Citation: K. Hagiwara *et al.* (Particle Data Group), Phys. Rev. D **66**, 010001 (2002) and 2003 partial update for edition 2004 (URL: http://pdg.lbl.gov)

$X(2000)$

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

OMITTED FROM SUMMARY TABLE

BALTAY 77 favors $J^P = 3^+$. Needs confirmation.

X(2000) MASS

VALUE (MeV)	EVTS	DOCUMENT ID		TECN	CHG	COMMENT
• • • We do not use the following data for averages, fits, limits, etc. • • •						
1964 ± 35		[1] ARMSTRONG	93D	E760		$\overline{p}p \rightarrow 3\pi^0 \rightarrow 6\gamma$
~ 2100		[1] ANTIPOV	77	CIBS	$-$	25 $\pi^- p \rightarrow p\pi^- \rho_3$
2214 ± 15		BALTAY	77	HBC	0	15 $\pi^- p \rightarrow \Delta^{++} 3\pi$
2080 ± 40	208	KALELKAR	75	HBC	$+$	15 $\pi^+ p \rightarrow p\pi^+ \rho_3$

[1] Cannot determine spin to be 3.

X(2000) WIDTH

VALUE (MeV)	EVTS	DOCUMENT ID		TECN	CHG	COMMENT
• • • We do not use the following data for averages, fits, limits, etc. • • •						
225 ± 50		[2] ARMSTRONG	93D	E760		$\overline{p}p \rightarrow 3\pi^0 \rightarrow 6\gamma$
~ 500		[2] ANTIPOV	77	CIBS	$-$	25 $\pi^- p \rightarrow p\pi^- \rho_3$
355 ± 21		BALTAY	77	HBC	0	15 $\pi^- p \rightarrow \Delta^{++} 3\pi$
340 ± 80	208	KALELKAR	75	HBC	$+$	15 $\pi^+ p \rightarrow p\pi^+ \rho_3$

[2] Cannot determine spin to be 3.

X(2000) DECAY MODES

	Mode	Fraction (Γ_i/Γ)
Γ_1	3π	
Γ_2	$\rho_3(1690)\pi$	dominant

X(2000) BRANCHING RATIOS

$\Gamma(\rho_3(1690)\pi)/\Gamma(3\pi)$ — **Γ_2/Γ_1**

VALUE	DOCUMENT ID		TECN	CHG	COMMENT
dominant	KALELKAR	75	HBC	$+$	15 $\pi^+ p \rightarrow p3\pi$

X(2000) REFERENCES

ARMSTRONG	93D	PL B307 399	T.A. Armstrong *et al.*	(FNAL, FERR, GENO+)
ANTIPOV	77	NP B119 45	Y.M. Antipov *et al.*	(SERP, GEVA)
BALTAY	77	PRL 39 591	C. Baltay, C.V. Cautis, M. Kalelkar	(COLU) JP
KALELKAR	75	Thesis Nevis 207	M.S. Kalelkar	(COLU)

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HUSON	68	PL 28B 208	R. Huson *et al.*	(ORSAY, MILA, UCLA)
DANYSZ	67B	NC 51A 801	J.A. Danysz, B.R. French, V. Simak	(CERN)