$T_{c\bar{c}1}(4200)^+$

$I^G(J^{PC}) = 1^+(1^{+-})$
I, G, C need confirmation.

OMITTED FROM SUMMARY TABLE
was $Z_c(4200)$, $X(4200)^{\pm}$

This state shows properties different from a conventional $q\bar{q}$ state. A candidate for an exotic structure. See the review on non-$q\bar{q}$ states.

Reported by CHILIKIN 14 in $J/\psi\pi^+$ at a significance of 6.2σ. Assignments of 0^-, 1^-, 2^-, and 2^+ excluded at 6.1σ, 7.4σ, 4.4σ, and 7.0σ level, respectively. Needs confirmation.

$T_{c\bar{c}1}(4200)^+$ MASS

VALUE (MeV)	*DOCUMENT ID*		*TECN*	*COMMENT*
4242±26 OUR AVERAGE	Error includes scale factor of 1.5.			
$4257 \pm 11 \pm 17$	AAIJ	25Q	LHCB	$B^+ \to \psi(2S)K^+\pi^+\pi^-$
4196^{+31+17}_{-29-13}	CHILIKIN	14	BELL	$\overline{B}^0 \to J/\psi K^-\pi^+$

$T_{c\bar{c}1}(4200)^+$ WIDTH

VALUE (MeV)	*DOCUMENT ID*		*TECN*	*COMMENT*
310±40 OUR AVERAGE				
$308 \pm 20 \pm 32$	AAIJ	25Q	LHCB	$B^+ \to \psi(2S)K^+\pi^+\pi^-$
$370 \pm 70^{+70}_{-132}$	CHILIKIN	14	BELL	$\overline{B}^0 \to J/\psi K^-\pi^+$

$T_{c\bar{c}1}(4200)^+$ DECAY MODES

	Mode	Fraction (Γ_i/Γ)
Γ_1	$J/\psi\pi^+$	seen
Γ_2	$\psi(2S)\pi^+$	seen

$T_{c\bar{c}1}(4200)^+$ BRANCHING RATIOS

$\Gamma(J/\psi\pi^+)/\Gamma_{\text{total}}$ Γ_1/Γ

VALUE	*DOCUMENT ID*		*TECN*	*COMMENT*
seen	CHILIKIN	14	BELL	$\overline{B}^0 \to J/\psi K^-\pi^+$

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

possibly seen	[1] AAIJ	19R	LHCB	$B^0 \to K^+\pi^- J/\psi$ + c.c.

[1] From a model-independent analysis.

$\Gamma(\psi(2S)\pi^+)/\Gamma_{\text{total}}$ Γ_2/Γ

VALUE	*DOCUMENT ID*		*TECN*	*COMMENT*
seen	AAIJ	25Q	LHCB	$B^+ \to \psi(2S)K^+\pi^+\pi^-$

$T_{c\bar{c}1}(4200)^+$ REFERENCES

AAIJ	25Q	JHEP 2501 054	R. Aaij *et al.*	(LHCb Collab.)
AAIJ	19R	PRL 122 152002	R. Aaij *et al.*	(LHCb Collab.)
CHILIKIN	14	PR D90 112009	K. Chilikin *et al.*	(BELLE Collab.)