



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

Семинар
"ТЕОРИЯ АДРОННОГО ВЕЩЕСТВА ПРИ ЭКСТРЕМАЛЬНЫХ УСЛОВИЯХ"

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

Семинар состоится
в среду 20 апреля в 16.00
в аудитории им. Д. И. Блохинцева (4 этаж)

А. Ю. Котов
(ИТЭР, Moscow)

**Study of the influence of external effects on the
properties of QCD by means of lattice simulation**
(based on the PhD thesis)

The author of the thesis, A. Yu. Kotov, will present the main results of his PhD dissertation "Modelling the influence of external effects on the properties of QCD by means of lattice simulation".

In particular, the following questions will be discussed:

- lattice calculation of the viscosity of the quark-gluon plasma including its dependence on temperature
- first results concerning the properties of two-color QCD with non-vanishing baryon density
- study of the phase diagram of QCD with non-vanishing chirality imbalance
- lattice study of an exotic superconducting phase of QCD under the influence of very strong magnetic fields.