

Recent results from the ALICE experiment at the LHC

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The main goal of the ALICE experiment is the characterization of the Quark-Gluon Plasma (QGP), the strongly interacting state of matter created in heavy-ion collisions at the LHC. Thanks to its excellent particle identification capabilities down to low transverse momentum, a comprehensive variety of QGP-related signals has been studied providing insights about QCD interaction at extreme energy density.

The results range from global observables (charged particle distributions, collective flow, multi-particle correlations,...) to identified particle spectra at intermediate momenta, where hydrodynamic and recombination models are tested, and to hard probes (jets, heavy quarks and quarkonia).

In this presentation, I will review the main ALICE results, with an emphasis on recent achievements, including observations of intriguing similarities among small (pp, p-Pb) and large (Pb-Pb) systems that suggest the presence of collective phenomena in pp and p-Pb collisions. Selected results from pp, p-Pb and Pb-Pb collisions at different centre of mass energies will be presented.

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