New results on the $X(3872)$

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We report on recent measurements of the properties of the $X(3872)$ produced in exclusive $B^+ \to K^+X(3872)$ decays. These measurements are based on a $\simeq 140$ fb^{-1} data sample collected at the $\Upsilon(4S)$ resonance with the Belle detector operating at the KEKB asymmetric-energy e^+e^- collider. Angular correlations in the $X(3872) \to \pi^+\pi^- J/\psi$ decay process are used to restrict the possible J^{PC} values. In addition, we report results of searches for other decay modes, such as $\gamma\chi_{c1}$, $\gamma\chi_{c2}$, $\gamma J/\psi$ and $D\bar{D}$. The results are compared with expectations for possible charmonium-state assignments for the $X(3872)$.

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