

# Z<sub>c</sub>(4200)

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

*I, G, C* need confirmation.

OMITTED FROM SUMMARY TABLE  
was X(4200)<sup>±</sup>

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  $6.2\sigma$ . As-  
signments of  $0^-$ ,  $1^-$ ,  $2^-$ , and  $2^+$  excluded at  $6.1\sigma$ ,  $7.4\sigma$ ,  $4.4\sigma$ ,  
and  $7.0\sigma$  level, respectively. Needs confirmation.

## Z<sub>c</sub>(4200) MASS

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

## Z<sub>c</sub>(4200) WIDTH

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
<b>370<sup>±70+70</sup><sub>-132</sub></b>	CHILIKIN 14	BELL	$\bar{B}^0 \rightarrow J/\psi K^- \pi^+$

## Z<sub>c</sub>(4200) DECAY MODES

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

## Z<sub>c</sub>(4200) BRANCHING RATIOS

$\Gamma(J/\psi\pi^+)/\Gamma_{\text{total}}$	DOCUMENT ID	TECN	COMMENT	$\Gamma_1/\Gamma$
<b>seen</b>	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	<sup>1</sup> AAIJ 19R	LHCB	$B^0 \rightarrow K^+ \pi^- J/\psi + \text{c.c.}$	

<sup>1</sup>From a model-independent analysis.

## Z<sub>c</sub>(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.)