

XXV International Baldin Seminar on High Energy Physics Problems "Relativistic Nuclear Physics and Quantum Chromodynamics"



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Influence of relativistic rotation on QCD properties

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In this report the influence of relativistic rotation on QCD properties will be considered. This study is carried out within lattice simulation of QCD which is performed in the reference frame which rotates with the system under investigation. In this case rotation is reduced to external gravitational field. Within the report I am going to discuss the following topics: the influence of rotation on the confinement/deconfinement and breaking/restoration of chiral symmetry phase transitions, the moment of inertia and inhomogeneous phase transitions in quark-gluon plasma.

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