



# Colóquio Interinstitucional

## Modelos Estocásticos e Aplicações

Quarta-feira, 20 de abril de 2016

### Programa

14:00 - 15:20 – **Hugo Duminil-Copin (Université de Genève)**

*A geometric approach to the Ising model*

In this talk, we will discuss a geometric approach to the Ising model which is based on the so-called random-current representation. We will introduce this representation and review a few results obtained in the past few years.

15:40 - 17:00 – **Aloisio Araujo (IMPA)**

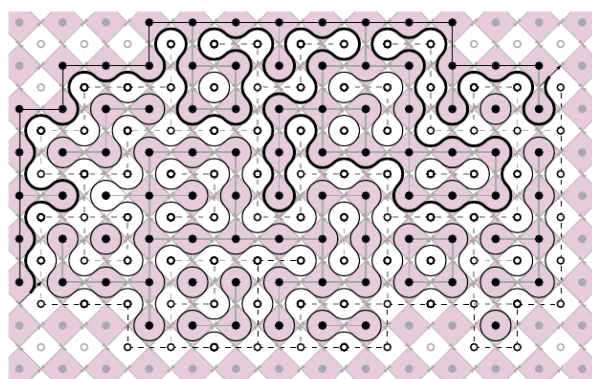
*General equilibrium with risk loving,  
Friedman-Savage and other preferences*

The interactions between risk averse and risk lovers (or ambiguity lovers, Friedman-Savage and related behavior) have not yet been extensively analyzed in the general equilibrium literature due to the lack of convexity and, hence, failure of existence.

We show that the aggregate risk of wealth, as well as the dominance of risk aversion in the economy, plays a role in the existence Arrow-Debreu equilibria. This result can be extended to ambiguity in the sense of prospect theory in the sense of Jullien and Salanié (2000).

Additionally, we study properties of the equilibrium, such as conditions for risk sharing, decomposition of risk factor and ambiguity factor in prices, and also the impact of regulation on volatility, particularly for preferences with distorted probabilities with CARA utility functions. Our analyses suggest that regulation increases volatility for pro-cyclical assets while reducing their utility levels; however, risk lovers or optimists are those who incur the larger losses.

17:00 – Discussão e lanche



### Local

Auditório 1 – IMPA  
Estrada Dona Castorina 110  
Rio de Janeiro, Brasil

Realização:



Apoio:



### Contatos

Augusto Teixeira (IMPA)  
Evaldo M. F. Curado (CBPF)  
Fábio D. A. Aarão Reis (UFF)  
Maria Eulália Vares (UFRJ)  
Mariane B. Alves (UFRJ)  
Simon Griffiths (PUC-Rio)

augusto@impa.br  
evaldo@cbpf.br  
reis@if.uff.br  
eulalia@im.ufrj.br  
mariane@im.ufrj.br  
griffith@stats.ox.ac.uk

[www.im.ufrj.br/~coloquiomea/](http://www.im.ufrj.br/~coloquiomea/)