$X(2000)$
was $a_3(2050)$

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

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	SPEC		$\overline{p}p \rightarrow 3\pi^0 \rightarrow 6\gamma$
~ 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	SPEC		$\overline{p}p \rightarrow 3\pi^0 \rightarrow 6\gamma$
~ 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	+Bettoni+	(FNAL, FERR, GENO, UCI, NWES+)
ANTIPOV	77	NP B119 45	+Busnello, Damgaard, Kienzle+	(SERP, GEVA)
BALTAY	77	PRL 39 591	+Cautis, Kalelkar	(COLU) JP
KALELKAR	75	Thesis Nevis 207		(COLU)

OTHER RELATED PAPERS

HARRIS	81	ZPHY C9 275	+Dunn, Lubatti, Moriyasu, Podolsky+	(SEAT, UCB)
HUSON	68	PL 28B 208	+Lubatti, Six, Veillet+	(ORSAY, MILA, UCLA)
DANYSZ	67B	NC 51A 801	+French, Simak	(CERN)