

**$\chi_{c0}(4500)$** 

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

OMITTED FROM SUMMARY TABLE  
was  $X(4500)$ 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  $6.1 \sigma$ . **$\chi_{c0}(4500)$  MASS**

VALUE (MeV)	EVTS	DOCUMENT ID	TECN	COMMENT
$4506 \pm 11^{+12}_{-15}$	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  $6.1 \sigma$ . **$\chi_{c0}(4500)$  WIDTH**

VALUE (MeV)	EVTS	DOCUMENT ID	TECN	COMMENT
$92 \pm 21^{+21}_{-20}$	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  $6.1 \sigma$ . **$\chi_{c0}(4500)$  DECAY MODES**

Mode
$\Gamma_1 \quad J/\psi \phi$

 **$\chi_{c0}(4500)$  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  $6.1 \sigma$ . **$\chi_{c0}(4500)$  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.)