$\rho(1900)$

$I^G(J^{PC}) = 1^+(1^{--})$

OMITTED FROM SUMMARY TABLE

See the review on "Spectroscopy of Light Meson Resonances."

$\rho(1900)$ MASS

VALUE (MeV)	*EVTS*	*DOCUMENT ID*		*TECN*	*COMMENT*
• • • We do not use the following data for averages, fits, limits, etc. • • •					
1880±10		[1] ABLIKIM	22L	BES3	2.0–3.08 $e^+e^- \to K^+K^-\pi^0$
1909±17±25	54	[2] AUBERT	08S	BABR	10.6 $e^+e^- \to \phi\pi^0\gamma$
1880±30		AUBERT	06D	BABR	10.6 $e^+e^- \to 3\pi^+3\pi^-\gamma$
1860±20		AUBERT	06D	BABR	10.6 $e^+e^- \to 2(\pi^+\pi^-\pi^0)\gamma$
1910±10		[3,4] FRABETTI	04	E687	$\gamma p \to 3\pi^+3\pi^- p$
1870±10		ANTONELLI	96	SPEC	$e^+e^- \to$ hadrons

[1] From a partial wave amplitude analysis at $\sqrt{s} = 2.125$ GeV which includes all the possible intermediate states that match J^{PC} conservation in the subsequent two-body decay. The intermediate states are parameterized with the relativistic Breit-Wigner functions. Statistical error only.
[2] From the fit with two resonances.
[3] From a fit with two resonances with the JACOB 72 continuum.
[4] Supersedes FRABETTI 01.

$\rho(1900)$ WIDTH

VALUE (MeV)	*EVTS*	*DOCUMENT ID*		*TECN*	*COMMENT*
• • • We do not use the following data for averages, fits, limits, etc. • • •					
69±15		[1] ABLIKIM	22L	BES3	2.0–3.08 $e^+e^- \to K^+K^-\pi^0$
48±17±2	54	[2] AUBERT	08S	BABR	10.6 $e^+e^- \to \phi\pi^0\gamma$
130±30		AUBERT	06D	BABR	10.6 $e^+e^- \to 3\pi^+3\pi^-\gamma$
160±20		AUBERT	06D	BABR	10.6 $e^+e^- \to 2(\pi^+\pi^-\pi^0)\gamma$
37±13		[3,4] FRABETTI	04	E687	$\gamma p \to 3\pi^+3\pi^- p$
10± 5		ANTONELLI	96	SPEC	$e^+e^- \to$ hadrons

[1] From a partial wave amplitude analysis at $\sqrt{s} = 2.125$ GeV which includes all the possible intermediate states that match J^{PC} conservation in the subsequent two-body decay. The intermediate states are parameterized with the relativistic Breit-Wigner functions. Statistical error only.
[2] From the fit with two resonances.
[3] From a fit with two resonances with the JACOB 72 continuum.
[4] Supersedes FRABETTI 01.

$\rho(1900)\ \Gamma(i)\Gamma(e^+e^-)/\Gamma^2(\text{total})$

$\Gamma(\phi\pi)/\Gamma_{\text{total}} \times \Gamma(e^+e^-)/\Gamma_{\text{total}}$ $\qquad$ $\Gamma_4/\Gamma \times \Gamma_6/\Gamma$

VALUE (units 10^{-8})	*EVTS*	*DOCUMENT ID*		*TECN*	*COMMENT*
• • • We do not use the following data for averages, fits, limits, etc. • • •					
4.2±1.2±0.8	54	[1] AUBERT	08S	BABR	10.6 $e^+e^- \to \phi\pi^0\gamma$

[1] From the fit with two resonances.

$\rho(1900)$ DECAY MODES

	Mode	Fraction (Γ_i/Γ)
Γ_1	6π	seen
Γ_2	$3\pi^+3\pi^-$	seen
Γ_3	$2\pi^+2\pi^-2\pi^0$	
Γ_4	$\phi\pi$	seen
Γ_5	hadrons	seen
Γ_6	e^+e^-	seen
Γ_7	$\overline{N}N$	not seen

$\rho(1900)$ BRANCHING RATIOS

$\Gamma(6\pi)/\Gamma_{\text{total}}$ Γ_1/Γ

VALUE	*EVTS*	*DOCUMENT ID*		*TECN*	*COMMENT*
seen	8k	AKHMETSHIN	13	CMD3	$e^+e^- \to 3\pi^+3\pi^-$
not seen		AGNELLO	02	OBLX	$\overline{n}p \to 3\pi^+2\pi^-\pi^0$
seen		FRABETTI	01	E687	$\gamma p \to 3\pi^+3\pi^- p$
seen		ANTONELLI	96	SPEC	$e^+e^- \to$ hadrons

$\rho(1900)$ REFERENCES

ABLIKIM	22L	JHEP 2207 045	M. Ablikim *et al.*	(BESIII Collab.)
AKHMETSHIN	13	PL B723 82	R.R. Akhmetshin *et al.*	(CMD-3 Collab.)
AUBERT	08S	PR D77 092002	B. Aubert *et al.*	(BABAR Collab.)
AUBERT	06D	PR D73 052003	B. Aubert *et al.*	(BABAR Collab.)
FRABETTI	04	PL B578 290	P.L. Frabetti *et al.*	(FNAL E687 Collab.)
AGNELLO	02	PL B527 39	M. Agnello *et al.*	(OBELIX Collab.)
FRABETTI	01	PL B514 240	P.L. Frabetti *et al.*	(FNAL E687 Collab.)
ANTONELLI	96	PL B365 427	A. Antonelli *et al.*	(FENICE Collab.)
JACOB	72	PR D5 1847	M. Jacob, R. Slansky	