang	
TESHIMA	02	JPG 28 1391	T. Teshima, I. Kitamura, N. Morisita	
VOLKOV	02	PAN 65 1657	M.K. Volkov, V.L. Yudichev	
ANISOVICH	01H	EPJ A12 103	A.V. Anisovich, V.V. Anisovich, V.A. Nikonov	
KOPP	01	PR D63 092001	S. Kopp <i>et al.</i>	(CLEO Collab.)
LI	01B	EPJ C19 529	D.-M. Li, H. Yu, Q.-X. Shen	
SUROVTSEV	01	PR D63 054024	Y.S. Surovtsev, D. Krupa, M. Nagy	
AKHMETSHIN	00C	PL B476 33	R.R. Akhmetshin <i>et al.</i>	(Novosibirsk CMD-2 Collab.)
BEVEREN	00	PL B495 300	E. van Beveren, G. Rupp, M.D. Scadron	
Also	01	PL B509 365 (erratum)	E. van Beveren, G. Rupp, M.D. Scadron	
KAMINSKI	00	APP B31 895	R. Kaminski, L. Lesniak, K. Rybicki	
SADOVSKY	00	NP A655 131c	S.A. Sadovsky	
BEVEREN	99	EPJ C10 469	E. Van Beveren, G. Rupp	
GODFREY	99	RMP 71 1411	S. Godfrey, J. Napolitano	
ISHIDA	99	PTP 101 661	M. Ishida	
MINKOWSKI	99	EPJ C9 283	P. Minkowski, W. Ochs	
TORNQVIST	99	EPJ C11 359	N. Tornqvist	
ACHASOV	98D	PAN 61 224	N.N. Achasov, V.V. Gubin	
ACHASOV	98E	PR D58 054011	N.N. Achasov, G.N. Shestakov	
AMSLER	98	RMP 70 1293	C. Amsler	
ANISOVICH	98	PL B437 209	V.V. Anisovich <i>et al.</i>	
BLACK	98	PR D58 054012	D. Black <i>et al.</i>	
LOCHER	98	EPJ C4 317	M.P. Locher <i>et al.</i>	(PSI)
NARISON	98	NP B509 312	S. Narison	
ANISOVICH	97	PL B395 123	A.V. Anisovich, A.V. Sarantsev	(PNPI)
ANISOVICH	97B	ZPHY A357 123	A.V. Anisovich <i>et al.</i>	(PNPI)
ANISOVICH	97C	PL B413 137	A.V. Anisovich, A.V. Sarantsev	
ANISOVICH	97E	PAN 60 1892	A.V. Anisovich <i>et al.</i>	(PNPI)
KAMINSKI	97	ZPHY C74 79	R. Kaminski, L. Lesniak, K. Rybicki	(CRAC)
PROKOSHKIN	97	SPD 42 117	Y.D. Prokoshkin <i>et al.</i>	(SERP)
		Translated from DANS 353 323.		

TORNQVIST	96	PRL 76 1575	N.A. Tornqvist, M. Roos	(HELS)
GASPERO	95	NP A588 861	M. Gaspero	(ROMA)
KLEMPPT	95	PL B361 160	E. Klempt <i>et al.</i>	
ZOU	94B	PR D50 591	B.S. Zou, D.V. Bugg	(LOQM)
CLOSE	93A	PL B319 291	F.E. Close <i>et al.</i>	
CLOSE	93B	NP B389 513	F.E. Close, N. Isgur, S. Kumano	
MORGAN	93	PR D48 1185	D. Morgan, M.R. Pennington	(RAL, DURH)
LI	91	PR D43 2161	Z.P. Li <i>et al.</i>	(TENN)
BARNES	85	PL B165 434	T. Barnes	
BIZZARRI	69	NP B14 169	R. Bizzarri <i>et al.</i>	(CERN, CDEF)
BETTINI	66	NC 42A 695	A. Bettini <i>et al.</i>	(PADO, PISA)
