$\psi_3(3842)$

$I^G(J^{PC}) = 0^-(3^{--})$
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±0.16±0.12	AAIJ	19M	LHCB	$pp \to D\overline{D} +$ anything

$\psi_3(3842)$ WIDTH

VALUE (MeV)	DOCUMENT ID		TECN	COMMENT
2.79±0.51±0.35	AAIJ	19M	LHCB	$pp \to D\overline{D} +$ anything

$\psi_3(3842)$ DECAY MODES

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

$\psi_3(3842)$ BRANCHING RATIOS

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

VALUE	DOCUMENT ID		TECN	COMMENT
seen	AAIJ	19M	LHCB	$pp \to D\overline{D} +$ anything
• • • We do not use the following data for averages, fits, limits, etc. • • •				
possibly seen	[1] ABLIKIM	22AL	BES3	$e^+e^- \to \pi^+\pi^- D^+D^-$

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

$\Gamma(D^0\overline{D}^0)/\Gamma_{total}$ — Γ_2/Γ

VALUE	DOCUMENT ID		TECN	COMMENT
seen	AAIJ	19M	LHCB	$pp \to D\overline{D} +$ 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.)