

Объединенный институт ядерных исследований  
ЛАБОРАТОРИЯ ТЕОРЕТИЧЕСКОЙ ФИЗИКИ  
*им. Н. Н. Боголюбова*

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Семинар  
"ТЕОРИЯ АДРОННОГО ВЕЩЕСТВА ПРИ ЭКСТРЕМАЛЬНЫХ УСЛОВИЯХ"

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Руководители: Э.-М. Илгенфритц и О. В. Теряев

Семинар состоится  
**в среду 7 августа в 16.00**  
в аудитории им. Д. И. Блохинцева (4 этаж)

**Elena Bratkovskaya**  
(ITP&FIAS, Univ. Frankfurt)

## **The properties of parton-hadron matter from heavy-ion collisions**

The intriguing problem of modern high energy and heavy-ion physics is to understand the nature of deconfinement and the phase transition from hadronic to partonic matter - the Quark-Gluon Plasma (QGP)- which occurs during heavy-ion collisions at relativistic energies. The latest experimental findings at high energy heavy-ion collisions indicate that the QGP shows the properties of a strongly interacting liquid (sQGP) rather than - as expected initially - a weakly interacting gas of partons. From the other hand, at low energy one observes a significant modification of hadronic properties in dense and hot nuclear environment. An overview of experimental observables as well as theoretical models for the dynamical description of strongly interaction parton-hadron matter in- and out-of equilibrium will be presented, the perspectives for the future NICA and BM@N experiments will be discussed.