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The current status of studying Zc(4200) exotic state

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Exotic hadron states with quark content beyond conventional meson and baryon models are natural laboratory to study the properties of strong interaction. Charmonium-like state $Z_c(4200)$ with a potentially tetraquark structure was found as an intermediate state in $B^0 \to J/\psi K^{\pm}\pi^{\mp}$ decays. The large width of this state leads to significant interference effects with other intermediate states, e.g. K^* mesons. The nature of this state and even its existence is still controversial. Further theoretical studies require high-precision measurements of the properties of this state using amplitude analysis methods.

In this report, the current theoretical and experimental status of studying $Z_c(4200)$ exotic state together with prospects for further research will be presented.

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