

$\Delta(1750) 1/2^+$  $I(J^P) = \frac{3}{2}(\frac{1}{2}^+)$  Status: \*

OMITTED FROM SUMMARY TABLE

 **$\Delta(1750)$  POLE POSITION****REAL PART**

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

**−2×IMAGINARY PART**

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

 **$\Delta(1750)$  ELASTIC POLE RESIDUE****MODULUS  $|r|$** 

<u>VALUE (MeV)</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
● ● ● We do not use the following data for averages, fits, limits, etc. ● ● ●			
48	ARNDT	04	DPWA $\pi N \rightarrow \pi N, \eta N$

**PHASE  $\theta$** 

<u>VALUE (°)</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
● ● ● We do not use the following data for averages, fits, limits, etc. ● ● ●			
158	ARNDT	04	DPWA $\pi N \rightarrow \pi N, \eta N$

 **$\Delta(1750)$  BREIT-WIGNER MASS**

<u>VALUE (MeV)</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
● ● ● We do not use the following data for averages, fits, limits, etc. ● ● ●			
$1712 \pm 1$	PENNER	02C	DPWA Multichannel
$1721 \pm 61$	VRANA	00	DPWA Multichannel

 **$\Delta(1750)$  BREIT-WIGNER WIDTH**

<u>VALUE (MeV)</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
● ● ● We do not use the following data for averages, fits, limits, etc. ● ● ●			
$643 \pm 17$	PENNER	02C	DPWA Multichannel
$70 \pm 50$	VRANA	00	DPWA Multichannel

## $\Delta(1750)$ DECAY MODES

Mode	Fraction ( $\Gamma_i/\Gamma$ )
$\Gamma_1$ $N\pi$	seen
$\Gamma_2$ $N(1440)\pi$	seen
$\Gamma_3$ $\Sigma K$	seen

## $\Delta(1750)$ BRANCHING RATIOS

### $\Gamma(N\pi)/\Gamma_{\text{total}}$ $\Gamma_1/\Gamma$

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

### $\Gamma(N(1440)\pi)/\Gamma_{\text{total}}$ $\Gamma_2/\Gamma$

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

### $\Gamma(\Sigma K)/\Gamma_{\text{total}}$ $\Gamma_3/\Gamma$

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

## $\Delta(1750)$ BREIT-WIGNER PHOTON DECAY AMPLITUDES

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

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

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

## $\Delta(1750)$ REFERENCES

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