XXVIII International Workshop on Deep-Inelastic Scattering and Related Subjects



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"Coherent photoproduction of J/ψ in nucleus-nucleus collisions in the color dipole approach- an update.

Thursday, 15 April 2021 08:36 (18 minutes)

We investigate the exclusive photoproduction of J/ ψ mesons in ultraperipheral heavy-ion collisions in the color dipole approach. We use the color dipole formulation of Glauber-Gribov theory to calculate the diffractive amplitude on the nuclear target. We compare our results to recent published data on exclusive J/ ψ production in ultraperipheral lead-lead collisions at $\sqrt{s}NN=2.76$ and $\sqrt{s}NN=5.02$ TeV (ALICE data from 2019). We also work on the incorporation of gluon shadowing corrections through the inclusion of $q\bar{q}g$ -Fock states. Such corrections appear to be necessary to describe the midrapidity ALICE data.

It is based on the paper "Coherent photoproduction of J/ψ in nucleus-nucleus collisions in the color dipole approach", Agnieszka Łuszczak and Wolfgang Schäfer

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Primary author: LUSZCZAK, Agnieszka (Cracow University of Technology)

Presenter: LUSZCZAK, Agnieszka (Cracow University of Technology) **Session Classification:** Small-x, Diffraction and Vector Mesons

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