The 5th international conference on particle physics and astrophysics



Contribution ID : 715

Type : Oral talk

Partial-wave analysis of $J/\psi \rightarrow K^+ K^- \pi^0$

Wednesday, 7 October 2020 13:00 (15)

The recent results of the partial wave analysis of $J/\psi \to K^+K^-\pi^0$ reaction using $(223.7 \pm 1.4) \times 10^6$ J/ψ decays collected by BESIII collaboration in 2009 will be presented. The high data quality and statistics of the BESIII experiment allowed revealing signals that had not been observed previously in J/ψ decays. The reported results for $K^*(892)^{\pm}$ and $K_2^*(1430)^{\pm}$ parameters are currently the most precise. The $K_2^*(1980)^{\pm}$, $K_4^*(2045)^{\pm}$ resonances are reported for the first time in J/ψ decays. Two resonance signals in the $K^+K^$ channel are reported and their interpretation will be discussed. Results also include branching ratios for decays through these intermediate states and a high precision measurement of $Br(J/\psi \to K^+K^-\pi^0)$. The results are significantly different from those presented earlier by BESII and BABAR.

Primary author(s) :DENISENKO, Igor (JINR)Presenter(s) :DENISENKO, Igor (JINR)Session Classification :High Energy Physics

Track Classification : High energy physics