

Contribution submission to the conference SMuK 2021

Recent measurements of charged-particle production in ALICE — ●YOUSSEF EL MARD BOUZIANI for the ALICE-Collaboration
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The ALICE experiment at the LHC is designed to investigate the properties of the Quark-Gluon Plasma by studying high-energy A–A collisions. Medium effects like parton energy loss can be examined by comparing the production of charged particles at high transverse momentum (p_T) in heavy-ion collisions with the one in pp collisions where no hot QCD medium is expected. This comparison is usually expressed by means of the nuclear modification factor R_{AA} . In addition, the correlation between p_T spectra and event multiplicity of charged particles can give insight in the different production mechanisms.

In this talk, we report on a study of charged-particle production in pp, p-Pb, Xe–Xe and Pb–Pb collisions at all available LHC beam energies. By comparing to QCD-inspired models, this measurement can help to understand the energy and system size dependence of charged-particle production at LHC.

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