Contribution ID: **126** Type: **Parallel session talk**

# Measurements of charmonium decays at BESIII

*Saturday 20 July 2024 09:45 (15 minutes)*

This presentation will feature several recent results of charmonium decays, including four first-time observations: $\psi(3686) \to \Omega^- K^+ anti - \Xi^0$, $\eta_c(2S) \to K^+K^-\eta$, $\eta_c(2S) \to \pi^+\pi^- K_s K^{+/-}\pi^{-/+}$, and $\chi_{cJ} \to 3(K^+K^-)$. Additionally, an updated measurement of the M1 transition $\psi(3686) \to \gamma\eta_c(2S)$ with $\eta_c(2S) \to K\bar{K}\pi$ will be discussed. In the search for $\eta_c(2S) \to \pi^+\pi^-\eta_c$, no significant signal was found, leading to the provision of an upper limit. These new measurements provide valuable insights into charmonium decay, contributing to a better understanding of the decay mechanism of charmonia and, consequently, a deeper comprehension of non-perturbative strong interactions.

## Alternate track

## I read the instructions above

Yes

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