



SCUOLA  
NORMALE  
SUPERIORE  
PISA

## SEMINARIO DI SISTEMI DINAMICI

**venerdì 16 gennaio 2009**

ore 14.00

Scuola Normale Superiore

Pisa

(Sala Conferenze - Centro De Giorgi)

**Giulio Tiozzo**

*Harvard University, USA*

Terrà un seminario dal titolo:

***“Spectral analysis of the Perron-Frobenius operator for continued fractions”***

**Abstract**

*The  $\alpha$ -continued fraction transformations are a generalization of the classical Gauss map generating continued fractions; the maps in this family are piecewise expanding but in general non-Markov. Through a careful investigation of the spectral decomposition of the transfer operator one can prove ergodic-theoretical results such as a central limit theorem for BV observables. This implies, consistently with numerical data, that the distribution of Birkhoff sums for the metric entropy is Gaussian. By extending such methods to perturbations of the original system, one can discuss the continuity in of the standard variation of this Gaussian.*

Tutti gli interessati sono invitati a partecipare.

La Segreteria della  
Classe di Scienze