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Measurement of low-mass dielectrons in p-Pb collisions with ALICE

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Low-mass dielectrons are an important probe for the hot and dense medium which is created in ultrarelativistic heavy-ion collisions. Since leptons do not interact strongly, they carry information from all collision stages with negligible final state interaction. While pp collisions provide a reference measurement for a medium-free environment, the impact of cold nuclear matter effects on the dielectron production can be estimated from p-Pb collisions. Moreover, the measurement of low-mass dileptons has a high sensitivity to the production of charmed mesons at low p_T via their decay into correlated e^+e^- pairs.

In this poster the results of the dielectron measurements at mid-rapidity in minimum bias p-Pb collisions at $\sqrt{s} = 5.02$ TeV with the ALICE detector will be presented. The dielectron invariant mass and transverse momentum distributions will be compared to expectations from light hadrons and semi-leptonic charm decays.

On behalf of collaboration:

ALICE

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