$\psi(4415)$

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

$\psi(4415)$ MASS

VALUE (MeV)	*DOCUMENT ID*		*TECN*	*COMMENT*
4415± 6 OUR AVERAGE				
4417±10	BRANDELIK	78C	DASP	e^+e^-
4414± 7	SIEGRIST	76	MRK1	e^+e^-
• • • We do not use the following data for averages, fits, limits, etc. • • •				
∼ 4400	KNIES	77	PLUT	$e^+e^- \rightarrow \mu^+\mu^-$

$\psi(4415)$ WIDTH

VALUE (MeV)	*DOCUMENT ID*		*TECN*	*COMMENT*
43±15 OUR AVERAGE 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 (Γ_i/Γ)
Γ_1	hadrons	dominant
Γ_2	e^+e^-	$(1.1\pm0.4)\times10^{-5}$

$\psi(4415)$ PARTIAL WIDTHS

$\Gamma(e^+e^-)$ Γ_2

VALUE (keV)	*DOCUMENT ID*		*TECN*	*COMMENT*
0.47±0.10 OUR AVERAGE				
0.49±0.13	BRANDELIK	78C	DASP	e^+e^-
0.44±0.14	SIEGRIST	76	MRK1	e^+e^-

$\psi(4415)$ BRANCHING RATIOS

$\Gamma(\text{hadrons})/\Gamma_{\text{total}}$ Γ_1/Γ

VALUE	*DOCUMENT ID*		*TECN*	*COMMENT*
dominant	SIEGRIST	76	MRK1	e^+e^-

$\psi(4415)$ REFERENCES

BRANDELIK	78C	PL 76B 361	+Cords+	(DASP Collab.)
KNIES	77	Hamburg Symp. 93		(PLUTO 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)