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## Recent Results from the PHENIX Experiment

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The primary mission of the PHENIX experiment is investigation of a state of matter called quark-gluon plasma (QGP), which according to quantum chromodynamics can be formed in relativistic heavy-ion collisions. Despite the success of QGP studies in heavy-ion collisions, there are still many open questions about QGP formation, expansion and hadronization. Current talk will present most recent PHENIX results on identified charged hadron and phi-meson production in Cu+Au and U+U collisions as well as photon, charm and bottom production in Au+Au collisions. Small collision systems such as (p+Al, p+Au, d+Au, He+Au) were long thought to be a reliable way to study cold nuclear matter effects without QGP presence. However, in 2019 PHENIX presented experimental evidences for possible QGP formation in p/d/He+Au collisions. Recent PHENIX measurements continue to study possible final state effects in small collision systems and minimal conditions for QGP formation. This talk will present latest results on identified charged hadron, phi, pi0, psi(2S) and direct photon production in small collision systems.

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