

$\eta_2(1645)$ 

$$I^G(J^{PC}) = 0^+(2^{-+})$$

OMITTED FROM SUMMARY TABLE

 $\eta_2(1645)$  MASS

<u>VALUE (MeV)</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>CHG</u>	<u>COMMENT</u>
<b>1617 ± 5 OUR AVERAGE</b>				
1613 ± 8	BARBERIS	00B		450 $pp \rightarrow$ $p_f \eta \pi^+ \pi^- p_s$
1617 ± 8	BARBERIS	00C		450 $pp \rightarrow$ $p_f 4\pi p_s$
1620 ± 20	BARBERIS	97B OMEG		450 $pp \rightarrow$ $pp2(\pi^+ \pi^-)$
1645 ± 14 ± 15	ADOMEIT	96 CBAR 0		1.94 $\bar{p}p \rightarrow \eta 3\pi^0$
• • • We do not use the following data for averages, fits, limits, etc. • • •				
1645 ± 6 ± 20	ANISOVICH	00E SPEC		1.94 $\bar{p}p \rightarrow \eta 3\pi^0$

 $\eta_2(1645)$  WIDTH

<u>VALUE (MeV)</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>CHG</u>	<u>COMMENT</u>
<b>181 ± 11 OUR AVERAGE</b>				
185 ± 17	BARBERIS	00B		450 $pp \rightarrow$ $p_f \eta \pi^+ \pi^- p_s$
177 ± 18	BARBERIS	00C		450 $pp \rightarrow$ $p_f 4\pi p_s$
180 ± 25	BARBERIS	97B OMEG		450 $pp \rightarrow$ $pp2(\pi^+ \pi^-)$
180 <sup>+40</sup> <sub>-21</sub> ± 25	ADOMEIT	96 CBAR 0		1.94 $\bar{p}p \rightarrow \eta 3\pi^0$
• • • We do not use the following data for averages, fits, limits, etc. • • •				
200 ± 25	ANISOVICH	00E SPEC		1.94 $\bar{p}p \rightarrow \eta 3\pi^0$

 $\eta_2(1645)$  DECAY MODES

Mode	
$\Gamma_1$	$a_2(1320)\pi$
$\Gamma_2$	$K\bar{K}\pi$
$\Gamma_3$	$K^*\bar{K}$
$\Gamma_4$	$\eta\pi^+\pi^-$
$\Gamma_5$	$a_0(980)\pi$
$\Gamma_6$	$f_2(1270)\eta$

## $\eta_2(1645)$ BRANCHING RATIOS

$\Gamma(K\bar{K}\pi)/\Gamma(a_2(1320)\pi)$   $\Gamma_2/\Gamma_1$

<i>VALUE</i>	<i>DOCUMENT ID</i>	<i>TECN</i>	<i>COMMENT</i>
<b>0.07 ± 0.03</b>	<sup>1</sup> BARBERIS	97C OMEG	450 $p p \rightarrow p p K \bar{K} \pi$

<sup>1</sup> Using  $2(\pi^+\pi^-)$  data from BARBERIS 97B.

$\Gamma(a_2(1320)\pi)/\Gamma(a_0(980)\pi)$   $\Gamma_1/\Gamma_5$

<i>VALUE</i>	<i>DOCUMENT ID</i>	<i>COMMENT</i>
<b>13.0 ± 2.7</b>	BARBERIS	00B 450 $p p \rightarrow p_f \eta \pi^+ \pi^- p_s$

$\Gamma(f_2(1270)\eta)/\Gamma_{\text{total}}$   $\Gamma_6/\Gamma$

<i>VALUE</i>	<i>DOCUMENT ID</i>	<i>COMMENT</i>
• • • We do not use the following data for averages, fits, limits, etc. • • •		
not seen	BARBERIS	00B 450 $p p \rightarrow p_f \eta \pi^+ \pi^- p_s$

## $\eta_2(1645)$ REFERENCES

ANISOVICH	00E	PL B477 19	A.V. Anisovich <i>et al.</i>	
BARBERIS	00B	PL B471 435	D. Barberis <i>et al.</i>	(WA 102 Collab.)
BARBERIS	00C	PL B471 440	D. Barberis <i>et al.</i>	(WA 102 Collab.)
BARBERIS	97B	PL B413 217	D. Barberis <i>et al.</i>	(WA 102 Collab.)
BARBERIS	97C	PL B413 225	D. Barberis <i>et al.</i>	(WA 102 Collab.)
ADOMEIT	96	ZPHY C71 227	J. Adomeit <i>et al.</i>	(Crystal Barrel Collab.)