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Exclusive photoproduction of heavy quarkonia pairs in ep collisions

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We present our theoretical results for the exclusive photoproduction of heavy quarkonia pairs in the kinematics of the future high-energy colliders, like the future Electron Ion Collider (EIC), the Large Hadron electron Collider (LHeC), and the Future Circular Collider (FCC-he). We found that in the leading order over the strong coupling α_s the produced quarkonia have opposite C-parity, and predominantly are produced with oppositely directed transverse momenta. Using the Color Glass Condensate (CGC/Sat) approach, we estimated numerically the cross-section of this process for the case of $J/\psi-\eta_c$ pair production in the kinematics of the future accelerators. Finally, we also discuss briefly subleading mechanisms which contribute to production of quarkonia pairs with the same C-parity.

Submitted on behalf of a Collaboration?

No

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