

Thermal radiation via dielectrons with ALICE

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Electromagnetic probes are a unique tool to study the space-time evolution of the hot and dense matter created in ultra-relativistic heavy-ion collisions. More specifically, dielectron pairs are emitted as thermal radiation during all stages of the collision, allowing the extraction of the real direct photon fraction at vanishing mass. Measurements in pp collisions both serve as a baseline for heavy-ion studies and allow one to search for interesting phenomena in events with high charged-particle multiplicities.

This talk will present the final LHC Run 2 ALICE results on the dielectron and direct-photon production in central Pb-Pb at $\sqrt{s_{NN}} = 5.02$ TeV and in minimum bias and high-multiplicity pp collisions at $\sqrt{s} = 13$ TeV. Finally, first results from the Run 3 data using the upgraded ALICE detector will be reported.

Alternate track

I read the instructions above

Yes

Primary author: VOROBYEV, Ivan (CERN)

Co-author: ALICE, Collaboration

Presenter: VOROBYEV, Ivan (CERN)

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