



ОБЪЕДИНЕННЫЙ ИНСТИТУТ ЯДЕРНЫХ ИССЛЕДОВАНИЙ

ОБЩЕИНСТИТУТСКИЙ СЕМИНАР

9 апреля 2008 г. (среда)
Начало в 15.00

Конференц-зал ЛТФ

“Black Hole and Wormhole Production at the LHC”

I.Ya. Aref'eva (MI RAS)

Recently, black hole and brane production at the LHC has been widely discussed. We argue that if the scale of quantum gravity is of the order of few TeVs, proton-proton collisions at the LHC could give a test of micro-causality. We compare the cross section for production of the mini-wormholes/time machines (spacetime regions with closed timelike curves which violate causality) with mini-black hole production at the LHC and conclude that they are of the same order. Decay of the mini-wormholes/time machines and signatures of these events at the LHC are discussed.