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Recent results from femtoscopic studies with ALICE at LHC

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We present the review of recent results of femtoscopic studies performed by ALICE experiment at the LHC in heavy ion and pp collisions. The measurements include the correlations between the identical and non-identical pairs of mesons and baryons. These correlations which arise from quantum statistics and final-state interactions among the produced particles, probe the space-time characteristics of particle production. The measurements involving pions, kaons and protons probe its hydrodynamic evolution. Results for heavy-ion collisions are consistent with the presence of a flowing medium which can be seen as manifestation of the collective behavior of the produced particles. The measured three-dimensional radii in heavy-ion collisions scales with event multiplicity what provides strict constraints on the dynamical models. The trends observed in high-multiplicity pp collisions show similarities to heavy-ion collisions.

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