

$X(10610)^0$

$$I^G(J^P) = 1^+(1^+)$$

OMITTED FROM SUMMARY TABLE

Observed by KROKOVNY 13 in $\Upsilon(10860) \rightarrow \Upsilon(nS)\pi^0\pi^0$ ($n=2,3$).
 Isospin 1 is favored from the proximity in mass to $X(10610)^\pm$ and
 their similarity of observed decay modes and cross sections. J^P
 $= 1^+$ is favored from angular analysis of $X(10610)^\pm$ decays by
 BONDAR 12.

 $X(10610)^0$ MASS

<u>VALUE (MeV)</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
$10609 \pm 4 \pm 4$	¹ KROKOVNY 13	BELL	$e^+e^- \rightarrow \Upsilon(2S)/\Upsilon(3S)\pi^0\pi^0$

¹From a simultaneous fit to the KROKOVNY 13 Dalitz analysis of $e^+e^- \rightarrow \Upsilon(2S)/\Upsilon(3S)\pi^0\pi^0$ decays with fixed width $\Gamma(X(10610)^0) = 18.4$ MeV.

 $X(10610)^0$ DECAY MODES

Mode	Fraction (Γ_i/Γ)
$\Gamma_1 \quad \Upsilon(1S)\pi^0$	not seen
$\Gamma_2 \quad \Upsilon(2S)\pi^0$	seen
$\Gamma_3 \quad \Upsilon(3S)\pi^0$	seen

 $X(10610)^0$ BRANCHING RATIOS

<u>$\Gamma(\Upsilon(1S)\pi^0)/\Gamma_{\text{total}}$</u>	<u>VALUE</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>	<u>Γ_1/Γ</u>
not seen		KROKOVNY 13	BELL	$e^+e^- \rightarrow \Upsilon(1S)\pi^0\pi^0$	

<u>$\Gamma(\Upsilon(2S)\pi^0)/\Gamma_{\text{total}}$</u>	<u>VALUE</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>	<u>Γ_2/Γ</u>
seen		² KROKOVNY 13	BELL	$e^+e^- \rightarrow \Upsilon(2S)\pi^0\pi^0$	

²Combined significance in $e^+e^- \rightarrow \Upsilon(2S)/\Upsilon(3S)\pi^0\pi^0$, including systematics, of 6.5σ .

<u>$\Gamma(\Upsilon(3S)\pi^0)/\Gamma_{\text{total}}$</u>	<u>VALUE</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>	<u>Γ_3/Γ</u>
seen		³ KROKOVNY 13	BELL	$e^+e^- \rightarrow \Upsilon(3S)\pi^0\pi^0$	

³Combined significance in $e^+e^- \rightarrow \Upsilon(2S)/\Upsilon(3S)\pi^0\pi^0$, including systematics, of 6.5σ .

 $X(10610)^0$ REFERENCES

KROKOVNY 13	PR D88 052016	P. Krokovny <i>et al.</i>	(BELLE Collab.)
BONDAR 12	PRL 108 122001	A. Bondar <i>et al.</i>	(BELLE Collab.)