NODE=B044

$\Sigma(1670)$ $3/2^-$

$I(J^P) = 1(\frac{3}{2}^-)$ Status: ∗∗∗∗

NODE=B044

For most results published before 1974 (they are now obsolete), see our 1982 edition Physics Letters **111B** 1 (1982).

Results from production experiments are listed separately in the next entry.

Σ(1670) POLE POSITION

NODE=B044225

REAL PART

NODE=B044RE
NODE=B044RE

VALUE (MeV)	DOCUMENT ID		TECN	COMMENT
1655 to 1675 (≈ 1662) OUR ESTIMATE				
1661±3	SARANTSEV	19	DPWA	$\overline{K}N$ multichannel
1669^{+7}_{-7}	[1] KAMANO	15	DPWA	$\overline{K}N$ multichannel
• • • We do not use the following data for averages, fits, limits, etc. • • •				
1674	ZHANG	13A	DPWA	$\overline{K}N$ multichannel

→ UNCHECKED ←

[1] From the preferred solution A in KAMANO 15.

NODE=B044RE;LINKAGE=A

−2×IMAGINARY PART

NODE=B044IM
NODE=B044IM

VALUE (MeV)	DOCUMENT ID		TECN	COMMENT
45 to 65 (≈ 55) OUR ESTIMATE				
52± 6	SARANTSEV	19	DPWA	$\overline{K}N$ multichannel
64^{+10}_{-14}	[1] KAMANO	15	DPWA	$\overline{K}N$ multichannel
• • • We do not use the following data for averages, fits, limits, etc. • • •				
54	ZHANG	13A	DPWA	$\overline{K}N$ multichannel

→ UNCHECKED ←

[1] From the preferred solution A in KAMANO 15.

NODE=B044IM;LINKAGE=A

Σ(1670) POLE RESIDUES

NODE=B044250

The normalized residue is the residue divided by $\Gamma_{pole}/2$.

NODE=B044250

Normalized residue in $N\overline{K} \rightarrow \Sigma(1670) \rightarrow N\overline{K}$

NODE=B044A00
NODE=B044A00

MODULUS	PHASE (°)	DOCUMENT ID		TECN	COMMENT
0.10 ±0.02	**−31 ± 12**	SARANTSEV	19	DPWA	$\overline{K}N$ multichannel
• • • We do not use the following data for averages, fits, limits, etc. • • •					
0.129	−20	[1] KAMANO	15	DPWA	$\overline{K}N$ multichannel

[1] From the preferred solution A in KAMANO 15.

NODE=B044A00;LINKAGE=A

Normalized residue in $N\overline{K} \rightarrow \Sigma(1670) \rightarrow \Sigma\pi$

NODE=B044A01
NODE=B044A01

MODULUS	PHASE (°)	DOCUMENT ID		TECN	COMMENT
0.25 ±0.05	**−25 ± 10**	SARANTSEV	19	DPWA	$\overline{K}N$ multichannel
• • • We do not use the following data for averages, fits, limits, etc. • • •					
0.249	−21	[1] KAMANO	15	DPWA	$\overline{K}N$ multichannel

[1] From the preferred solution A in KAMANO 15.

NODE=B044A01;LINKAGE=A

Normalized residue in $N\overline{K} \rightarrow \Sigma(1670) \rightarrow \Lambda\pi$

NODE=B044A02
NODE=B044A02

MODULUS	PHASE (°)	DOCUMENT ID		TECN	COMMENT
0.09 ±0.03	**−52 ± 12**	SARANTSEV	19	DPWA	$\overline{K}N$ multichannel
• • • We do not use the following data for averages, fits, limits, etc. • • •					
0.0818	−7	[1] KAMANO	15	DPWA	$\overline{K}N$ multichannel

[1] From the preferred solution A in KAMANO 15.

NODE=B044A02;LINKAGE=A

Normalized residue in $N\overline{K} \rightarrow \Sigma(1670) \rightarrow \Xi K$

NODE=B044A05
NODE=B044A05

MODULUS	PHASE (°)	DOCUMENT ID		TECN	COMMENT
0.02±0.01	**160 ± 20**	SARANTSEV	19	DPWA	$\overline{K}N$ multichannel

Normalized residue in $N\overline{K} \rightarrow \Sigma(1670) \rightarrow \Sigma\sigma$

NODE=B044A06
NODE=B044A06

MODULUS	PHASE (°)	DOCUMENT ID		TECN	COMMENT
0.08±0.03	**−25 ± 15**	SARANTSEV	19	DPWA	$\overline{K}N$ multichannel

Normalized residue in $N\overline{K} \to \Sigma(1670) \to \Sigma(1385)\pi$, S-wave

NODE=B044A03
NODE=B044A03

MODULUS	PHASE (°)	DOCUMENT ID	TECN	COMMENT
• • • We do not use the following data for averages, fits, limits, etc. • • •				
0.228	167	[1] KAMANO 15	DPWA	$\overline{K}N$ multichannel

[1] From the preferred solution A in KAMANO 15.

NODE=B044A03;LINKAGE=A

Normalized residue in $N\overline{K} \to \Sigma(1670) \to \Sigma(1385)\pi$, D-wave

NODE=B044A04
NODE=B044A04

MODULUS	PHASE (°)	DOCUMENT ID	TECN	COMMENT
• • • We do not use the following data for averages, fits, limits, etc. • • •				
0.0915	141	KAMANO 15	DPWA	$\overline{K}N$ multichannel

Normalized residue in $N\overline{K} \to \Sigma(1670) \to \Lambda(1405)\pi$

NODE=B044A07
NODE=B044A07

MODULUS	PHASE (°)	DOCUMENT ID	TECN	COMMENT
0.03±0.02	**160 ± 15**	SARANTSEV 19	DPWA	$\overline{K}N$ multichannel

Normalized residue in $N\overline{K} \to \Sigma(1670) \to \Lambda(1520)\pi$, P-wave

NODE=B044A08
NODE=B044A08

MODULUS	PHASE (°)	DOCUMENT ID	TECN	COMMENT
0.04±0.02	**120 ± 20**	SARANTSEV 19	DPWA	$\overline{K}N$ multichannel

Normalized residue in $N\overline{K} \to \Sigma(1670) \to \Lambda(1520)\pi$, F-wave

NODE=B044A09
NODE=B044A09

MODULUS	PHASE (°)	DOCUMENT ID	TECN	COMMENT
0.01±0.01		SARANTSEV 19	DPWA	$\overline{K}N$ multichannel

Normalized residue in $N\overline{K} \to \Sigma(1670) \to \Delta\overline{K}$, S-wave

NODE=B044A10
NODE=B044A10

MODULUS	PHASE (°)	DOCUMENT ID	TECN	COMMENT
0.01±0.01		SARANTSEV 19	DPWA	$\overline{K}N$ multichannel

Normalized residue in $N\overline{K} \to \Sigma(1670) \to N\overline{K}^*(892)$, S=3/2, S-wave

NODE=B044A13
NODE=B044A13

VALUE	DOCUMENT ID	TECN	COMMENT
0.05+-0.03@50+-60	SARANTSEV 19	DPWA	$\overline{K}N$ multichannel

Normalized residue in $N\overline{K} \to \Sigma(1670) \to N\overline{K}^*(892)$, S=3/2, D-wave

NODE=B044A11
NODE=B044A11

MODULUS	PHASE (°)	DOCUMENT ID	TECN	COMMENT
0.01±0.01		SARANTSEV 19	DPWA	$\overline{K}N$ multichannel

Normalized residue in $N\overline{K} \to \Sigma(1670) \to N\overline{K}^*(892)$, S=1/2, D-wave

NODE=B044A12
NODE=B044A12

MODULUS	PHASE (°)	DOCUMENT ID	TECN	COMMENT
0.03±0.02		SARANTSEV 19	DPWA	$\overline{K}N$ multichannel

$\Sigma(1670)$ MASS

NODE=B044M

NODE=B044M

→ UNCHECKED ←

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
1665 to 1685 (≈ 1675) OUR ESTIMATE			
1679.7± 3.4±4.3	ABLIKIM 25AF	BES3	$\psi(3686) \to \Lambda\overline{\Sigma}^0\pi^0$ + c.c. (PWA)
1665 ± 3	SARANTSEV 19	DPWA	$\overline{K}N$ multichannel
1678 ± 2	ZHANG 13A	DPWA	$\overline{K}N$ multichannel
1673 ± 1	GAO 12	DPWA	$\overline{K}N \to \Lambda\pi$
1665.1± 4.1	KOISO 85	DPWA	$K^- p \to \Sigma\pi$
1682 ± 5	GOPAL 80	DPWA	$\overline{K}N \to \overline{K}N$
1679 ±10	ALSTON-... 78	DPWA	$\overline{K}N \to \overline{K}N$
1670 ± 5	GOPAL 77	DPWA	$\overline{K}N$ multichannel
1670 ± 6	HEPP 76B	DPWA	$K^- N \to \Sigma\pi$
1685 ±20	BAILLON 75	IPWA	$\overline{K}N \to \Lambda\pi$
1659 $^{+12}_{-5}$	VANHORN 75	DPWA	$K^- p \to \Lambda\pi^0$
1670 ± 2	KANE 74	DPWA	$K^- p \to \Sigma\pi$
• • • We do not use the following data for averages, fits, limits, etc. • • •			
1667 or 1668	[1] MARTIN 77	DPWA	$\overline{K}N$ multichannel
1650	DEBELLEFON 76	IPWA	$K^- p \to \Lambda\pi^0$
1671 ± 3	PONTE 75	DPWA	$K^- p \to \Lambda\pi^0$ (sol. 1)
1655 ± 2	PONTE 75	DPWA	$K^- p \to \Lambda\pi^0$ (sol. 2)

OCCUR=2

[1] The two MARTIN 77 values are from a T-matrix pole and from a Breit-Wigner fit. NODE=B044M;LINKAGE=C

$\Sigma(1670)$ WIDTH

NODE=B044W

VALUE (MeV)	DOCUMENT ID		TECN	COMMENT
40 to 100 (≈ 70) OUR ESTIMATE				
$87.0 \pm 6.4 \pm 8.9$	ABLIKIM	25AF	BES3	$\psi(3686) \rightarrow \Lambda \overline{\Sigma}^0 \pi^0 +$ c.c. (PWA)
54 ± 6	SARANTSEV	19	DPWA	$\overline{K}N$ multichannel
55 ± 4	ZHANG	13A	DPWA	$\overline{K}N$ multichannel
52^{+5}_{-2}	GAO	12	DPWA	$\overline{K}N \rightarrow \Lambda\pi$
65.0 ± 7.3	KOISO	85	DPWA	$K^- p \rightarrow \Sigma\pi$
79 ± 10	GOPAL	80	DPWA	$\overline{K}N \rightarrow \overline{K}N$
56 ± 20	ALSTON-...	78	DPWA	$\overline{K}N \rightarrow \overline{K}N$
50 ± 5	GOPAL	77	DPWA	$\overline{K}N$ multichannel
56 ± 3	HEPP	76B	DPWA	$K^- N \rightarrow \Sigma\pi$
85 ± 25	BAILLON	75	IPWA	$\overline{K}N \rightarrow \Lambda\pi$
32 ± 11	VANHORN	75	DPWA	$K^- p \rightarrow \Lambda\pi^0$
79 ± 6	KANE	74	DPWA	$K^- p \rightarrow \Sigma\pi$
• • • We do not use the following data for averages, fits, limits, etc. • • •				
46 or 46	[1] MARTIN	77	DPWA	$\overline{K}N$ multichannel
80	DEBELLEFON	76	IPWA	$K^- p \rightarrow \Lambda\pi^0$
44 ± 11	PONTE	75	DPWA	$K^- p \rightarrow \Lambda\pi^0$ (sol. 1)
76 ± 5	PONTE	75	DPWA	$K^- p \rightarrow \Lambda\pi^0$ (sol. 2)

NODE=B044W
→ UNCHECKED ←
OCCUR=2

[1] The two MARTIN 77 values are from a T-matrix pole and from a Breit-Wigner fit. NODE=B044W;LINKAGE=C

$\Sigma(1670)$ DECAY MODES

NODE=B044215;NODE=B044

	Mode	Fraction (Γ_i/Γ)	
Γ_1	$N\overline{K}$	0.06 to 0.12	DESIG=1
Γ_2	$\Lambda\pi$	5–15 %	DESIG=2;OUR EST
Γ_3	$\Sigma\pi$	30–60 %	DESIG=3;OUR EST
Γ_4	$\Lambda\pi\pi$		DESIG=4
Γ_5	$\Sigma\pi\pi$		DESIG=5
Γ_6	$\Sigma\sigma$	(7.0 ± 3.0) %	DESIG=62
Γ_7	$\Sigma(1385)\pi$		DESIG=55
Γ_8	$\Sigma(1385)\pi$, S-wave		DESIG=6
Γ_9	$\Sigma(1385)\pi$, D-wave		DESIG=56
Γ_{10}	$N\overline{K}^*(892)$, S=1/2, D-wave		DESIG=57
Γ_{11}	$N\overline{K}^*(892)$, S=3/2, S-wave		DESIG=58
Γ_{12}	$N\overline{K}^*(892)$, S=3/2, D-wave		DESIG=59
Γ_{13}	$\Lambda(1405)\pi$		DESIG=7
Γ_{14}	$\Lambda(1520)\pi$		DESIG=8

$\Sigma(1670)$ BRANCHING RATIOS

NODE=B044220

See "Sign conventions for resonance couplings" in the Note on Λ and Σ Resonances. NODE=B044220

$\Gamma(N\overline{K})/\Gamma_{total}$ Γ_1/Γ

NODE=B044R1
NODE=B044R1

VALUE	DOCUMENT ID		TECN	COMMENT
0.06 to 0.12 OUR ESTIMATE				
0.10 ± 0.02	SARANTSEV	19	DPWA	$\overline{K}N$ multichannel
0.062 ± 0.007	ZHANG	13A	DPWA	$\overline{K}N$ multichannel
0.10 ± 0.03	GOPAL	80	DPWA	$\overline{K}N \rightarrow \overline{K}N$
0.11 ± 0.03	ALSTON-...	78	DPWA	$\overline{K}N \rightarrow \overline{K}N$
• • • We do not use the following data for averages, fits, limits, etc. • • •				
0.121	[1] KAMANO	15	DPWA	$\overline{K}N$ multichannel
0.08 ± 0.03	GOPAL	77	DPWA	See GOPAL 80
0.07 or 0.07	[2] MARTIN	77	DPWA	$\overline{K}N$ multichannel

→ UNCHECKED ←

[1] From the preferred solution A in KAMANO 15. NODE=B044R1;LINKAGE=A
[2] The two MARTIN 77 values are from a T-matrix pole and from a Breit-Wigner fit. NODE=B044R1;LINKAGE=C

$\Gamma(\Lambda\pi)/\Gamma_{total}$ — Γ_2/Γ

NODE=B044R01
NODE=B044R01

VALUE	DOCUMENT ID	TECN	COMMENT
0.09 ±0.02	SARANTSEV 19	DPWA	$\overline{K}N$ multichannel
• • • We do not use the following data for averages, fits, limits, etc. • • •			
0.058	[1] KAMANO 15	DPWA	$\overline{K}N$ multichannel

[1] From the preferred solution A in KAMANO 15.

NODE=B044R01;LINKAGE=A

$\Gamma(\Sigma\pi)/\Gamma_{total}$ — Γ_3/Γ

NODE=B044R00
NODE=B044R00

VALUE	DOCUMENT ID	TECN	COMMENT
0.70 ±0.15	SARANTSEV 19	DPWA	$\overline{K}N$ multichannel
• • • We do not use the following data for averages, fits, limits, etc. • • •			
0.465	[1] KAMANO 15	DPWA	$\overline{K}N$ multichannel

[1] From the preferred solution A in KAMANO 15.

NODE=B044R00;LINKAGE=A

$\Gamma(\Lambda\pi\pi)/\Gamma_{total}$ — Γ_4/Γ

NODE=B044R2
NODE=B044R2

VALUE	DOCUMENT ID	TECN	COMMENT
• • • We do not use the following data for averages, fits, limits, etc. • • •			
<0.11	ARMENTEROS68E	HBC	$K^- p$ (Γ_1=0.09)

$\Gamma(\Sigma\pi\pi)/\Gamma_{total}$ — Γ_5/Γ

NODE=B044R3
NODE=B044R3

VALUE	DOCUMENT ID	TECN	COMMENT
• • • We do not use the following data for averages, fits, limits, etc. • • •			
<0.14	[1] ARMENTEROS68E	HBC	$K^- p$, $K^- d$ (Γ_1=0.09)

[1] Ratio only for $\Sigma 2\pi$ system in $I = 1$, which cannot be $\Sigma(1385)$.

NODE=B044;LINKAGE=E

$\Gamma(\Sigma\sigma)/\Gamma_{total}$ — Γ_6/Γ

NODE=B044R02
NODE=B044R02

VALUE	DOCUMENT ID	TECN	COMMENT
0.07±0.03	SARANTSEV 19	DPWA	$\overline{K}N$ multichannel

$\Gamma(\Sigma(1385)\pi$, S-wave$)/\Gamma_{total}$ — Γ_8/Γ

NODE=B044R07
NODE=B044R07

VALUE	DOCUMENT ID	TECN	COMMENT
• • • We do not use the following data for averages, fits, limits, etc. • • •			
0.309	[1] KAMANO 15	DPWA	Multichannel

[1] From the preferred solution A in KAMANO 15.

NODE=B044R07;LINKAGE=A

$\Gamma(\Sigma(1385)\pi$, D-wave$)/\Gamma_{total}$ — Γ_9/Γ

NODE=B044R03
NODE=B044R03

VALUE	DOCUMENT ID	TECN	COMMENT
• • • We do not use the following data for averages, fits, limits, etc. • • •			
0.044	[1] KAMANO 15	DPWA	Multichannel

[1] From the preferred solution A in KAMANO 15.

NODE=B044R03;LINKAGE=A

$\Gamma(N\overline{K}^*(892)$, S=1/2, D-wave$)/\Gamma_{total}$ — Γ_{10}/Γ

NODE=B044R04
NODE=B044R04

VALUE	DOCUMENT ID	TECN	COMMENT
• • • We do not use the following data for averages, fits, limits, etc. • • •			
0.001	[1] KAMANO 15	DPWA	Multichannel

[1] From the preferred solution A in KAMANO 15.

NODE=B044R04;LINKAGE=A

$\Gamma(N\overline{K}^*(892)$, S=3/2, S-wave$)/\Gamma_{total}$ — Γ_{11}/Γ

NODE=B044R05
NODE=B044R05

VALUE	DOCUMENT ID	TECN	COMMENT
• • • We do not use the following data for averages, fits, limits, etc. • • •			
0.002	[1] KAMANO 15	DPWA	Multichannel

[1] From the preferred solution A in KAMANO 15.

NODE=B044R05;LINKAGE=A

$\Gamma(N\overline{K}^*(892)$, S=3/2, D-wave$)/\Gamma_{total}$ — Γ_{12}/Γ

NODE=B044R06
NODE=B044R06

VALUE	DOCUMENT ID	TECN	COMMENT
• • • We do not use the following data for averages, fits, limits, etc. • • •			
0.001	[1] KAMANO 15	DPWA	Multichannel

[1] From the preferred solution A in KAMANO 15.

NODE=B044R06;LINKAGE=A

$\Gamma(\Lambda(1405)\pi)/\Gamma_{total}$ — Γ_{13}/Γ

NODE=B044R4
NODE=B044R4

VALUE	DOCUMENT ID	TECN	COMMENT
0.01±0.01	SARANTSEV 19	DPWA	$\overline{K}N$ multichannel
• • • We do not use the following data for averages, fits, limits, etc. • • •			
<0.06	ARMENTEROS68E	HBC	$K^- p$, $K^- d$ (Γ_1=0.09)

$\Gamma(\Lambda(1405)\pi)/\Gamma(\Sigma(1385)\pi)$ — Γ_{13}/Γ_7

NODE=B044R9

VALUE	DOCUMENT ID		TECN	COMMENT
0.23±0.08	BRUCKER	70	DBC	$K^- N \to \Sigma\pi\pi$

$(\Gamma_i\Gamma_f)^{1/2}/\Gamma_{total}$ in $N\overline{K} \to \Sigma(1670) \to \Lambda\pi$ — $(\Gamma_1\Gamma_2)^{1/2}/\Gamma$

NODE=B044R5

VALUE	DOCUMENT ID		TECN	COMMENT
+0.08 ±0.01	ZHANG	13A	DPWA	Multichannel
$+0.081^{+0.002}_{-0.004}$	GAO	12	DPWA	$\overline{K}N \to \Lambda\pi$
+0.17 ±0.03	[1] MORRIS	78	DPWA	$K^- n \to \Lambda\pi^-$
+0.13 ±0.02	[1] MORRIS	78	DPWA	$K^- n \to \Lambda\pi^-$ (OCCUR=2)
+0.10 ±0.02	GOPAL	77	DPWA	$\overline{K}N$ multichannel
+0.06 ±0.02	BAILLON	75	IPWA	$\overline{K}N \to \Lambda\pi$
+0.09 ±0.02	VANHORN	75	DPWA	$K^- p \to \Lambda\pi^0$
+0.018±0.060	DEVENISH	74B		Fixed-t dispersion rel.
• • • We do not use the following data for averages, fits, limits, etc. • • •				
+0.08 or +0.08	[2] MARTIN	77	DPWA	$\overline{K}N$ multichannel
+0.05	DEBELLEFON	76	IPWA	$K^- p \to \Lambda\pi^0$
+0.08 ±0.01	PONTE	75	DPWA	$K^- p \to \Lambda\pi^0$ (sol. 1)
+0.17 ±0.01	PONTE	75	DPWA	$K^- p \to \Lambda\pi^0$ (sol. 2) (OCCUR=2)

[1] Results are with and without an S_{11} $\Sigma(1620)$ in the fit. NODE=B044;LINKAGE=F

[2] The two MARTIN 77 values are from a T-matrix pole and from a Breit-Wigner fit. NODE=B044R5;LINKAGE=C

$(\Gamma_i\Gamma_f)^{1/2}/\Gamma_{total}$ in $N\overline{K} \to \Sigma(1670) \to \Sigma\pi$ — $(\Gamma_1\Gamma_3)^{1/2}/\Gamma$

NODE=B044R6

VALUE	DOCUMENT ID		TECN	COMMENT
+0.20±0.01	ZHANG	13A	DPWA	Multichannel
+0.20±0.02	KOISO	85	DPWA	$K^- p \to \Sigma\pi$
+0.21±0.02	GOPAL	77	DPWA	$\overline{K}N$ multichannel
+0.20±0.01	HEPP	76B	DPWA	$K^- N \to \Sigma\pi$
+0.21±0.03	KANE	74	DPWA	$K^- p \to \Sigma\pi$
• • • We do not use the following data for averages, fits, limits, etc. • • •				
+0.18 or +0.17	[1] MARTIN	77	DPWA	$\overline{K}N$ multichannel

[1] The two MARTIN 77 values are from a T-matrix pole and from a Breit-Wigner fit. NODE=B044;LINKAGE=C

$(\Gamma_i\Gamma_f)^{1/2}/\Gamma_{total}$ in $N\overline{K} \to \Sigma(1670) \to \Sigma(1385)\pi$, *S*-wave — $(\Gamma_1\Gamma_8)^{1/2}/\Gamma$

NODE=B044R7

VALUE	DOCUMENT ID		TECN	COMMENT
+0.11±0.03	PREVOST	74	DPWA	$K^- N \to \Sigma(1385)\pi$
• • • We do not use the following data for averages, fits, limits, etc. • • •				
0.17±0.02	[1] SIMS	68	DBC	$K^- N \to \Lambda\pi\pi$

[1] SIMS 68 uses only cross-section data. Result used as upper limit only. NODE=B044;LINKAGE=G

$\Gamma_i\Gamma_f/\Gamma^2_{total}$ in $N\overline{K} \to \Sigma(1670) \to \Lambda(1405)\pi$ — $\Gamma_1\Gamma_{13}/\Gamma^2$

NODE=B044R8

VALUE	DOCUMENT ID		TECN	COMMENT
0.007±0.002	[1] BRUCKER	70	DBC	$K^- N \to \Sigma\pi\pi$
• • • We do not use the following data for averages, fits, limits, etc. • • •				
<0.03	BERLEY	69	HBC	$K^- p$ 0.6–0.82 GeV/c

[1] Assuming the $\Lambda(1405)\pi$ cross-section bump is due only to $3/2^-$ resonance. NODE=B044;LINKAGE=H

$(\Gamma_i\Gamma_f)^{1/2}/\Gamma_{total}$ in $N\overline{K} \to \Sigma(1670) \to \Lambda(1520)\pi$ — $(\Gamma_1\Gamma_{14})^{1/2}/\Gamma$

NODE=B044R10

VALUE	DOCUMENT ID		TECN	COMMENT
0.081±0.016	[1] CAMERON	77	DPWA	*P*-wave decay

[1] The CAMERON 77 upper limit on *F*-wave decay is 0.03. NODE=B044;LINKAGE=I

$\Sigma(1670)$ REFERENCES

NODE=B044

ABLIKIM	25AF	JHEP 2502 212	M. Ablikim *et al.*	(BESIII Collab.)	REFID=63277
SARANTSEV	19	EPJ A55 180	A.V. Sarantsev *et al.*	(BONN, PNPI)	REFID=59986
KAMANO	15	PR C92 025205	H. Kamano *et al.*	(ANL, OSAK)	REFID=57507
ZHANG	13A	PR C88 035205	H. Zhang *et al.*	(KSU)	REFID=55441
GAO	12	PR C86 025201	P. Gao, J. Shi, B.S. Zou	(BHEP, BEIJT)	REFID=54341
Also		NP A867 41	P. Gao, B.S. Zou, A. Sibirtsev	(BHEP, BEIJT+)	REFID=53734
KOISO	85	NP A433 619	H. Koiso *et al.*	(TOKY, MASA)	REFID=31795
PDG	82	PL 111B 1	M. Roos *et al.*	(HELS, CIT, CERN)	REFID=41167
GOPAL	80	Toronto Conf. 159	G.P. Gopal	(RHEL) IJP	REFID=31755
ALSTON-...	78	PR D18 182	M. Alston-Garnjost *et al.*	(LBL, MTHO+) IJP	REFID=31751
Also		PRL 38 1007	M. Alston-Garnjost *et al.*	(LBL, MTHO+) IJP	REFID=31752
MORRIS	78	PR D17 55	W.A. Morris *et al.*	(FSU) IJP	REFID=32092
CAMERON	77	NP B131 399	W. Cameron *et al.*	(RHEL, LOIC) IJP	REFID=31749
GOPAL	77	NP B119 362	G.P. Gopal *et al.*	(LOIC, RHEL) IJP	REFID=31750

MARTIN	77	NP B127 349	B.R. Martin, M.K. Pidcock, R.G. Moorhouse	(LOUC+) IJP	REFID=31762
Also		NP B126 266	B.R. Martin, M.K. Pidcock	(LOUC)	REFID=31763
Also		NP B126 285	B.R. Martin, M.K. Pidcock	(LOUC) IJP	REFID=31764
DEBELLEFON	76	NP B109 129	A. de Bellefon, A. Berthon	(CDEF) IJP	REFID=32158
HEPP	76B	PL 65B 487	V. Hepp *et al.*	(CERN, HEIDH, MPIM) IJP	REFID=31761
BAILLON	75	NP B94 39	P.H. Baillon, P.J. Litchfield	(CERN, RHEL) IJP	REFID=32089
PONTE	75	PR D12 2597	R.A. Ponte *et al.*	(MASA, TENN, UCR) IJP	REFID=32114
VANHORN	75	NP B87 145	A.J. van Horn	(LBL) IJP	REFID=32093
Also		NP B87 157	A.J. van Horn	(LBL) IJP	REFID=32094
DEVENISH	74B	NP B81 330	R.C.E. Devenish, C.D. Froggatt, B.R. Martin	(DESY+)	REFID=30036
KANE	74	LBL-2452	D.F. Kane	(LBL) IJP	REFID=31759
PREVOST	74	NP B69 246	J. Prevost *et al.*	(SACL, CERN, HEID)	REFID=31785
BRUCKER	70	Duke Conf. 155	E.B. Brucker *et al.*	(FSU) I	REFID=32142
Hyperon Resonances, 1970					
BERLEY	69	PL 30B 430	D. Berley *et al.*	(BNL)	REFID=31775
ARMENTEROS	68E	PL 28B 521	R. Armenteros *et al.*	(CERN, HEID, SACL) I	REFID=32136
SIMS	68	PRL 21 1413	W.H. Sims *et al.*	(FSU, TUFTS, BRAN)	REFID=32137