

ОБЩЕИНСТИТУТСКИЙ СЕМИНАР

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Online via Zoom at 11:00

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Experimental Results from the STAR Experiment at Relativistic Heavy Ion Collider

The STAR experiment at Brookhaven National Laboratory was built to study the properties of Quark Gluon Plasma (QGP), a deconfined state of quarks and gluons, created in the relativistic nuclear collisions. Experimental study of these collisions has revealed the strongly coupled nature of QGP having low value of viscosity over entropy ratio and high vorticity. The investigation of Quantum chromodynamics (QCD) phase diagram is one of the primary goals of the Beam Energy Scan (BES) program at RHIC. These include the search for the location of QCD critical point and the first order phase transition between QGP and hadron gas. The BES phase-I was completed during 2010-2014 with the collection of data at center-of-mass energies covering 7.7, 11.5, 14.5, 19.6, 27, and 39 GeV giving many interesting results. In BES phase-II, the high statistics data was collected for low energies during 2018-2021. I will discuss the recent results from the beam energy scan program at STAR.

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