

**$\psi(4415)$** 

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

 **$\psi(4415)$  MASS**

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

 **$\psi(4415)$  WIDTH**

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
<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**

$\Gamma(e^+e^-)$				$\Gamma_2$
VALUE (keV)	DOCUMENT ID	TECN	COMMENT	
<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**

$\Gamma(\text{hadrons})/\Gamma_{\text{total}}$				$\Gamma_1/\Gamma$
VALUE	DOCUMENT ID	TECN	COMMENT	
<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)