$X(4430)^{\pm}$

$I(J^P) = ?(?^?)$

OMITTED FROM SUMMARY TABLE

Seen by CHOI 08 in $B \to K\pi^+\psi(2S)$ decays and confirmed by reanalysis of the same data sample in MIZUK 09. Not seen by AUBERT 09AA.

$X(4430)^{\pm}$ MASS

VALUE (MeV)	*DOCUMENT ID*		*TECN*	*COMMENT*
4443^{+15+19}_{-12-13}	[1] MIZUK	09	BELL	$B \to K\pi^+\psi(2S)$
• • • We do not use the following data for averages, fits, limits, etc. • • •				
$4433 \pm 4 \pm 2$	[2] CHOI	08	BELL	$B \to K\pi^+\psi(2S)$

[1] From a Dalitz plot analysis.
[2] Superseded by MIZUK 09.

$X(4430)^{\pm}$ WIDTH

VALUE (MeV)	*DOCUMENT ID*		*TECN*	*COMMENT*
$107^{+\ 86+74}_{-\ 43-56}$	[3] MIZUK	09	BELL	$B \to K\pi^+\psi(2S)$
• • • We do not use the following data for averages, fits, limits, etc. • • •				
$45^{+\ 18+30}_{-\ 13-13}$	[4] CHOI	08	BELL	$B \to K\pi^+\psi(2S)$

[3] From a Dalitz plot analysis.
[4] Superseded by MIZUK 09.

$X(4430)^{\pm}$ DECAY MODES

	Mode	Fraction (Γ_i/Γ)
Γ_1	$\pi^+\psi(2S)$	seen
Γ_2	$\pi^+ J/\psi$	not seen

$X(4430)^{\pm}$ BRANCHING RATIOS

$\Gamma(\pi^+\psi(2S))/\Gamma_{\text{total}}$ Γ_1/Γ

VALUE	*DOCUMENT ID*		*TECN*	*COMMENT*
seen	[5] MIZUK	09	BELL	$B \to K\pi^+\psi(2S)$
• • • We do not use the following data for averages, fits, limits, etc. • • •				
not seen	[6] AUBERT	09AA	BABR	$K \to K\pi^+\psi(2S)$

[5] Measured a product of branching fractions $B(\overline{B}^0 \to K^- X(4430)^+) \times B(X(4430)^+ \to \pi^+\psi(2S)) = (3.2^{+1.8+5.3}_{-0.9-1.6}) \times 10^{-5}$.
[6] AUBERT 09AA quotes $B(B^+ \to \overline{K}^0 X(4430)^+) \times B(X(4430)^+ \to \pi^+\psi(2S)) < 4.7 \times 10^{-5}$ and $B(\overline{B}^0 \to K^- X(4430)^+) \times B(X(4430)^+ \to \pi^+\psi(2S)) < 3.1 \times 10^{-5}$ at 95% CL.

$\Gamma(\pi^+ J/\psi)/\Gamma_{\text{total}}$ Γ_2/Γ

VALUE	DOCUMENT ID	TECN	COMMENT
not seen	[7] AUBERT	09AA BABR	$K \to K\pi^+ J/\psi$

[7] AUBERT 09AA quotes $B(B^+ \to \overline{K}^0 X(4430)^+) \times B(X(4430)^+ \to \pi^+ J/\psi) < 1.5 \times 10^{-5}$ and $B(\overline{B}^0 \to K^- X(4430)^+) \times B(X(4430)^+ \to \pi^+ J/\psi) < 0.4 \times 10^{-5}$ at 95% CL.

$X(4430)^{\pm}$ REFERENCES

AUBERT	09AA	PR D79 112001	B. Aubert *et al.*	(BABAR Collab.)
MIZUK	09	PR D80 031104R	R. Mizuk *et al.*	(BELLE Collab.)
CHOI	08	PRL 100 142001	S.-K. Choi *et al.*	(BELLE Collab.)