

Quarkonia photoproduction and dilepton production in UPCs with ALICE

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We will present the latest measurements of charmonia photoproduction and two-photon processes in ultra-peripheral Pb-Pb collisions at the LHC, using the ALICE detector. These processes probe the nuclear gluon distribution at low Bjorken- x and QED effects in strong fields. ALICE has an active program on UPC physics, which is benefiting from the Run 3 detector upgrades because of a continuous and trigger-less data acquisition mode. This greatly improves the sensitivity and efficiency for these rare phenomena. We will compare the data with theoretical predictions, highlighting the new insights and directions for the field of ultra-peripheral heavy-ion collisions. In addition, we will present the prospects of measuring a_τ with ALICE in Run 3 using tau pair production, and compare them with theoretical predictions and recent measurements.

Alternate track

I read the instructions above

Yes

Primary author: BURMASOV, Nazar (In person)

Co-author: COLLABORATION, ALICE

Presenter: BURMASOV, Nazar (In person)

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