Diffraction and Low-x 2022



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Recent ALICE results on ultra-peripheral heavy-ion collisions

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Photon-photon and photonuclear reactions are induced by the strong electromagnetic fields generated by ultrarelativistic heavy-ion collisions. These processes have been extensively studied in ultra-peripheral collisions with impact parameters larger than twice the nuclear radii. Photoproduced quarkonia can probe the nuclear gluon distributions at low Bjorken-x. The continuum dilepton production could be used to further map the electromagnetic fields produced in heavy-ion collisions and to study possible induced or final state effects in overlapping hadronic interactions.

The measurement of J/ψ photoproduction off hadrons sheds light onto the initial state of QCD targets and provides important constraints to the initial conditions used in hydrodynamical models of heavy ion collisions. We will present recent ALICE results using ultra-peripheral p-Pb and Pb-Pb collisions.

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