

ρ(1900)

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

OMITTED FROM SUMMARY TABLE

See our mini-review under the ρ(1700).

ρ(1900) MASS

VALUE (MeV)	EVTS	DOCUMENT ID	TECN	COMMENT
● ● ● We do not use the following data for averages, fits, limits, etc. ● ● ●				
1909 ± 17 ± 25	54	¹ AUBERT	08S BABR	10.6 e ⁺ e ⁻ → φπ ⁰ γ
1880 ± 30		AUBERT	06D BABR	10.6 e ⁺ e ⁻ → 3π ⁺ 3π ⁻ γ
1860 ± 20		AUBERT	06D BABR	10.6 e ⁺ e ⁻ → 2(π ⁺ π ⁻ π ⁰)γ
1910 ± 10		^{2,3} FRABETTI	04 E687	γp → 3π ⁺ 3π ⁻ p
1870 ± 10		ANTONELLI	96 SPEC	e ⁺ e ⁻ → hadrons

¹ From the fit with two resonances.

² From a fit with two resonances with the JACOB 72 continuum.

³ Supersedes FRABETTI 01.

ρ(1900) WIDTH

VALUE (MeV)	EVTS	DOCUMENT ID	TECN	COMMENT
● ● ● We do not use the following data for averages, fits, limits, etc. ● ● ●				
48 ± 17 ± 2	54	⁴ AUBERT	08S BABR	10.6 e ⁺ e ⁻ → φπ ⁰ γ
130 ± 30		AUBERT	06D BABR	10.6 e ⁺ e ⁻ → 3π ⁺ 3π ⁻ γ
160 ± 20		AUBERT	06D BABR	10.6 e ⁺ e ⁻ → 2(π ⁺ π ⁻ π ⁰)γ
37 ± 13		^{5,6} FRABETTI	04 E687	γp → 3π ⁺ 3π ⁻ p
10 ± 5		ANTONELLI	96 SPEC	e ⁺ e ⁻ → hadrons

⁴ From the fit with two resonances.

⁵ From a fit with two resonances with the JACOB 72 continuum.

⁶ Supersedes FRABETTI 01.

ρ(1900) Γ(i)Γ(e⁺e⁻)/Γ²(total)

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

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	⁷ AUBERT	08S BABR	10.6 e ⁺ e ⁻ → φπ ⁰ γ

⁷ 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 $\phi\pi$	
Γ_5 hadrons	seen
Γ_6 $e^+ e^-$	seen
Γ_7 $\bar{N} N$	not seen

$\rho(1900)$ BRANCHING RATIOS

$\Gamma(6\pi)/\Gamma_{\text{total}}$	Γ_1/Γ
<u>VALUE</u>	<u>DOCUMENT ID</u> <u>TECN</u> <u>COMMENT</u>
not seen	AGNELLO 02 OBLX $\bar{n} p \rightarrow 3\pi^+ 2\pi^- \pi^0$
seen	FRABETTI 01 E687 $\gamma p \rightarrow 3\pi^+ 3\pi^- p$
seen	ANTONELLI 96 SPEC $e^+ e^- \rightarrow$ hadrons

$\rho(1900)$ REFERENCES

AUBERT 08S PR D77 092002	B. Aubert <i>et al.</i>	(BABAR Collab.)
AUBERT 06D PR D73 052003	B. Aubert <i>et al.</i>	(BABAR Collab.)
FRABETTI 04 PL B578 290	P.L. Frabetti <i>et al.</i>	(FNAL E687 Collab.)
AGNELLO 02 PL B527 39	M. Agnello <i>et al.</i>	(OBELIX Collab.)
FRABETTI 01 PL B514 240	P.L. Frabetti <i>et al.</i>	(FNAL E687 Collab.)
ANTONELLI 96 PL B365 427	A. Antonelli <i>et al.</i>	(FENICE Collab.)
JACOB 72 PR D5 1847	M. Jacob, R. Slansky	