



## **Low mass dielectrons in pp at 13 TeV, p-Pb at 5.02 TeV and Pb-Pb collisions at 2.76 TeV measured by the ALICE experiment**

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Dielectrons produced in ultra-relativistic heavy-ion collisions at the LHC provide a unique probe of the whole system evolution as they are unperturbed by final-state interactions. The dielectron continuum is extremely rich in physics sources: on top of ordinary Dalitz and resonance decays of pseudoscalar and vector mesons, thermal black-body radiation is of particular interest as it carries information about the temperature of the hot and dense system created in such collisions. Dielectron invariant-mass distribution is furthermore sensitive to medium modifications of the spectral function of short-lived vector mesons that are linked to the potential restoration of chiral symmetry at high temperatures. Correlated electron pairs from semi-leptonic charm and beauty decays provide complementary information about the heavy-quark energy loss.

In this talk, we will present an extensive summary of the LHC Run-1 results from the ALICE experiment in all three collisions systems: pp, p-Pb and Pb-Pb, the former two providing crucial vacuum and cold-nuclear matter references for the latter. Furthermore, we will discuss the latest results of the analysis of Run-2 pp collisions at 13 TeV collected with a trigger on high charged-particle multiplicities and report on the progress made employing multivariate analysis techniques being developed by ALICE.

### **List of tracks**

Heavy-flavour (open and hidden)

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