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)

$\pi(1300)$

$I^G(J^{PC}) = 1^-(0^{-+})$

$\pi(1300)$ MASS

VALUE (MeV)	DOCUMENT ID		TECN	COMMENT
1300±100 OUR ESTIMATE				
• • • We do not use the following data for averages, fits, limits, etc. • • •				
1343± 15±24	CHUNG	02	MPS	18.3 $\pi^- p \to \pi^+\pi^-\pi^- p$
1375± 40	ABELE	01	CBAR	0.0 $\overline{p} d \to \pi^- 4\pi^0 p$
1275± 15	BERTIN	97D	OBLX	0.05 $\overline{p} p \to 2\pi^+ 2\pi^-$
~ 1114	ABELE	96	CBAR	0.0 $\overline{p} p \to 5\pi^0$
1190± 30	ZIELINSKI	84	SPEC	200 $\pi^+ Z \to Z 3\pi$
1240± 30	BELLINI	82	SPEC	40 $\pi^- A \to A 3\pi$
1273± 50	[1] AARON	81	RVUE	
1342± 20	BONESINI	81	OMEG	12 $\pi^- p \to p 3\pi$
~ 1400	DAUM	81B	SPEC	63,94 $\pi^- p$

[1] Uses multichannel Aitchison-Bowler model (BOWLER 75). Uses data from DAUM 80 and DANKOWYCH 81.

$\pi(1300)$ WIDTH

VALUE (MeV)	DOCUMENT ID		TECN	COMMENT
200 to 600 OUR ESTIMATE				
• • • We do not use the following data for averages, fits, limits, etc. • • •				
449± 39±47	CHUNG	02	MPS	18.3 $\pi^- p \to \pi^+\pi^-\pi^- p$
268± 50	ABELE	01	CBAR	0.0 $\overline{p} d \to \pi^- 4\pi^0 p$
218±100	BERTIN	97D	OBLX	0.05 $\overline{p} p \to 2\pi^+ 2\pi^-$
~ 340	ABELE	96	CBAR	0.0 $\overline{p} p \to 5\pi^0$
440± 80	ZIELINSKI	84	SPEC	200 $\pi^+ Z \to Z 3\pi$
360±120	BELLINI	82	SPEC	40 $\pi^- A \to A 3\pi$
580±100	[2] AARON	81	RVUE	
220± 70	BONESINI	81	OMEG	12 $\pi^- p \to p 3\pi$
~ 600	DAUM	81B	SPEC	63,94 $\pi^- p$

[2] Uses multichannel Aitchison-Bowler model (BOWLER 75). Uses data from DAUM 80 and DANKOWYCH 81.

$\pi(1300)$ DECAY MODES

	Mode	Fraction (Γ_i/Γ)
Γ_1	$\rho\pi$	seen
Γ_2	$\pi(\pi\pi)_{S\text{-wave}}$	seen
Γ_3	$\gamma\gamma$	

$\pi(1300)$ $\Gamma(i)\Gamma(\gamma\gamma)/\Gamma(\text{total})$

$\Gamma(\rho\pi) \times \Gamma(\gamma\gamma)/\Gamma_{\text{total}}$ — $\Gamma_1\Gamma_3/\Gamma$

VALUE (keV)	CL%	DOCUMENT ID		TECN	COMMENT
<0.085	90	ACCIARRI	97T	L3	$e^+e^- \to e^+e^-\pi^+\pi^-\pi^0$
<0.54	90	ALBRECHT	97B	ARG	$e^+e^- \to e^+e^-\pi^+\pi^-\pi^0$

$\pi(1300)$ BRANCHING RATIOS

$\Gamma(\pi(\pi\pi)_{S\text{-wave}})/\Gamma(\rho\pi)$ — Γ_2/Γ_1

VALUE	CL%	DOCUMENT ID		TECN	COMMENT
• • • We do not use the following data for averages, fits, limits, etc. • • •					
seen		CHUNG	02	MPS	18.3 $\pi^- p \to \pi^+\pi^-\pi^- p$
<0.15	90	ABELE	01	CBAR	0.0 $\overline{p}d \to \pi^- 4\pi^0 p$
2.12		[3] AARON	81	RVUE	

[3] Uses multichannel Aitchison-Bowler model (BOWLER 75). Uses data from DAUM 80 and DANKOWYCH 81.

$\pi(1300)$ REFERENCES

CHUNG	02	PR D65 072001	S.U. Chung *et al.*	
ABELE	01	EPJ C19 667	A. Abele *et al.*	(Crystal Barrel Collab.)
ACCIARRI	97T	PL B413 147	M. Acciarri *et al.*	(L3 Collab.)
ALBRECHT	97B	ZPHY C74 469	H. Albrecht *et al.*	(ARGUS Collab.)
BERTIN	97D	PL B414 220	A. Bertin *et al.*	(OBELIX Collab.)
ABELE	96	PL B380 453	A. Abele *et al.*	(Crystal Barrel Collab.)
ZIELINSKI	84	PR D30 1855	M. Zielinski *et al.*	(ROCH, MINN, FNAL)
BELLINI	82	PRL 48 1697	G. Bellini *et al.*	(MILA, BGNA, JINR)
AARON	81	PR D24 1207	R.A. Aaron, R.S. Longacre	(NEAS, BNL)
BONESINI	81	PL 103B 75	M. Bonesini *et al.*	(MILA, LIVP, DARE+)
DANKOWY...	81	PRL 46 580	J.A. Dankowych *et al.*	(TNTO, BNL, CARL+)
DAUM	81B	NP B182 269	C. Daum *et al.*	(AMST, CERN, CRAC, MPIM+)
DAUM	80	PL 89B 281	C. Daum *et al.*	(AMST, CERN, CRAC, MPIM+)
BOWLER	75	NP B97 227	M.G. Bowler *et al.*	(OXFTP, DARE)

OTHER RELATED PAPERS

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ZAIMIDOROGA	99	PAN 30 1 Translated from SJPN 30 5.	O.A. Zaimidoroga	
ACKERSTAFF	97R	ZPHY C75 593	K. Ackerstaff *et al.*	(OPAL Collab.)
ALBRECHT	95C	PL B349 576	H. Albrecht *et al.*	(ARGUS Collab.)