

# $\pi_1(1600)$

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

OMITTED FROM SUMMARY TABLE

## $\pi_1(1600)$ MASS

<u>VALUE (MeV)</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
<b>1596<sup>+25</sup><sub>-14</sub> OUR AVERAGE</b>			
1597 ± 10 <sup>+45</sup> <sub>-10</sub>	IVANOV	01 MPS	18 $\pi^- p \rightarrow \eta' \pi^- p$
1593 ± 8 <sup>+29</sup> <sub>-47</sub>	<sup>1</sup> ADAMS	98B MPS	18.3 $\pi^- p \rightarrow$ $\pi^+ \pi^- \pi^- p$

<sup>1</sup> Natural parity exchange.

## $\pi_1(1600)$ WIDTH

<u>VALUE (MeV)</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
<b>312<sup>+64</sup><sub>-24</sub> OUR AVERAGE</b> Error includes scale factor of 1.1.			
340 ± 40 ± 50	IVANOV	01 MPS	18 $\pi^- p \rightarrow \eta' \pi^- p$
168 ± 20 <sup>+150</sup> <sub>-12</sub>	<sup>2</sup> ADAMS	98B MPS	18.3 $\pi^- p \rightarrow$ $\pi^+ \pi^- \pi^- p$

<sup>2</sup> Natural parity exchange.

## $\pi_1(1600)$ DECAY MODES

Mode	Fraction ( $\Gamma_i/\Gamma$ )
$\Gamma_1$ $\pi \pi \pi$	seen
$\Gamma_2$ $\rho^0 \pi^-$	seen
$\Gamma_3$ $f_2(1270) \pi^-$	not seen
$\Gamma_4$ $\eta'(958) \pi^-$	seen

## $\pi_1(1600)$ BRANCHING RATIOS

<b><math>\Gamma(\rho^0 \pi^-)/\Gamma_{\text{total}}</math></b>	<b><math>\Gamma_2/\Gamma</math></b>
<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. • • •	
seen	<sup>3</sup> ADAMS 98B MPS 18.3 $\pi^- p \rightarrow$ $\pi^+ \pi^- \pi^- p$

<b><math>\Gamma(\eta'(958) \pi^-)/\Gamma_{\text{total}}</math></b>	<b><math>\Gamma_4/\Gamma</math></b>
<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. • • •	
seen	IVANOV 01 MPS 18 $\pi^- p \rightarrow \eta' \pi^- p$

$\Gamma(f_2(1270)\pi^-)/\Gamma_{\text{total}}$				$\Gamma_3/\Gamma$
VALUE	DOCUMENT ID	TECN	COMMENT	
• • • We do not use the following data for averages, fits, limits, etc. • • •				
not seen	CHUNG	02 MPS	18.3 $\pi^- p \rightarrow$ $\pi^+ \pi^- \pi^- p$	
<sup>3</sup> Natural parity exchange.				

### $\pi_1(1600)$ REFERENCES

CHUNG	02	PR D65 072001	S.U. Chung <i>et al.</i>	
IVANOV	01	PRL 86 3977	E.I. Ivanov <i>et al.</i>	
ADAMS	98B	PRL 81 5760	G.S. Adams <i>et al.</i>	(MPS Collab.)

### OTHER RELATED PAPERS

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ACHASOV	02J	PAN 65 552	N.N. Achasov, G.N. Shestakov
		Translated from YAF 65 579.	
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THOMAS	02	PL B526 72	A.W. Thomas, A.P. Szczepaniak
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