Contribution ID: **40** Type: **not specified**

# C-even quarkonia production at JLab and EIC

We study the C-even heavy quarkonium production processes. The charge odd $J/\psi$ production process via gravitational interaction is also investigated. The nonperturbative nature of quarkonia is depicted by the NRQCD factorization framework. The predicted cross sections for $\chi_{c(b)1}$ are suppressed compared with their counterparts $\eta_{c(b)}$, $\chi_{c(b)0}$ and $\chi_{c(b)2}$, which can be explained by the Landau-Yang theorem. We propose that these production processes can be detected in the future JLab and EIC experiments.

## Presentation type

Oral

**Primary authors:** Ms ZHANG, Jia-Yue (IHEP); Mr PAN, Jichen (IHEP); Prof. JIA, Yu (IHEP); Mr MO, Zhewen (IHEP)

**Presenter:** Mr MO, Zhewen (IHEP)