Contribution ID: **521** Type: **Poster**

Particle production in inelastic photonuclear interactions in ultra-peripheral Pb–Pb collisions with ALICE

Ultra-peripheral collisions enable a variety of two-photon and photonuclear interactions to be studied. Earlier analyses have mostly focused on exclusive photonuclear vector meson production and on two-photon interactions. This presentation will be on photonuclear interactions where the target nucleus breaks up. The cross sections for these interactions are huge in Pb–Pb collisions at the LHC. The transverse momentum and rapidity distributions of pions, kaons, and protons measured by ALICE will be presented. The results will be compared to model calculations. These interactions provide an additional measure of cold nuclear matter effects, which have previously been probed in proton-nucleus interactions.

Category

Experiment

Collaboration (if applicable)

ALICE

Authors: NYSTRAND, Joakim (University of Bergen (NO)); Mr DUDI, Sandeep (National Institute of Science Education and Research (NISER) (IN))

Co-authors: BYLINKIN, Sasha (University of Bergen (NO)); RAGONI, Simone (Creighton University (US))

Presenter: NYSTRAND, Joakim (University of Bergen (NO))

Session Classification: Poster session 1

Track Classification: Physics of ultraperipheral collisions