

# $\psi(4415)$

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

## $\psi(4415)$ MASS

<u>VALUE (MeV)</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
<b>4415 ± 6 OUR AVERAGE</b>			
4417 ± 10	BRANDELIK	78C DASP	$e^+ e^-$
4414 ± 7	SIEGRIST	76 MRK1	$e^+ e^-$

## $\psi(4415)$ WIDTH

<u>VALUE (MeV)</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
<b>43 ± 15 OUR AVERAGE</b> Error includes scale factor of 1.8.			
66 ± 15	BRANDELIK	78C DASP	$e^+ e^-$
33 ± 10	SIEGRIST	76 MRK1	$e^+ e^-$

## $\psi(4415)$ DECAY MODES

Mode	Fraction ( $\Gamma_i/\Gamma$ )
$\Gamma_1$ hadrons	dominant
$\Gamma_2$ $e^+ e^-$	$(1.1 \pm 0.4) \times 10^{-5}$

## $\psi(4415)$ PARTIAL WIDTHS

<u>VALUE (keV)</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>	$\Gamma_2$
<b><math>\Gamma(e^+ e^-)</math></b>				
<b>0.47 ± 0.10 OUR AVERAGE</b>				
0.49 ± 0.13	BRANDELIK	78C DASP	$e^+ e^-$	
0.44 ± 0.14	SIEGRIST	76 MRK1	$e^+ e^-$	

## $\psi(4415)$ BRANCHING RATIOS

<u>VALUE</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>	$\Gamma_1/\Gamma$
<b><math>\Gamma(\text{hadrons})/\Gamma_{\text{total}}</math></b>				
<b>dominant</b>				
	SIEGRIST	76 MRK1	$e^+ e^-$	

## $\psi(4415)$ REFERENCES

BRANDELIK	78C	PL 76B 361	R. Brandelik <i>et al.</i>	(DASP Collab.)
SIEGRIST	76	PRL 36 700	J.L. Siegrist <i>et al.</i>	(LBL, SLAC)

## OTHER RELATED PAPERS

BURMESTER	77	PL 66B 395	J. Burmester <i>et al.</i>	(DESY, HAMB, SIEG+)
LUTH	77	PL 70B 120	V. Luth <i>et al.</i>	(LBL, SLAC)