

$\chi_{c1}(4274)$

$$J^G(J^{PC}) = 0^+(1^{++})$$

was $X(4274)$

See the review on the "Spectroscopy of Mesons Containing two Heavy Quarks."

$\chi_{c1}(4274)$ MASS

VALUE (MeV)	EVTS	DOCUMENT ID	TECN	COMMENT
4286 ± 8 -9 OUR AVERAGE		Error includes scale factor of 1.7.		
4294 ± 4 ± 3 -6	24k	¹ AAIJ	21E LHCb	$B^+ \rightarrow J/\psi \phi K^+$
4274.4 ± 8.4 -6.7 ± 1.9	22	² AALTONEN	17 CDF	$B^+ \rightarrow J/\psi \phi K^+$
• • • We do not use the following data for averages, fits, limits, etc. • • •				
4273.3 ± 8.3 -3.6 ± 17.2	4289	^{3,4} AAIJ	17C LHCb	$B^+ \rightarrow J/\psi \phi K^+$

¹ From an amplitude analysis of the decay $B^+ \rightarrow J/\psi \phi K^+$ with a significance of 18 σ .
² From a fit to the invariant mass spectrum with a significance of 3.1 σ .
³ From an amplitude analysis of the decay $B^+ \rightarrow J/\psi \phi K^+$ with a significance of 6.0 σ .
⁴ Superseded by AAIJ 21E.

$\chi_{c1}(4274)$ WIDTH

VALUE (MeV)	EVTS	DOCUMENT ID	TECN	COMMENT
51 ± 7 OUR AVERAGE				
53 ± 5 ± 5	24k	¹ AAIJ	21E LHCb	$B^+ \rightarrow J/\psi \phi K^+$
32.3 ± 21.9 -15.3 ± 7.6	22	² AALTONEN	17 CDF	$B^+ \rightarrow J/\psi \phi K^+$
• • • We do not use the following data for averages, fits, limits, etc. • • •				
56 ± 11 ± 8 -11	4289	^{3,4} AAIJ	17C LHCb	$B^+ \rightarrow J/\psi \phi K^+$

¹ From an amplitude analysis of the decay $B^+ \rightarrow J/\psi \phi K^+$ with a significance of 18 σ .
² From a fit to the invariant mass spectrum with a significance of 3.1 σ .
³ From an amplitude analysis of the decay $B^+ \rightarrow J/\psi \phi K^+$ with a significance of 6.0 σ .
⁴ Superseded by AAIJ 21E.

$\chi_{c1}(4274)$ DECAY MODES

Mode	Fraction (Γ_i/Γ)
Γ_1 $J/\psi \phi$	seen

$\chi_{c1}(4274)$ BRANCHING RATIOS

$\Gamma(J/\psi\phi)/\Gamma_{\text{total}}$					Γ_1/Γ
VALUE	EVTS	DOCUMENT ID	TECN	COMMENT	
seen	24k	¹ AAIJ	21E	LHCB	$B^+ \rightarrow J/\psi\phi K^+$
• • • We do not use the following data for averages, fits, limits, etc. • • •					
seen	4289	^{2,3} AAIJ	17C	LHCB	$B^+ \rightarrow J/\psi\phi K^+$
¹ From an amplitude analysis of the decay $B^+ \rightarrow J/\psi\phi K^+$ with a significance of 18 σ .					
² From an amplitude analysis of the decay $B^+ \rightarrow J/\psi\phi K^+$ with a significance of 6.0 σ .					
³ Superseded by AAIJ 21E.					

$\chi_{c1}(4274)$ REFERENCES

AAIJ	21E	PRL 127 082001	R. Aaij <i>et al.</i>	(LHCb Collab.)
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.)
AALTONEN	17	MPL A32 1750139	T. Altonen <i>et al.</i>	(CDF Collab.)