**SOME HIGHLIGHTS OF RESEARCH ON HEAVY ION COLLISIONS BY ALICE AT LHC**

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In this overview, we present several recent experimental observations by ALICE collaboration in studies of strongly interacting matter formed in pp, p-Pb and Pb-Pb collisions at the LHC. The talk will include results of medium induced effects on strange and charm particles yields, shape of jets, production of light (anti)(hyper)nuclei, studies of residual strong interaction between strange, charm and light hadrons. We will also discuss enhanced production of multi-strange hadrons in high-multiplicity pp and p-Pb collisions and particle flows observed for small systems. And we will also present the status of ALICE upgrade for RUN 3 and future prospects.