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## Studying the nucleus via angular correlations in UPCs with ALICE

*Tuesday 5 September 2023 17:30 (2h 10m)*

Angular correlations and polarization studies provide valuable insights into the vector meson production mechanism, including interference effects as well as information on the nuclear geometry of the target. In this talk, we present two new results. We will report the first measurement of the polarization of both coherent and incoherent  $J/\psi$  photoproduction in ultra-peripheral Pb–Pb collisions at  $\sqrt{s_{NN}} = 5.02$  TeV. In addition, we will present the first measurement of azimuthal anisotropies of coherent  $\rho^0$  photoproduction in ultra-peripheral Pb–Pb collisions. These are the first measurements of this kind at the LHC.

### Category

Experiment

### Collaboration (if applicable)

ALICE

**Primary author:** RIFFERO, Andrea Giovanni (University and INFN Torino (IT))

**Presenter:** RIFFERO, Andrea Giovanni (University and INFN Torino (IT))

**Session Classification:** Poster Session

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