

$\psi_3(3842)$

$$I^G(J^{PC}) = 0^-(3^{--})$$

J, P need confirmation.

J^P has not been measured, 3^- is the quark model prediction.

 $\psi_3(3842)$ MASS

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
$3842.71 \pm 0.16 \pm 0.12$	AAIJ	19M LHCb	$pp \rightarrow D\bar{D} + \text{anything}$

 $\psi_3(3842)$ WIDTH

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
$2.79 \pm 0.51 \pm 0.35$	AAIJ	19M LHCb	$pp \rightarrow D\bar{D} + \text{anything}$

 $\psi_3(3842)$ DECAY MODES

Mode	Fraction (Γ_i/Γ)
Γ_1 $D^+ D^-$	seen
Γ_2 $D^0 \bar{D}^0$	seen

 $\psi_3(3842)$ BRANCHING RATIOS

$\Gamma(D^+ D^-)/\Gamma_{\text{total}}$				Γ_1/Γ
VALUE	DOCUMENT ID	TECN	COMMENT	
seen	AAIJ	19M LHCb	$pp \rightarrow D\bar{D} + \text{anything}$	

• • • We do not use the following data for averages, fits, limits, etc. • • •

possibly seen ¹ ABLIKIM 22AL BES3 $e^+ e^- \rightarrow \pi^+ \pi^- D^+ D^-$

¹ From a fit to the $\pi^+ \pi^-$ recoil mass for $e^+ e^- \rightarrow D^+ D^- \pi^+ \pi^-$.

$\Gamma(D^0 \bar{D}^0)/\Gamma_{\text{total}}$				Γ_2/Γ
VALUE	DOCUMENT ID	TECN	COMMENT	
seen	AAIJ	19M LHCb	$pp \rightarrow D\bar{D} + \text{anything}$	

 $\psi_3(3842)$ REFERENCES

ABLIKIM	22AL PR D106 052012	M. Ablikim <i>et al.</i>	(BESIII Collab.)
AAIJ	19M JHEP 1907 035	R. Aaij <i>et al.</i>	(LHCb Collab.)