

**Отчет о научной деятельности
Отделения теоретической физики им. И.Е. Тамма
в 2004 г.**

I. Важнейшие результаты научных исследований:

1. Предложена общая схема проверки AdS/CFT соответствия путем сравнения интегрируемых систем, естественно возникающих в калибровочной теории и в теории струн. Построены общие решения уравнений, отвечающих перенормировке простейших операторов в суперсимметричной теории Янга Миллса. Найдены струнные решения в асимметричной калибровочной теории и получены формулы для масс монополей в фазе конфайнмента.

Аннотация

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2 ● Построена и исследована модель гетерогенной опухоли, показано, что в доминировании клеточной популяции большую роль играет клеточная подвижность. ● Проведено исследование зависимости устойчивости фронта растущей опухоли от величины индивидуальной клеточной подвижности, и также изучена роль взаимодействий между клетками опухоли и окружающими тканями в скорости роста опухоли и в устойчивости ее границы. ● Исследовано влияние пространственных неоднородностей и внешнего шума на устойчивость фронта растущей опухоли. ●

Аннотация

II. Основные результаты научных исследований:

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Сектор теории элементарных частиц
 Руководитель сектора д.ф.н. проф. И.В. Блохинцев

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Сектор физики высоких энергий
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 Руководитель сектора академик РАН А.С. Буревич

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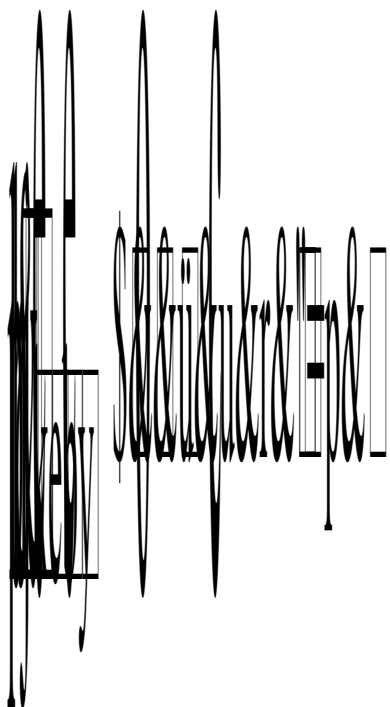
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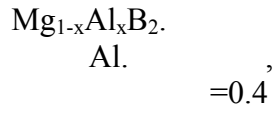
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Руководитель сектора ●●●●●проф ●●●●Максимов

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Руководитель сектора д.ф.н. профессор Пернавский

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