$X(10610)^0$

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

Observed by KROKOVNY 13 in $\Upsilon(10860) \to \Upsilon(nS)\pi^0\pi^0$ (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

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
10609±4±4	[1] KROKOVNY 13	BELL	$e^+e^- \to \Upsilon(2S)/\Upsilon(3S)\pi^0\pi^0$

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

$X(10610)^0$ DECAY MODES

	Mode	Fraction (Γ_i/Γ)
Γ_1	$\Upsilon(1S)\pi^0$	not seen
Γ_2	$\Upsilon(2S)\pi^0$	seen
Γ_3	$\Upsilon(3S)\pi^0$	seen

$X(10610)^0$ BRANCHING RATIOS

$\Gamma(\Upsilon(1S)\pi^0)/\Gamma_{total}$ $\qquad\qquad$ Γ_1/Γ

VALUE	DOCUMENT ID	TECN	COMMENT
not seen	KROKOVNY 13	BELL	$e^+e^- \to \Upsilon(1S)\pi^0\pi^0$

$\Gamma(\Upsilon(2S)\pi^0)/\Gamma_{total}$ $\qquad\qquad$ Γ_2/Γ

VALUE	DOCUMENT ID	TECN	COMMENT
seen	[2] KROKOVNY 13	BELL	$e^+e^- \to \Upsilon(2S)\pi^0\pi^0$

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

$\Gamma(\Upsilon(3S)\pi^0)/\Gamma_{total}$ $\qquad\qquad$ Γ_3/Γ

VALUE	DOCUMENT ID	TECN	COMMENT
seen	[3] KROKOVNY 13	BELL	$e^+e^- \to \Upsilon(3S)\pi^0\pi^0$

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

$X(10610)^0$ REFERENCES

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