

**X(2370)**

$$I^G(J^{PC}) = ??(???)$$

OMITTED FROM SUMMARY TABLE

**X(2370) MASS**

VALUE (MeV)	EVTS	DOCUMENT ID	TECN	COMMENT
<b>2357 ±17 OUR AVERAGE</b>		Error includes scale factor of 2.7.		
2341.6 ± 6.5 ± 5.7		<sup>1</sup> ABLIKIM	20Q BES3	$J/\psi \rightarrow \gamma K \bar{K} \eta'$
2376.3 ± 8.7 <sup>+3.2</sup> <sub>-4.3</sub>	565	ABLIKIM	11C BES3	$J/\psi \rightarrow \gamma \pi^+ \pi^- \eta'$

<sup>1</sup>The state observed by ABLIKIM 11C at 2120 MeV is not observed with 90% CL upper limit of  $1.49 \times 10^{-5}$  for  $J/\psi \rightarrow \gamma X(2120) \rightarrow \gamma K^+ K^- \eta'$  and  $6.38 \times 10^{-6}$  for  $K_S^0 K_S^0 \eta'$ .

**X(2370) WIDTH**

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
<b>114<sup>+12</sup><sub>-10</sub> OUR AVERAGE</b>			
117 ± 10 ± 8	<sup>1</sup> ABLIKIM	20Q BES3	$J/\psi \rightarrow \gamma K \bar{K} \eta'$
83 ± 17 <sup>+44</sup> <sub>-6</sub>	ABLIKIM	11C BES3	$J/\psi \rightarrow \gamma \pi^+ \pi^- \eta'$

<sup>1</sup>The state observed by ABLIKIM 11C at 2120 MeV is not observed with 90% CL upper limit of  $1.49 \times 10^{-5}$  for  $J/\psi \rightarrow \gamma X(2120) \rightarrow \gamma K^+ K^- \eta'$  and  $6.38 \times 10^{-6}$  for  $K_S^0 K_S^0 \eta'$ .

**X(2370) DECAY MODES**

Mode	Fraction ( $\Gamma_i/\Gamma$ )
$\Gamma_1$ $K^+ K^- \eta'$	seen
$\Gamma_2$ $K_S^0 K_S^0 \eta'$	seen
$\Gamma_3$ $\pi^+ \pi^- \eta'$	seen
$\Gamma_4$ $\eta \eta \eta'$	not seen

**X(2370) BRANCHING RATIOS**

$\Gamma(K^+ K^- \eta')/\Gamma_{\text{total}}$	$\Gamma_1/\Gamma$		
VALUE	DOCUMENT ID	TECN	COMMENT
seen	ABLIKIM	20Q BES3	$J/\psi \rightarrow \gamma K^+ K^- \eta'$
$\Gamma(K_S^0 K_S^0 \eta')/\Gamma_{\text{total}}$	$\Gamma_2/\Gamma$		
VALUE	DOCUMENT ID	TECN	COMMENT
seen	ABLIKIM	20Q BES3	$J/\psi \rightarrow \gamma K_S^0 K_S^0 \eta'$

$\Gamma(\pi^+\pi^-\eta')/\Gamma_{\text{total}}$   $\Gamma_3/\Gamma$

<u>VALUE</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
<b>seen</b>	ABLIKIM 11C	BES3	$J/\psi \rightarrow \gamma\pi^+\pi^-\eta'$

$\Gamma(\eta\eta\eta')/\Gamma_{\text{total}}$   $\Gamma_4/\Gamma$

<u>VALUE</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
<b>not seen</b>	<sup>1</sup> ABLIKIM 21C	BES3	$J/\psi(1S) \rightarrow \gamma\eta\eta\eta'$

<sup>1</sup> ABLIKIM 21C measured  $B(J/\psi(1S) \rightarrow \gamma X(2370) \rightarrow \gamma\eta\eta\eta') < 9.2 \times 10^{-6}$ .

**X(2370) REFERENCES**

ABLIKIM 21C	PR D103 012009	M. Ablikim <i>et al.</i>	(BESIII Collab.)
ABLIKIM 20Q	EPJ C80 746	M. Ablikim <i>et al.</i>	(BESIII Collab.)
ABLIKIM 11C	PRL 106 072002	M. Ablikim <i>et al.</i>	(BESIII Collab.)