

**$\chi_{c0}(4700)$** 

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

OMITTED FROM SUMMARY TABLE  
was  $X(4700)$

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.

Seen by AAIJ 17C in  $B^+ \rightarrow \chi_{c0} K^+$ ,  $\chi_{c0} \rightarrow J/\psi\phi$  using an amplitude analysis of  $B^+ \rightarrow J/\psi\phi K^+$  with a significance (accounting for systematic uncertainties) of  $5.6\sigma$ .

 **$\chi_{c0}(4700)$  MASS**

VALUE (MeV)	EVTS	DOCUMENT ID	TECN	COMMENT
$4704 \pm 10^{+14}_{-24}$	4289	<sup>1</sup> AAIJ	17C LHCb	$B^+ \rightarrow J/\psi\phi K^+$

<sup>1</sup> From an amplitude analysis of the decay  $B^+ \rightarrow J/\psi\phi K^+$  with a significance of  $5.6\sigma$ .

 **$\chi_{c0}(4700)$  WIDTH**

VALUE (MeV)	EVTS	DOCUMENT ID	TECN	COMMENT
$120 \pm 31^{+42}_{-33}$	4289	<sup>1</sup> AAIJ	17C LHCb	$B^+ \rightarrow J/\psi\phi K^+$

<sup>1</sup> From an amplitude analysis of the decay  $B^+ \rightarrow J/\psi\phi K^+$  with a significance of  $5.6\sigma$ .

 **$\chi_{c0}(4700)$  DECAY MODES**

Mode	Fraction ( $\Gamma_i/\Gamma$ )
$\Gamma_1 \quad J/\psi\phi$	seen

 **$\chi_{c0}(4700)$  BRANCHING RATIOS**

$\Gamma(J/\psi\phi)/\Gamma_{\text{total}}$	$\Gamma_1/\Gamma$			
VALUE	EVTS	DOCUMENT ID	TECN	COMMENT
seen	4289	<sup>1</sup> AAIJ	17C LHCb	$B^+ \rightarrow J/\psi\phi K^+$

<sup>1</sup> From an amplitude analysis of the decay  $B^+ \rightarrow J/\psi\phi K^+$  with a significance of  $5.6\sigma$ .

 **$\chi_{c0}(4700)$  REFERENCES**

AAIJ	17C	PRL 118 022003	R. Aaij <i>et al.</i>	(LHCb Collab.) JP
Also		PR D95 012002	R. Aaij <i>et al.</i>	(LHCb Collab.)