11th International Conference on Hard and Electromagnetic Probes of High-Energy Nuclear Collisions



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Recent ALICE results on photon-lead interactions

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Photon-induced reactions in ultra-peripheral collisions (UPCs) of heavy nuclei at the LHC have been studied using the ALICE detector for several years. The ALICE detector can measure the photoproduction cross section for vector mesons at various rapidities, centre-of-mass energies and collision systems. Beyond the recent ALICE studies of the rapidity and momentum transfer dependence of coherent J/ψ photoproduction, new results on incoherent J/ψ photoproduction will be discussed. These results complement coherent J/ψ measurements and provide additional sensitivity to probing nuclear gluon effects including the presence of subnucleon gluon fluctuations. Additionally, new measurements of the coherent and incoherent J/ψ polarization will be shown. These new results serve for testing the s-channel helicity conservation hypothesis.

Experiment/Theory

ALICE

Affiliation

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Sitzung Einordnung: Parallel: Electromagnetic & Electroweak Probes

Track Klassifizierung: Electromagnetic and electroweak probes