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Title: Study of X(3872) and X(3915) Using Belle Detector

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Abstract: Last decade has seen the discovery of many exotic charmonium-like states. X(3872) is the poster boy of such exotic states. The nature of X(3872) is still unknown. Precise measurement of $R_{3\pi/2\pi} = B(X(3872) \rightarrow J/\psi \pi^+ \pi^- \pi^0) / B(X(3872) \rightarrow J/\psi \pi^+ \pi^-)$ is crucial to understand the nature of X(3872) state. We performed Monte Carlo study for $B^+ \rightarrow (J/\psi) K$ decay at Belle detector. We estimated the reconstruction efficiency for $B \rightarrow X(3872) K$ and $B \rightarrow X(3915) K$ decay modes. Based on that we expect 35 (170) signal events for $X(3872) \rightarrow J/\psi$ ($X(3915) \rightarrow J/\psi$) from the (4S) data collected by Belle detector at KEKB asymmetric electron-positron collider.


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