

$\psi(4415)$

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

### $\psi(4415)$ 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

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

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

### $\psi(4415)$ REFERENCES

BRANDELIK 78C PL 76B 361 +Cords+ (DASP Collab.)  
 SIEGRIST 76 PRL 36 700 +Abrams, Boyarski, Breidenbach+ (LBL, SLAC)

### OTHER RELATED PAPERS

BURMESTER 77 PL 66B 395 +Criegee+ (DESY, HAMB, SIEG, WUPP)  
 LUTH 77 PL 70B 120 +Pierre, Abrams, Alam, Boyarski+ (LBL, SLAC)