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## Low-Mass Dielectron Production in pp, p-Pb and Pb-Pb Collisions with ALICE

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The measurement of electron-positron pairs (dielectrons) in the low invariant mass region allows studying the vacuum and in-medium properties of light vector mesons. Additionally, low-mass dielectrons are produced by internal conversion of virtual direct photons. They are excellent direct probes to study all collision stages, since they pass through the created medium almost unaffected. To quantify modifications of the dielectron production in heavy-ion collisions, measurements in pp collisions serve as a reference, while the analysis of p-A collisions allows disentangling cold from hot nuclear matter effects.

I will present dielectron measurements from the ALICE experiment at the LHC, where electrons at mid-rapidity are identified by their specific energy loss in the Inner Tracking System (ITS) and the Time Projection Chamber (TPC), combined with time-of-flight information from the TOF detector. The dielectron invariant mass distributions will be compared to the expected hadronic sources in pp collisions at  $\sqrt{s} = 7$  TeV and in p-Pb collisions at  $\sqrt{s_{NN}} = 5.02$  TeV. In addition, the status of the analysis of Pb-Pb collisions at  $\sqrt{s_{NN}} = 2.76$  TeV will be presented. The aim is the extraction of the virtual direct photon yield, which gives access to the temperature of the created medium. Also future prospects of low-mass dielectron measurements with an upgraded ALICE detector after the second LHC long shutdown in 2018 will be discussed.

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