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# Prospects for the study of heavy-ion collisions at the NICA collider at JINR

*Friday, July 7, 2017 6:15 PM (15 minutes)*

The main scientific goal of the NICA heavy-ion physics program at JINR will be an experimental investigation of the properties of nuclear matter under extreme conditions. A comprehensive scan of the QCD phase diagram in the region of maximum baryon density will be performed at NICA with ion beam species ranging from protons to gold nuclei. Systematic measurements of the production of leptons, hadrons, and light (hyper)nuclei will be conducted covering a wide range of the event phase-space with the MPD and BM@N experiments in the collider and fixed-target mode, respectively.
In my talk, an overview of the current status of the NICA project realization will be given. I'll discuss the main physics cases at NICA and briefly describe the elements of the detectors.
A theoretical motivation will be accompanied by results of realistic Monte-Carlo simulation of the proposed experimental setups

## Experimental Collaboration

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