

Strange hadrons and resonances at LHC energies with the ALICE detector

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The characteristics of strange hadron and resonance production are powerful probes of the properties of the deconfined and chirally restored medium formed in ultrarelativistic heavy-ion collisions. Moreover they permit to test the evolution of the dense and hot matter during its different stages. In particular, the modification of the resonance masses and widths is expected to be a probe of the restoration of chiral symmetry, while the corresponding production yields can give information on the hadronic phase evolution. The enhancement of strange particles in heavy-ion collisions relative to pp is considered among the signatures of the deconfined quark gluon plasma phase. Measurements of strange particles and resonances in proton-proton collisions not only provide an important baseline for heavy-ion data, but also allow for the tuning of QCD-inspired particle production models. The ALICE experiment, thanks to its excellent tracking and particle identification capabilities, allows one to detect strange hadrons and resonances in an extended transverse momentum range. In this talk the latest ALICE results on their production and characteristics in pp, p-Pb and Pb-Pb collisions at the LHC energies will be presented.