

X(4050)[±]

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

OMITTED FROM SUMMARY TABLE

Observed by MIZUK 08 in the $\pi^+ \chi_{c1}(1P)$ invariant mass distribution in $\bar{B}^0 \rightarrow K^- \pi^+ \chi_{c1}(1P)$ decays. Not seen by LEES 12B in this same mode after accounting for $K\pi$ resonant mass and angular structure.

X(4050)[±] MASS

<u>VALUE (MeV)</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
4051 ± 14⁺²⁰₋₄₁	¹ MIZUK	08	BELL $\bar{B}^0 \rightarrow K^- \pi^+ \chi_{c1}(1P)$

¹ From a Dalitz plot analysis with two Breit-Wigner amplitudes.

X(4050)[±] WIDTH

<u>VALUE (MeV)</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
82⁺²¹⁺⁴⁷₋₁₇₋₂₂	² MIZUK	08	BELL $\bar{B}^0 \rightarrow K^- \pi^+ \chi_{c1}(1P)$

² From a Dalitz plot analysis with two Breit-Wigner amplitudes.

X(4050)[±] DECAY MODES

<u>Mode</u>	<u>Fraction (Γ_i/Γ)</u>
$\Gamma_1 \quad \pi^+ \chi_{c1}(1P)$	seen

X(4050)[±] BRANCHING RATIOS

<u>$\Gamma(\pi^+ \chi_{c1}(1P))/\Gamma_{\text{total}}$</u>	<u>Γ_1/Γ</u>
seen	
³ MIZUK	08
BELL	$\bar{B}^0 \rightarrow K^- \pi^+ \chi_{c1}(1P)$

• • • We do not use the following data for averages, fits, limits, etc. • • •

not seen	⁴ LEES	12B	BABR	$B \rightarrow K \pi \chi_{c1}(1P)$
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³ With a product branching fraction measurement of $B(\bar{B}^0 \rightarrow K^- X(4050)^+) \times B(X(4050)^+ \rightarrow \pi^+ \chi_{c1}(1P)) = (3.0^{+1.5+3.7}_{-0.8-1.6}) \times 10^{-5}$.

⁴ With a product branching fraction limit of $B(\bar{B}^0 \rightarrow X(4050)^+ K^-) \times B(X(4050)^+ \rightarrow \chi_{c1} \pi^+) < 1.8 \times 10^{-5}$ at 90% CL.

X(4050)[±] REFERENCES

LEES	12B	PR D85 052003	J.P. Lees <i>et al.</i>	(BABAR Collab.)
MIZUK	08	PR D78 072004	R. Mizuk <i>et al.</i>	(BELLE Collab.)