



Contribution ID: 552

Type: **Parallel session talk**

Low-mass dielectron measurements with ALICE at the LHC

Thursday 29 July 2021 17:00 (15 minutes)

Dileptons and photons are unique tools to study the space–time evolution of systems created by QCD in hadronic collisions. They are produced continuously by a variety of sources, in particular prompt and thermal photons and semileptonic heavy-flavour hadron decays, during the entire history of the collision and traverse the medium with negligible final state interaction. So they can carry undistorted information on early stages of the collision.

In this contribution, we will present results from the recent measurements of e^+e^- pair production in pp and p–Pb collisions at the center-of-mass energy $\sqrt{s_{NN}} = 5.02$ TeV. Charm and beauty cross sections are extracted to investigate possible cold nuclear matter effects such as shadowing by comparing different nPDFs on the nuclear modification factor R_{pPb} .

Furthermore, our results on dielectrons at low $p_{T,ee}$ in pp collisions at $\sqrt{s} = 13$ TeV and new preliminary results of dilepton production from photoproduction in inelastic Pb–Pb collisions at $\sqrt{s_{NN}} = 5.02$ TeV are presented and compared to expectations from calculations including bremsstrahlung (for pp collisions) and photoproduction (for Pb–Pb collisions).

Collaboration / Activity

ALICE

First author

Email

Primary authors: COLLABORATION, ALICE; DEGENHARDT, Hermann**Presenter:** DEGENHARDT, Hermann**Session Classification:** T06: QCD and Hadronic Physics**Track Classification:** QCD and Hadronic Physics