

Highlights from the heavy-ion program in STAR

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The experiments at RHIC have produced convincing evidence during last decade that strongly interacting partonic matter, Quark Gluon Plasma (QGP) is created in the central collisions of heavy ions. The unique flexibility of RHIC to collide different nuclear species over wide range of collision energies together with STAR's wide acceptance and particle identification are ideally suited for systematic exploration of the properties of this QCD matter. STAR collaboration has successfully completed first phase of Beam Energy Scan, program focused on searching for the onset of the QGP signatures and studying the nature of the phase transition, indicating that the region of interests for critical point and the first-order phase transition is within the reach of RHIC experiments. Moreover, with it's detector upgrades, STAR has launched a comprehensive heavy-flavor program which allows high precision measurements of the properties of the partonic matter. In this talk I will present highlights of that STAR latest heavy-ion results. I will also discuss the results of the first phase of RHIC Beam Energy Scan and present the plan of the future measurements and upgrades.

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