

$\rho(1900)$

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

OMITTED FROM SUMMARY TABLE

See our mini-review under the $\rho(1700)$. **$\rho(1900)$ MASS**

<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. ● ● ●				
$1909 \pm 17 \pm 25$	54	¹ AUBERT	08S BABR	$10.6 e^+ e^- \rightarrow \phi \pi^0 \gamma$
1880 ± 30		AUBERT	06D BABR	$10.6 e^+ e^- \rightarrow 3\pi^+ 3\pi^- \gamma$
1860 ± 20		AUBERT	06D BABR	$10.6 e^+ e^- \rightarrow 2(\pi^+ \pi^- \pi^0) \gamma$
1910 ± 10		^{2,3} FRABETTI	04 E687	$\gamma p \rightarrow 3\pi^+ 3\pi^- p$
1870 ± 10		ANTONELLI	96 SPEC	$e^+ e^- \rightarrow \text{hadrons}$

¹ From the fit with two resonances.² From a fit with two resonances with the JACOB 72 continuum.³ Supersedes FRABETTI 01. **$\rho(1900)$ WIDTH**

<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. ● ● ●				
$48 \pm 17 \pm 2$	54	⁴ AUBERT	08S BABR	$10.6 e^+ e^- \rightarrow \phi \pi^0 \gamma$
130 ± 30		AUBERT	06D BABR	$10.6 e^+ e^- \rightarrow 3\pi^+ 3\pi^- \gamma$
160 ± 20		AUBERT	06D BABR	$10.6 e^+ e^- \rightarrow 2(\pi^+ \pi^- \pi^0) \gamma$
37 ± 13		^{5,6} FRABETTI	04 E687	$\gamma p \rightarrow 3\pi^+ 3\pi^- p$
10 ± 5		ANTONELLI	96 SPEC	$e^+ e^- \rightarrow \text{hadrons}$

⁴ From the fit with two resonances.⁵ From a fit with two resonances with the JACOB 72 continuum.⁶ Supersedes FRABETTI 01. **$\rho(1900) \Gamma(i)\Gamma(e^+ e^-)/\Gamma^2(\text{total})$**

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

<u>VALUE (units 10^{-8})</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. ● ● ●				
$4.2 \pm 1.2 \pm 0.8$	54	⁷ AUBERT	08S BABR	$10.6 e^+ e^- \rightarrow \phi \pi^0 \gamma$

⁷ From the fit with two resonances.

$\rho(1900)$ DECAY MODES

Mode	Fraction (Γ_j/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	