

DIS2023: XXX International Workshop on Deep-Inelastic Scattering and Related Subjects



Contribution ID: 215

Type: **Parallel talk**

Dipion and dikaon photoproduction in ultra-peripheral Pb-Pb collisions with ALICE

Thursday 30 March 2023 15:00 (20 minutes)

High energy photons originating from the electromagnetic field of ultrarelativistic lead nuclei can interact with the other lead beam. These reactions are studied in the ultra-peripheral heavy ion collisions to probe the physics of strong interactions. The analysis of dipion and dikaon photoproduction was carried out using the ALICE 2015 Pb-Pb data at center-of-mass energy $\sqrt{s_{NN}} = 5.02$ TeV. We will be presenting the ρ^0 meson and direct $\pi^+\pi^-$ measurements, as well as the prospects of studying exclusive K^+K^- photoproduction, with sensitivity towards higher dikaon invariant mass above the $\phi(1020)$ threshold.

Submitted on behalf of a Collaboration?

Yes

Participate in poster competition?

Primary author: HAMDI, Abdennacer (Lawrence Berkeley National Lab. (US))

Presenter: HAMDI, Abdennacer (Lawrence Berkeley National Lab. (US))

Session Classification: WG2

Track Classification: WG2: Small-x, Diffraction and Vector Mesons