

$T_{cc\bar{c}\bar{c}}(7100)$

$$J^G(J^{PC}) = 0^+(2^{++})$$

OMITTED FROM SUMMARY TABLE

Assuming that all structures seen in the $J/\psi J/\psi$ final state have the same quantum numbers, CMS determined those to $J^{PC} = 2^{++}$ (HAYRAPETYAN 25AG). State incompatible with a $q\bar{q}$ structure. Needs confirmation. See the review on "Heavy Non- $q\bar{q}$ Mesons."

$T_{cc\bar{c}\bar{c}}(7100)$ MASS

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
7134^{+48+41}_{-25-15}	¹ HAYRAPETY...24	CMS	$pp \rightarrow J/\psi J/\psi X$

¹ In a model with three resonances described by interfering relativistic Breit-Wigner functions above background from non-resonant single and double parton scattering and a threshold enhancement.

$T_{cc\bar{c}\bar{c}}(7100)$ WIDTH

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
97^{+40+29}_{-29-26}	¹ HAYRAPETY...24	CMS	$pp \rightarrow J/\psi J/\psi X$

¹ In a model with three resonances described by interfering relativistic Breit-Wigner functions above background from non-resonant single and double parton scattering and a threshold enhancement.

$T_{cc\bar{c}\bar{c}}(7100)$ DECAY MODES

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

$T_{cc\bar{c}\bar{c}}(7100)$ BRANCHING RATIOS

$\Gamma(J/\psi J/\psi)/\Gamma_{\text{total}}$				Γ_1/Γ
VALUE	DOCUMENT ID	TECN	COMMENT	
seen	HAYRAPETY...24	CMS	$pp \rightarrow J/\psi J/\psi X$	

$T_{cc\bar{c}\bar{c}}(7100)$ REFERENCES

HAYRAPETY... 25AG NAT 648 58	A. Hayrapetyan <i>et al.</i>	(CMS Collab.) JPC
HAYRAPETY... 24 PRL 132 111901	A. Hayrapetyan <i>et al.</i>	(CMS Collab.)