$\psi(4040)$

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

ψ(4040) MASS

VALUE (MeV)	*DOCUMENT ID*		*TECN*	*COMMENT*
4040±10	BRANDELIK	78C	DASP	e^+e^-

ψ(4040) WIDTH

VALUE (MeV)	*DOCUMENT ID*		*TECN*	*COMMENT*
52±10	BRANDELIK	78C	DASP	e^+e^-

ψ(4040) DECAY MODES

	Mode	Fraction (Γ_i/Γ)
Γ_1	e^+e^-	$(1.4\pm0.4)\times10^{-5}$
Γ_2	$D^0\overline{D}^0$	seen
Γ_3	$D^*(2007)^0\overline{D}^0$ + c.c.	seen
Γ_4	$D^*(2007)^0\overline{D}^*(2007)^0$	seen
Γ_5	$J/\psi(1S)$ hadrons	
Γ_6	$\mu^+\mu^-$	

ψ(4040) PARTIAL WIDTHS

$\Gamma(e^+e^-)$ — Γ_1

VALUE (keV)	*DOCUMENT ID*		*TECN*	*COMMENT*
0.75±0.15	BRANDELIK	78C	DASP	e^+e^-

ψ(4040) BRANCHING RATIOS

$\Gamma(e^+e^-)/\Gamma_{total}$ — Γ_1/Γ

VALUE (units 10^{-5})	*DOCUMENT ID*		*TECN*	*COMMENT*
• • • We do not use the following data for averages, fits, limits, etc. • • •				
~ 1.0	FELDMAN	77	MRK1	e^+e^-

$\Gamma(D^0\overline{D}^0)/\Gamma(D^*(2007)^0\overline{D}^0$ + c.c.$)$ — Γ_2/Γ_3

VALUE	*DOCUMENT ID*		*TECN*	*COMMENT*
0.05 ±0.03	[1] GOLDHABER	77	MRK1	e^+e^-

$\Gamma(D^*(2007)^0\overline{D}^*(2007)^0)/\Gamma(D^*(2007)^0\overline{D}^0$ + c.c.$)$ — Γ_4/Γ_3

VALUE	*DOCUMENT ID*		*TECN*	*COMMENT*
32.0±12.0	[1] GOLDHABER	77	MRK1	e^+e^-

[1] Phase-space factor (p^3) explicitly removed.

$\psi(4040)$ REFERENCES

BRANDELIK	78C	PL 76B 361	R. Brandelik *et al.*	(DASP Collab.)
Also	79C	ZPHY C1 233	R. Brandelik *et al.*	(DASP Collab.)
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