



**Mês de: Maio 2009**

## **SEMINÁRIO DE SISTEMAS DINÂMICOS**

**Dia 21 de Maio (quinta-feira), às 15h30 na Sala B3-01**

“Fermi Acceleration in non-autonomous billiards”

*Vassili Gelfreich*

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**Abstract:**

In 1949 Fermi proposed a mechanism for generation of the background cosmic radiation. One of the natural mathematical models for this phenomena is a particle which elastically bounces from the boundary inside a domain. If the boundary is not stationary the particle may loose or gain energy depending on the direction of the boundary motion at the point of collision. In this talk we will discuss recent result on the long term behaviour of the particle, including the possibility of unbounded energy growth.

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