

**$\psi(3836)$**

$$I^G(J^{PC}) = 0^-(2^{--})$$

OMITTED FROM SUMMARY TABLE

Quantum numbers are not established.

Seen in  $\pi^\pm$ Li interactions by ANTONIAZZI 94 as a peak in the invariant mass of the  $J/\psi(1S)\pi^+\pi^-$  system. Possibly seen also in  $p$ Li interactions. Interpretation as a  $^3D_2(2^{--})$  charmonium state favored. Not seen by BAI 98E in  $e^+e^-$  interactions. Needs confirmation.

**$\psi(3836)$  MASS**

VALUE (MeV)	EVTS	DOCUMENT ID	TECN	COMMENT
<b><math>3836 \pm 13</math></b>	$58 \pm 21$	ANTONIAZZI 94	E705	$\pi^\pm$ Li $\rightarrow J/\psi\pi^+\pi^-X$

**$\psi(3836)$  DECAY MODES**

Mode	Fraction ( $\Gamma_i/\Gamma$ )
$\Gamma_1 \quad J/\psi(1S)\pi^+\pi^-$	seen

**$\psi(3836)$  REFERENCES**

BAI 98E PR D57 3854	J.Z. Bai <i>et al.</i>	(BES Collab.)
ANTONIAZZI 94 PR D50 4258	L. Antoniazzi <i>et al.</i>	(E705 Collab.)