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Matinée EDAÍ

3ª Rodada

Dilema do prisioneiro e cooperação

EXPOSITOR: **Enrique Pujals (IMPA)**
Prêmio EDAI 2008
HORA: **14 : 30 h**
RESUMO: Apresentaremos o dilema do prisioneiro e como as estratégias cooperativas surgem quando o jogo é repetido. Tentaremos explicar algumas técnicas dinâmicas utilizadas no entendimento do mesmo.

Instituto de Matemática - UFF
Sala de Seminários, 7º andar
Dia 26 de junho (sexta-feira)
Niterói

Open set condition for iterated function systems

EXPOSITOR: **Michal Rams (IMPAN, Polônia)**
HORA: **15 : 45 h**
RESUMO: An iterated function systems acting on a complete metric space X (for us $X = \mathbb{R}^d$) is a finite family of contractions $f_i : X \to X$. We will assume the maps f_i are smooth ($C^{1+\alpha}$) and conformal. We define the limit set of an iterated function system as a unique nonempty compact set Λ satisfying $\Lambda = \bigcup_i f_i(\Lambda)$.
The geometric properties of Λ are easy to describe if the iterated function system satisfies so called open set condition, i.e. if there exists an open set U such that $f_i(U) \subset U$ and $f_i(U) \cap f_j(U) = \emptyset$ for all $i \neq j$. In particular, if the open set condition is satisfied then s-dimensional Hausdorff measure of Λ is positive and finite, where s is so-called similarity dimension of the iterated function system (calculated as solution of so-called Bowens equation).
My goal in this talk will be proving that this property is actually equivalent to the open set condition. This result was first obtained by Schief (based on previous work of Bandt and Graf) for the contracting similitudes case, and then by Peres, Simon, Solomyak and myself in the general situation.

Café EDAÍ
16:45 - 17:15

On physical measures for flows on surfaces

EXPOSITOR: **Radu Saghin (IME-USP)**
HORA: **17 : 15 h**
RESUMO: I will discuss several examples of transitive flows on surfaces with physical measures supported on some fixed points. There are known examples of non-invertible one-dimensional maps with physical measures supported at indifferent or hyperbolic fixed points, and our motivation is to present similar examples for flows on surfaces. First I will analyze whether stopping a transitive flow at a point will create a physical measure supported on that indifferent fixed point. Then I will present examples of transitive flows with physical measures supported on hyperbolic fixed points. This is joint work with Edson Vargas.

Confraternização EDAÍ
19:00 - Chope na Cantareira