NODE=B145

$\Delta(1750)\ 1/2^+$

$I(J^P) = \frac{3}{2}(\frac{1}{2}^+)$ Status: *

OMITTED FROM SUMMARY TABLE

Δ(1750) POLE POSITION

NODE=B145230

REAL PART

NODE=B145RE
NODE=B145RE

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
• • • We do not use the following data for averages, fits, limits, etc. • • •			
1748	ARNDT	04	DPWA $\pi N \to \pi N, \eta N$
1714	VRANA	00	DPWA Multichannel

−2×IMAGINARY PART

NODE=B145IM
NODE=B145IM

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
• • • We do not use the following data for averages, fits, limits, etc. • • •			
524	ARNDT	04	DPWA $\pi N \to \pi N, \eta N$
68	VRANA	00	DPWA Multichannel

Δ(1750) ELASTIC POLE RESIDUE

NODE=B145235

MODULUS $|r|$

NODE=B145RER
NODE=B145RER

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
• • • We do not use the following data for averages, fits, limits, etc. • • •			
48	ARNDT	04	DPWA $\pi N \to \pi N, \eta N$

PHASE θ

NODE=B145IMR
NODE=B145IMR

VALUE (°)	DOCUMENT ID	TECN	COMMENT
• • • We do not use the following data for averages, fits, limits, etc. • • •			
158	ARNDT	04	DPWA $\pi N \to \pi N, \eta N$

Δ(1750) BREIT-WIGNER MASS

NODE=B145M

NODE=B145M

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
• • • We do not use the following data for averages, fits, limits, etc. • • •			
1712± 1	PENNER	02C	DPWA Multichannel
1721±61	VRANA	00	DPWA Multichannel

Δ(1750) BREIT-WIGNER WIDTH

NODE=B145W

NODE=B145W

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
• • • We do not use the following data for averages, fits, limits, etc. • • •			
643±17	PENNER	02C	DPWA Multichannel
70±50	VRANA	00	DPWA Multichannel

Δ(1750) DECAY MODES

NODE=B145215;NODE=B145

	Mode	Fraction (Γ_i/Γ)	
Γ_1	$N\pi$	seen	DESIG=1;OUR EVAL
Γ_2	$N(1440)\pi$	seen	DESIG=3;OUR EVAL
Γ_3	ΣK	seen	DESIG=4;OUR EVAL

Δ(1750) BRANCHING RATIOS

NODE=B145220

$\Gamma(N\pi)/\Gamma_{total}$ Γ_1/Γ

NODE=B145R1
NODE=B145R1

VALUE (%)	DOCUMENT ID	TECN	COMMENT
• • • We do not use the following data for averages, fits, limits, etc. • • •			
1±1	PENNER	02C	DPWA Multichannel
6±9	VRANA	00	DPWA Multichannel

$\Gamma(N(1440)\pi)/\Gamma_{total}$ Γ_2/Γ

NODE=B145R3
NODE=B145R3

VALUE (%)	DOCUMENT ID		TECN	COMMENT
• • • We do not use the following data for averages, fits, limits, etc. • • •				
83±1	VRANA	00	DPWA	Multichannel

$\Gamma(\Sigma K)/\Gamma_{total}$ Γ_3/Γ

NODE=B145R4
NODE=B145R4

VALUE (%)	DOCUMENT ID		TECN	COMMENT
• • • We do not use the following data for averages, fits, limits, etc. • • •				
0.1±0.1	PENNER	02C	DPWA	Multichannel

Δ(1750) BREIT-WIGNER PHOTON DECAY AMPLITUDES

NODE=B145225

Papers on γN amplitudes predating 1981 may be found in our 2006 edition, Journal of Physics **G33** 1 (2006).

NODE=B145225

$\Delta(1750) \to N\gamma$, helicity-1/2 amplitude $A_{1/2}$

NODE=B145A1
NODE=B145A1

VALUE ($GeV^{-1/2}$)	DOCUMENT ID		TECN	COMMENT
• • • We do not use the following data for averages, fits, limits, etc. • • •				
0.053	PENNER	02D	DPWA	Multichannel

Δ(1750) REFERENCES

NODE=B145

PDG	06	JP G33 1	W.-M. Yao *et al.*	(PDG Collab.)	REFID=51004
ARNDT	04	PR C69 035213	R.A. Arndt *et al.*	(GWU, TRIU)	REFID=49947
PENNER	02C	PR C66 055211	G. Penner, U. Mosel	(GIES)	REFID=49129
PENNER	02D	PR C66 055212	G. Penner, U. Mosel	(GIES)	REFID=49130
VRANA	00	PRPL 328 181	T.P. Vrana, S.A. Dytman, T.-S.H. Lee	(PITT, ANL)	REFID=47593