SESSÃO TEMÁTICA DE ANÁLISE
Coordenador: Felipe Linares (IMPA) e Emanuel Carneiro (IMPA)

- Jean-Claude Saut (Orsay, França)

Navier and Stokes meet Poincar and Dulac.

- Eduardo Teixeira (UFC)

Varying singularity technique for discontinuous PDEs.

- Luiz Gustavo Farah (UFMG)

The supercritical generalized KdV equation: Global well-posedness in the energy space and below.

- Nicola Gigli (University of Nice)

Heat flow as gradient flow.

- Diego Rial (Universidad de Buenos Aires)

Initial value problems for a wave interaction model.

- Ademir Pazoto (UFRJ)

Carleman Estimates for a Nonlinear Dispersive System.

- Adan Corcho (UFRJ)

Global well-posedness for modified korteweg-de vries system.

- Jorge Zubelli (IMPA)

Non-quadratic Regularization of the Inverse Problem associated to the Black-Scholes PDE.

SESSÃO TEMÁTICA DE COMBINATÓRIA
Coordenador: Julia Bottcher (IME-USP) E Robert Morris (IMPA)

- Peter Allen (USP)

The chromatic thresholds of graphs

- Gonzalo Fiz Pontiveros (IMPA)

Freiman homomorphisms of random subsets of Z_N.

- Béla Bollobas (Cambridge and Memphis)

Union-Closed Families

- Roberto Imbuzeiro (IMPA)

Mean field conditions for coalescing random walks

- Jon Cutler (Montclair)

Extremal problems related to graph homomorphisms

- Paul Balister (Memphis)

Barrier coverage.

- Simon Griffiths (IMPA)

Noise Sensitivity for Continuum Percolation.

- Hiep Han (USP)

Minimum vertex degree conditions for loose Hamilton cycles in 3-uniform hypergraphs.

- Mathias Schacht (Hamburg)

Extremal problems for (pseudo)random discrete structures

- Carlos Hoppen (UFRGS)

Edge colorings of graphs avoiding monochromatic copies of a fixed subgraph

- Rodrigo Bissacot (USP)

An Improvement of the Lovász Local Lemma via Cluster Expansion

- Robert Morris (IMPA)

Sum-free subsets of abelian groups

- Maya Stein (Santiago, Chile)

Canonical tree-decompositions and nested separation systems.

- Fabricio Benevides (Fortaleza)

Ramsey numbers for cycles in graphs with large minimum degree.

- Yuval Peres (Microsoft)

Anatomy of the young giant component in the random graph, with application to diameter and mixing time.

SESSÃO TEMÁTICA DE ECONOMIA MATEMÁTICA
Coordenador: Aloisio Araújo (IMPA) e Susan Schommer (IMPA)

- Carlo Pietro Sousa (IMPA, Rio de Janeiro)

Survival and ambiguity through Variational preferences

- Paulo Natenzon (Washington University, St. Louis)

Random Choice and Learning

- Susan Schommer (IMPA, Rio de Janeiro)

Conventional and unconventional monetary policy with Endogenous collateral constraints

- Sergei Vieira Silva (IMPA, Rio de Janeiro)

Teoria de Contratos sem Single-Crossing.

- José Heleno Faro (INSPER, São Paulo)

Event dependence of ambiguity attitudes

- Simone Cerreia Vioglio (Università Bocconi)

Ambiguity and robust statistics

- Alain Chateauneuf (Université Paris 1 Panthéon-Sorbonne)

Optimal Risk Sharing with Optimistic and Pessimistic Decision Makers

SESSÃO ESPECIAL DE ESTATÍSTICA
Coordenador: Dani Gamerman (UFRJ) e Alexandra M. Schmidt (UFRJ)

- Cibele Russo (USP-SC)

Modelos elípticos não lineares para dados correlacionados.

- Ralph S. Silva (UFMG)

Propriedades da combinação dos filtros de partículas e dos métodos de simulação Monte Carlo via Cadeias de Markov

- Flávio B. Gonçalves (UFJF)

Exact solution for an infinite-dimensional problem: making Bayesian inference for jump-diffusion processes.

- Silvia R. C. Lopes (UFRGS)

Estimation and Forecasting on FIEGARCH Processes.

- Thais C. O. Fonseca (UFRJ)

On flexible modelling of spatiotemporal processes

- Leonardo S. Bastos (UFF)

Analysis and validation of discrepancy function models

- Márcia D. Branco (IME-USP)

Objective bayes analysis of skew-t distributions.

- Getulio J. A. Amaral (UFPE)

Some contributions to statistical shape analysis

SESSÃO TEMÁTICA DE FOLHEAÇÕES E SISTEMAS DINAMICOS COMPLEXOS
Coordenador: Thiago Fassarella do Amaral (UFF) e Gabriel Calsamiglia (UFF)

- Rogério Mol (UFMG)

Global polarity of holomorphic foliations on P^2_C.

- Maycol Falla (UFF)

On the algebraic solutions of second order differential equations

- Alcides Lins Neto (IMPA)

Irreducible components of the space of foliations by curves with a morse center

- Arturo Fernandez (UFMG)

Normal forms of Levi-Flat Hypersurfaces

- Viviana Ferrer (UFF)

Pullback component of the space of codimension one foliations in P^n

- Julio Rebelo (Université Toulouse)

Poincare-type series and maximal solutions of complex ODEs

SESSÃO TEMÁTICA DE GEOMETRIA
Coordenador: Keti Tenenblat (UNB)

- Detang Zhou (UFF)

Some recent developments on ricci solitons.

- Harold Rosenberg (IMPA)

Periodic minimal and constant mean curvature surfaces in H x R; H the hyperbolic plane.

- Marcos Dajczer (IMPA)

Submanifolds with nonparallel first normal bundle.

- Pedro Roitman (UnB)

Laguerre minimal surfaces via congruences of lines

- Nigel Hitchin (Oxford University)

Generalized holomorphic bundles

- Fernando Codá Marques (IMPA)

Scalar curvature, minmax minimal surfaces and Ricci flow.

- Manfredo P. do Carmo (IMPA)

Surfaces in product spaces that are invariant under one-parameter groups of isometries.

- Sergio Almaraz (UFF)

The set of conformal scalar-flat metrics on manifolds with boundary: compactness and noncompactness results

- Frank Pacard (Univ. Paris, France)

Construction and properties of constant mean curvature surfaces in Riemannian manifolds.

- Antonio Martinez (Univ. de Granada, Spain)

Geometry of affine maximal maps

- Jeff Streets (Princeton Univ. USA)

Geometric flows in complex geometry.

- Armando Vasquez Corro (UFG)

Surfaces of rotation with constant extrinsic curvature in a conformally at 3-space.

- Frederico Xavier (Notre Dame Univ. USA)

Inverting maps on Riemannian manifolds and banach spaces.

- Gregório Pacelli Feitosa Bessa (UFC)

Spectrum of stochastically incomplete manifolds

- Renato Tribuzy (UFAM)

Rigidity of convex surfaces in homogeneous spaces

- Graham Smith (IMPA)

The plateau problem for general curvature functions

- Ruy Tojeiro (UFSCar)

Umbilical submanifolds of Sn x R.

- Jorge Herbert Soares de Lira (UFC)

Hipersuperfícies com Curvatura Anisotrópica Prescrita.

- Theodoros Vlachos (Univ. Ioaninna, Greece)

Exceptional minimal surfaces in spheres

- Fernando Schwartz (Univ. Tennessee USA)

On how black holes contribute to the mass of the universe.

SESSÃO TEMÁTICA DE GEOMETRIA ALGÉBRICA
Coordenador: Eduardo Esteves (IMPA)

- Ciro Ciliberto (Universidade de Roma Tor Vergata)

Curves on general rational surfaces.

- Alex Abreu (UFF)

The hyperelliptic locus in genus 4

- Carolina Araujo (IMPA)

Uniform vector bundles on rational homogeneous spaces.

- Peter Beelen (Universidade Técnica da Dinamarca)

Recursively defined towers of function fields

SESSÃO TEMÁTICA DE LEIS DA CONSERVAÇÃO
Coordenador: Dan Marchesin (IMPA)

- Wanderson Lambert (UFRRJ)

The random riemann problem and statistical moments

- Vitor Matos (Universidade do Porto)

Classification of flux singularity for three-phase immiscible flow in porous media with Corey permeability functions.

- Carlos F.B. Palmeira (PUC-Rio)

Tangencies between shock curves and the sonic surface in a quadratic system of two conservation laws

- Cesar Eschenazi (UFMG)

Lax's Admissibility Regions in the Wave Manifold for Quadratic Systems of Two Conservation Laws.

- Duilio da Conceição (UFRRJ)

Numerical modeling and simulation of degenerate multiphase flow equations in porous media.

- Panters Bermúdez (IMPA)

Analytical Solution for Vertical Three-Phase Flow in porous media.

- Aparecido Souza (Univ.Fed. de Campina Grande)

The Riemann problem for a system of two conservation laws with initial data representing two-phase mistures in a three-phase flow in porous media.

- Grigori Chapiro (UFJF)

Asymptotic approximation of long time solution for lowtemperature filtration combustion.

- Jesus Mota (UFGo)

Traveling waves combustion in a two phase flow through a porous medium.

- Johanes Bruining (Delft University of Technology)

An Analytical Method for Predicting the Performance of Gravitationally-Unstable Flow in Porous Media.

- Igor Mozolevski (UFSC)

Discontinuous Galerkin methods for two-phase two-component flow in porous media.

- Frederico Furtado (University of Wyoming)

Scaling behavior of stochastic, multiphase flow in porous media.

SESSÃO TEMÁTICA DE OTIMIZAÇÃO
Coordenador: Ernesto G. Birgin (IMPA)

- Walter F. Mascarenhas (IME-USP)

Matemática aplicada à Otimização.

- Solange Regina dos Santos (UEPR)

Augmented Lagrangian and Spectral Gradient applied to structural reliablility problems.

- Gislaine Aparecida Periçaro (UEPR)

Convergence of the filter methods and comparative numerical experiments.

- Sissy da Silva Souza (UFPI)

Um método de direção de descida suficiente para otimização quase-convexa sobre variedades riemannianas.

- Jurandir Oliveira Lopes (UFPI)

Algoritmos de Ponto Proximal para o Problema de Otimização Quase-Convexa com Restrições Lineares e para Desigualdade Variacional.

- Francisco A. M. Gomes (UNICAMP - IMECC)

Otimização topológica de estruturas.

- Thadeu Alves Senne (UNICAMP - IMECC)

Programação Linear Sequencial aplicada à otimização topológica de estruturas sob não linearidade geométrica.

- Phillipe Sampaio (IME-USP)

Teoria, métodos e aplicações de otimização multiobjetivo.

- Ellen Hidemi Fukuda (IMECC)

Reformulação semi-suave para programação crônica de segunda ordem não linear.

- Hector F. Callisaya (IMECC)

The spheres packing problem

- Vinicius A. Armentano (UNICAMP - FEEC)

Busca tabu para a Otimização de um Problema Integrado de Produção e Distribuição.

- Tiago de Morais Montanher (IME-USP)

Um modelo usando programação inteira para o problema de transferência de produtos em refinarias.

- Ricardo Andrade (IME-USP)

Problema de corte bidimensional em dois estágios com sobras aproveitáveis.

- Rafael da Ponte Barbosa (IME-USP)

Cobertura por Sensores.

- Robert Gower (Banco Itaú S.a.)

Diferenciação Automática de Matrizes Hessianas.

- Claudia Sagastizábal (CEPEL)

Ultrapassando Cila e Caribdis em Programação Estocástica.

- João Xavier da Cruz Neto (UFPI)

Método de ponto proximal em ambiente finsleriano.

- Damián Fernández (FAMAF)

A globally convergent sSQP method

- Juan Pablo Luna (IMPA)

Wolfe Type Decomposition Algorithms for Variational Inequality Problems.

- Abilio Pereira de Lucena Filho (UFRJ)

Conjuntos conexos dominantes: formulações, extensões e algoritmos.

- Renan V. Pinto (UFRJ)

Problema de recobrimento de um sólido por esferas: aplicação ao problema de radiocirurgia.

- Ana Flávia U. S. Macambira (UFPB)

Preenchimento elipsoidal utilizando esferas de diferentes raios.

- Carlile Lavor (IMECC)

Estrutura tridimensional de proteínas via ressonância magnética nuclear.

SESSÃO TEMÁTICA DE PROBABILIDADE
Coordenador: Bernardo N. B. de Lima (UFMG) e Leonardo Rolla (IMPA)

- Yuval Peres (Microsoft)

Cover times, blanket times, and the Gaussian free field.

- Leandro Pimentel (UFRJ)

Local comparison of transversal fluctuations in lpp models.

- Andrei Toom (UFPE)

Trajectories of slow random monads have phases

- Serguei Popov (IMECC-UNICAMP)

On a general many-dimensional excited random walk.

- Laurent Tournier (ENS-Lyon)

Oriented-edge reinforced random walks and Dirichlet environments.

- Alexandre Gaudillière (Marseille)

Fluctuations for internal DLA

- Perla Sousi (University of Cambridge)

Mobile geometric graphs and thewiener Sausage.

- Rémy Sanchis (UFMG)

Peierls argument revisited.

- Gady Kozma (Weizmann)

Arm exponents in high dimensional percolation.

SESSÃO TEMÁTICA DE SISTEMAS DINÂMICOS
Coordenador: Ali Tahzibi (ICMC-São Carlos) Vilton Pinheiro (UFBa)

- Stefano Luzzatto (ICTP-Italy)

One-dimensional dynamical systems with non-Markov induced maps

- Andres Koropecki (UFF)

Consequences of the Shadowing Property.

- Paulo Varandas (UFBA)

Thermodynamical formalism beyond uniform hyperbolicity

- Luiz San Martin (UNICAMP)

Flows on Flag bundles

- Carlos Bocker (UFPA)

Continuidade dos expoentes de Lyapunov para matrizes aleatórias

- Alexandre Baraviera (UFRGS)

SL(2, R) cocycles and the Herman- Avila - Bochi formula