

# $\psi_3(3842)$

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

$J, P$  need confirmation.

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

## $\psi_3(3842)$ MASS

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

## $\psi_3(3842)$ WIDTH

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

## $\psi_3(3842)$ DECAY MODES

Mode	Fraction ( $\Gamma_i/\Gamma$ )
$\Gamma_1 \quad D^+ D^-$	seen
$\Gamma_2 \quad D^0 \bar{D}^0$	seen

## $\psi_3(3842)$ BRANCHING RATIOS

$\Gamma(D^+ D^-)/\Gamma_{\text{total}}$	$\Gamma_1/\Gamma$		
VALUE	DOCUMENT ID	TECN	COMMENT
<b>seen</b>	AAIJ	19M LHCb	$pp \rightarrow D\bar{D} + \text{anything}$

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

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

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

$\Gamma(D^0 \bar{D}^0)/\Gamma_{\text{total}}$	$\Gamma_2/\Gamma$		
VALUE	DOCUMENT ID	TECN	COMMENT
<b>seen</b>	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.)