

$\psi_3(3842)$

$I^G(J^{PC}) = 0^-(3^{--})$
 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	$pp \rightarrow D\overline{D} + \text{anything}$

$\psi_3(3842)$ WIDTH

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

$\psi_3(3842)$ DECAY MODES

Mode	Fraction (Γ_i/Γ)
$\Gamma_1 \quad D^+ D^-$	seen
$\Gamma_2 \quad D^0 \overline{D}^0$	seen

$\psi_3(3842)$ BRANCHING RATIOS

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

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

$\psi_3(3842)$ REFERENCES

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