

$Z_c(4200)$

$$I^G(J^{PC}) = 1^+(1^{+-})$$

I, G, C need confirmation.

OMITTED FROM SUMMARY TABLE

was $X(4200)^\pm$

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 $6.1\sigma, 7.4\sigma, 4.4\sigma$, and 7.0σ level, respectively. Needs confirmation.

 $Z_c(4200)$ MASS

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
4196^{+31+17}_{-29-13}	CHILIKIN 14	BELL	$\bar{B}^0 \rightarrow J/\psi K^- \pi^+$

 $Z_c(4200)$ WIDTH

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
$370 \pm 70^{+70}_{-132}$	CHILIKIN 14	BELL	$\bar{B}^0 \rightarrow J/\psi K^- \pi^+$

 $Z_c(4200)$ DECAY MODES

Mode	Fraction (Γ_i/Γ)
$\Gamma_1 \quad J/\psi\pi^+$	seen

 $Z_c(4200)$ BRANCHING RATIOS

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

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

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

possibly seen ¹ AAIJ 19R LHCb $B^0 \rightarrow K^+ \pi^- J/\psi + \text{c.c.}$

¹ From a model-independent analysis.

 $Z_c(4200)$ REFERENCES

AAIJ 19R	PRL 122 152002	R. Aaij <i>et al.</i>	(LHCb Collab.)
CHILIKIN 14	PR D90 112009	K. Chilikin <i>et al.</i>	(BELLE Collab.)