

$T_{cc\bar{c}\bar{c}}(6600)$

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

NODE=M272

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."

NODE=M272

$T_{cc\bar{c}\bar{c}}(6600)$  MASS

NODE=M272M

NODE=M272M

$T_{cc\bar{c}\bar{c}}(6600)$  WIDTH

NODE=M272W

NODE=M272W

$T_{cc\bar{c}\bar{c}}(6600)$  DECAY MODES

NODE=M272215;NODE=M272

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

DESIG=1

$T_{cc\bar{c}\bar{c}}(6600)$  BRANCHING RATIOS

NODE=M272225

| $\Gamma(J/\psi J/\psi)/\Gamma_{\text{total}}$ |                |      |                                  | $\Gamma_1/\Gamma$ |
|-----------------------------------------------|----------------|------|----------------------------------|-------------------|
| VALUE                                         | DOCUMENT ID    | TECN | COMMENT                          |                   |
| seen                                          | HAYRAPETY...24 | CMS  | $pp \rightarrow J/\psi J/\psi X$ |                   |

NODE=M272R00  
NODE=M272R00

$T_{cc\bar{c}\bar{c}}(6600)$  REFERENCES

NODE=M272

|                                |                              |                   |
|--------------------------------|------------------------------|-------------------|
| 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.)     |

REFID=63635  
REFID=62649