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Virtual Single and double J/ψ hadroproduction in the ICEM via the Parton Reggeization Approach

Monday 28 November 2022 16:20 (15 minutes)

We study the prompt single and double J/ψ hadroproduction in the Improved Color Evaporation Model using the Parton Reggeization Approach. We make calculations in a single manner to described the experimental data for prompt J/ψ transverse momentum spectra from the energy of $\sqrt{s} = 19$ GeV up to modern energy of the LHC, $\sqrt{s} = 13$ TeV. The numerical calculations are doing using parton-level MC generator for k_T -dependent initial-state partons, KaTie. We use the modified KMR-type unintegrated parton distribution functions of Reggeized gluons and quarks with exact normalization based on Kimber-Martin-Ryskin-Watt model. We suggest improvement of the ICEM for the pair-production of J/ψ . In case of double J/ψ production we investigate the relative contributions of the single-parton scattering and double-parton scattering mechanisms.

Declaration

I certify that I have checked that I am authorised to submit the abstract with the listed co-authors with their current affiliations

Change of Speaker

I understand that change of speaker is allowed provided that no participant gives more than one talk. Otherwise, we will ask the speaker to choose between one or the other abstract to be presented.

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