

July, 19 - Wednesday

10:00 -10:45 Auditorium Ricardo Mañé	F. Takens, University of Groningen Multifractal Formalism for Dimensions and Entropies
11:15 - 12:00 Auditorium Ricardo Mañé	C. G. Moreira, IMPA Homoclinic Tangencies and Fractal Invariants in Arbitrary Dimension
14:30 - 15:15	Invited Sessions
15:45 - 16:30	Invited Sessions
16:45 - 17:30 Auditorium Ricardo Mañé	D. Anosov, Steklov Institute, Moscow Some Geometrical Problems Related to the Flows on Closed Surfaces

Invited Sessions

	14:30 - 15:15	15:45 - 16:30
Room 224	L. Mora, IVIC A Complement to the Connecting Lemma of Hayashi	S. Marmi, Università di Udine Quasianalytic Continuation Beyond Natural Boundaries
Auditorium Ricardo Mañé	V. Baladi, CNRS and Université Paris-Sud (Orsay) Almost Sure Rates of Mixing for Random Unimodal Maps	Yu. Kifer, Hebrew University A Dimension Gap for Continued Fractions with Random Digits
Auditorium II	C. Morales, UFRJ Anosov Flows with Transverse Torus	M. A. Teixeira, IMECC-UNICAMP Reversible and Hamiltonian Vector Fields on R^4 with Resonances
Room 236	C. Ragazzo, IME-USP On the Stability of Fixed Points of Some Non-differentiable Area Preserving Twist Maps	M. Paternain, Universidad de Montevideo The Principal Loop-bundle and Dynamical Systems

Room 232	M. Tsujii, Hokudai University Ergodic Properties of Piecewise Expanding Maps in Higher Dimension	E. Colli, IME-USP Unimodal Families, Generalized Renormalization and Parameter Distortion
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July, 20 - Thursday

9:00 - 9:45 Auditorium Ricardo Mañé	M. Herman, CNRS and Université Paris VII Existence of an elliptic periodic geodesic by C^2- perturbation of a metric of strictly positive curvature on the 2-sphere
10:15 - 11:00 Auditorium Ricardo Mañé	G. Swiatek, Pennsylvania State University Remarks on Complex Extensions of Real Maps
11:15 - 12:00	Invited Sessions
15:30 - 16:15	Invited Sessions
16:30 - 17:15 Auditorium Ricardo Mañé	S. Newhouse, Michigan State University On the Mathematical Contributions of Jacob Palis

Invited Sessions

	11:15 - 12:00	15:30 - 16:15
Room 224	G. David, Université Paris Sud (Orsay) An Advertisement for Uniform Rectifiability	M. Jonsson, University of Michigan, Ann Arbor Large Brolin's Theorem in Two Complex Dimensions
Auditorium Ricardo Mañé	G. Paternain, Universidad de Montevideo The Minimal Entropy Problem	C. Pugh, University of Berkeley Structural Stability of Piecewise Smooth Dynamical Systems
Auditorium II	V. Araújo, Universidade do Porto Infinitely Many Stochastically Stable Attractors	J. Alves, Universidade do Porto Stochastic Behavior of Non-uniformly Expanding Dynamical Systems
Room 236	A.Lopes, UFRGS Exact Bounds for the Polynomial Decay of Correlation, 1/f Noise and the Central	S. Carvalho, UFMG Chaos and Elliptic Island on the Elliptical

	Limit Theorem for the Equilibrium State of a Non-Hölder Potential	Stadium
Room 232	B. Solomyak, University of Washington Iterated Function Systems with Overlaps: Measure of the Limit Set	D. Massart, Université Montpellier II On Mather's Action Functional
Room 228	J. Graczyk, Université Paris-Sud (Orsay) Non-Uniform Hyperbolicity in Complex Dynamics	E. Vargas, IME-USP Real Bounds for C^2 Multimodal Maps

July, 21 - Friday

9:00 - 9:45 Auditorium Ricardo Mañé	M. Shub, IBM On Random and Mean Exponents for Unitarily Invariant Measures on $GL(n, C)$
10:15 - 11:00 Auditorium Ricardo Mañé	R. MacKay, University of Warwick Coupled Map Lattices with Phase Transition
11:15 - 12:00	Invited Sessions
15:30 - 16:15	Invited Sessions
16:30 - 17:15 Auditorium Ricardo Mañé	C. Bonatti, Université de Bourgogne, Dijon Unique Ergodicity of Some Holomorphic Foliations

Invited Sessions

	11:15 - 12:00	15:30 - 16:15
Room 224	V. Sidoravicius, IMPA Mixing Properties for the Mechanical Motion of a Charged Particle in a Random Medium	N. Simanyi, University of Alabama at Birmingham The Boltzmann-Sinai Ergodic Hypothesis for Typical Hard Disk Systems
Auditorium Ricardo Mañé	J. Laskar, Bureau des Longitudes, Paris On the Spacing of Planetary Systems	C. Grebogi, University of Maryland Shadowing and the Validity of Dynamical Models
Auditorium II	N. Makarov, Caltech Harmonic Measure and Polynomial Julia Sets	S. Smirnov, Royal Institute of Technology, Stockholm Dynamics and Dimension Estimates in Complex Analysis
Room 236	J. Lamb, Imperial College, London Steady-state Bifurcation in Reversible	J. Sotomayor, IME-USP Recent Developments on the Dynamic

	Equivariant Systems	Properties of Lines of Curvature on Surfaces in Euclidean Spaces
Room 232	A. Rovella, Universidad de Montevideo Perturbation of the Higher Dimensional Quadratic Family	G. Levin, Hebrew University Bounds, Rigidity, and Universality in Critical Circle Endomorphisms
Room 228	H. Bruin, Caltech Growth of Derivatives and Measure of Julia Sets	A. Pinto, Universidade do Porto Geometric Measures for Hyperbolic Surface Dynamics

July, 24 - Monday

9:00 - 9:45 Auditorium Ricardo Mañé	J. C. Yoccoz, Collège de France Nonuniformly Dynamics in Homoclinic Bifurcations
10:15 - 11:00 Auditorium Ricardo Mañé	E. de Faria, IME-USP Hyperbolicity of Renormalization for C^r Unimodal Maps
11:15 - 12:00	Invited Sessions
12:30 - 15:00	Posters
15:30 - 16:15	Invited Sessions
16:30 - 17:15 Auditorium Ricardo Mañé	J. Franks, Northwestern University Regions of Instability for Non-twist Maps

Invited Sessions

	11:15 - 12:00	15:30 - 16:15
Auditorium I	G. Buzzard, Cornell University Hyperbolic Automorphisms and Holomorphic Motions in C^2	M. Shishikura, Hiroshima University Totally Invariant Varieties of Holomorphic Maps of P^n
Auditorium Ricardo Mañé	M. J. Pacífico, UFRJ Maximal Transitive Sets for C^1 Flows	A. Wilkinson, Northwestern University C ¹ Density of Stable Accessibility
Auditorium II	A. Blokh, University of Alabama at Birmingham On Dynamics and Topology of Some Polynomials	N. Chernov, University of Alabama at Birmingham Small Perturbations of Dispersing Billiards
Room 236	C. Gutierrez, ICMC/USP São Carlos On C^r Closing-Lema for Flows on Two-manifolds	E. Catsigeras, Universidad de Montevideo SRB Measures and Ergodicity of Certain almost Hyperbolic diffeomorphisms with a tangency

Room 232	R. Krikorian, École Polytechnique, Paris Global Reducibility of $SU(2)$ and $SL(2, R)$-valued Quasi-periodic Cocycles	B. Fayad, École Polytechnique, Paris Reparametrization of Irrational Flows
Room 228	A. Albouy, Bureau des Longitudes, Paris Why are the Keplerian orbits closed?	H. Broer, University of Groningen KAM theory: Multiperiodicity in Dissipative and Conservative Systems

Posters

[**Universal Evolution Criterion of Glansdorff-Prigginine Fails on Strange Attractors**](#)

Ladislav Andrey, ICS-ASCR

[**Variational Methods and Homoclinic Orbits of Hamiltonian Systems**](#)

Patrick Bernard, Univ. Dauphine

[**Fixed Points, Amenability and Concentration of Measure**](#)

Vladimir Pestov, Victoria University of Wellington, New Zealand

[**A Minimax Selector for a Class of Hamiltonians on Cotangents Bundles**](#)

Hector Sánchez-Morgado, UNAM, Mx

July, 25 - Tuesday

9:00 - 9:45 Auditorium Ricardo Mañé	M. Lyubich, SUNY at Stony Brook Foliated Structures of Some Spaces of Dynamical Systems
10:15 - 11:00 Auditorium Ricardo Mañé	R. Roussarie, Université de Bourgogne, Dijon Exponential Confinement of Chaos
11:15 - 12:00	Invited Sessions
12:30 - 15:00	Posters
15:30 - 16:15	Invited Sessions
16:30 - 17:15 Auditorium Ricardo Mañé	F. Ledrappier, École Polytechnique, Paris Local Characteristics for Non-Uniformly Hyperbolic Measures

Invited Sessions

	11:15 - 12:00	15:30 - 16:15
Auditorium I	L. Bunimovich, Georgia Institute of Technology Hyperbolicity and Astigmatism	V. Donnay, Bryn Mawr College Embedded Surfaces with Ergodic Geodesic Flow are Dense
Auditorium Ricardo Mañé	C. Baesens, University of Warwick Order-preservation in Cooperative Networks of Overdamped Inertial Units	K. Khanin, Cambridge University Minimizers of Random Lagrangians
Auditorium II	Stefano Luzzatto, UMIST, UK Rates of Mixing and Robust Hyperbolicity in One-dimensional Maps	F. Przytycki, Polish Acad. of Sciences Holomorphic Iteration: Topological Collet-Eckmann Maps
Room 236	S. Hayashi, Tokyo University	M. Sambarino, Universidad de Montevideo

	On a Conjecture by Palis	On the Existence of Homoclinic Orbits
Room 232	Y. Kaloshin, Princeton University Almost Exponential Growth of Number of Periodic Points for Diffeomorphisms with Probability One	Eugen Mihailescu, University of Texas Topological Pressure and the Dynamics of Hyperbolic Maps on P^2C
Room 228	R. Garcia, UFG Umbilic and Tangential Singularities on Configurations of Principal Lines	N. Haydn, Univ. South California The Distribution of Return Times in Dynamical Systems

Posters

[Diffeomorphisms as Time One Maps, a Constructive Approach](#)

[Jaime Arango](#), Universidad del Valle, Colombia

[Renormalization for Multimodal Maps: a Priori Bounds for Bounded Combinatorics](#)

Daniel S. Brandão, IMPA

[Hausdorff Dimension for a Class of Non-Hyperbolic Repellers](#)

Vanderlei Horita, UNESP

[Tangential \$\lambda\$ -lemma in \$R^n\$](#)

Victoria Rayskin, Boston University

[Hausdorff Dimension of the Exceptional Set in Jakobson's Theorem](#)

Samuel Senti, Universite de Paris-Sud, Orsay

July, 26 - Wednesday

9:00 - 9:45 Auditorium Ricardo Mañé	J. Xia, Northwestern University Lagrangian Submanifolds and Hamiltonian Dynamics
10:15 - 11:00 Auditorium Ricardo Mañé	A. Ávila, IMPA Regular or Stochastic Dynamics in Real Analytic Families of Unimodal Maps
11:15 - 12:00	Invited Sessions

12:30 - 15:00	Posters
15:30 - 16:15	Invited Sessions
16:30 - 17:15 Auditorium Ricardo Mañé	J. Mather, Princeton University Action Minimizing Orbits: Open Problems

Invited Sessions

	11:15 - 12:00	15:30 - 16:15
Auditorium I	P. Schweitzer, PUC-RJ Reeb Components in Codimension one Foliations: a Generalization of Novikov's Theorem	G. Forni, Princeton University Deviation of Ergodic Averages for Locally Hamiltonian Flows on Surfaces of Higher Genus
Auditorium Ricardo Mañé	M. Pollicot, University of Manchester Computing Lyapunov Exponents for Hyperbolic Systems	M. Jakobson, University of Maryland Piecewise smooth maps with absolutely continuous invariant measures and uniformly scaled Markov partitions
Auditorium II	L. J. Díaz, PUC-RJ Robustly Transitive Set and Heteroclinic Cycles	Yu. Ilyashenko, Moscow State and Independent Universities New Robust Properties of Invariant Set and Attractors of Dynamical Systems
Room 236	A. Fisher, IME-USP An Extension of Abramov's Formula for Flow Entropy	R. Langevin, University of Bourgogne, Dijon A Model for the Germ of a Structurally Stable Vector Field Near an Hyperbolic Set According to F.Beguin and C. Bonatti
Room 232	D. Sands, Université Paris-Sud (Orsay) Monotonicity via Sheaf Cohomology	G. Lukaszewicz, University of Warsaw Long Time Behavior of 2D Micropolar Fluid Flows
Room 228	J. Bobenrieth, Universidad del Bío-Bío Hyperbolic Components of the Family $z \mapsto 1 + 1/wz^d$	E. Bedford, University of Indiana Polynomial Diffeomorphisms of C^2

Posters

[A Homological Invariant of Projectively Anosov Flows on the 2-torus](#)

Masayuki Asaoka, The University of Tokushima, Japan

[Geometry and Dynamics of Partially Hyperbolic Tori](#)

Jacky Cresson, Université de Franche-Comte

[New Results in Dynamics of Piecewise Isometries](#)

Arek Goetz, San Francisco State University, California

[Chaos in Bianchi IX Cosmology](#)

Adilson Motter, IMECC-UNICAMP

[Compact Global Attractors and Morse Decompositions for Diffeomorphisms of \$\mathbb{R}^n\$ with Oscillatory Jacobians](#)

Paulo Ricardo da Silva, UNESP- São José do Rio Preto

[On Some Infinite Dimensional Linear Groups](#)

Igor Subbotin, National University, USA

July, 27 - Thursday

9:00 - 9:45 Auditorium Ricardo Mañé	B. Weiss, Hebrew University Metanormal Numbers and Poisson Limit Processes for Dynamical Systems
10:15 - 11:00 Auditorium Ricardo Mañé	Ya. Sinai, Princeton and Moscow State University Invariant Measures for the Navier-Stokes System with Random Forcing
11:15 - 12:00	Invited Sessions
12:30 - 15:00	Posters
15:30 - 16:15	Invited Sessions
16:30 - 17:15 Auditorium Ricardo Mañé	S. van Strien, University of Warwick Real and Complex Dynamics: Bounds, Ergodicity and Absence of Invariant Linefields

Invited Sessions

	11:15 - 12:00	15:30 - 16:15
Auditorium I	C. Robinson, Northwestern University Nonsymmetric Lorenz-like Attractors from Homoclinic Bifurcations	A. A. Castro, UFC Backward Inducing and the Exponential Decay of Correlations for Mostly Contracting Diffeomorphisms
Auditorium Ricardo Mañé	R. Markarian, Universidad de Montevideo Billiards with Polynomial Decay of Correlations	D. Szász, Technical University, Budapest Exponential Decay of Correlations for Multidimensional Dispersing Billiards
Auditorium II	M. Urbanski, University of North Texas Rigidity of Connected Limit Sets of Conformal IFS	J. Smillie, Cornell University Computer Pictures of Complex Henon Diffeomorphisms
Room 236	J. P. Brasselet, Université de Marseille A Lefschetz Formula for the Local Euler Obstruction	F. Dumortier, Limburgs Universitair Centrum Limit Cycles in Lienard Equations
Room 232	R. Metzger, IMCA, Lima Stochastic Stability for Multidimensional Lorenz Attractors with Arbitrary Expanding Dimension	R. Labarca, Universidad de Santiago de Chile Bifurcation of the Essential Dynamics of Lorenz Maps on the Real Line and the Bifurcation Scenario for Lorenz Like Flows: The Contracting Case
Room 228	C. Tresser, IBM, Watson Research Center Mathematics for Digital Halftoning	O. Kozlovski, University of Warwick Fast Dynamo Problem

Posters

[Abstract of Recent Work on Complex Dynamical Systems](#)

Marco Abate, Università di Roma "Tor Vergata"

[Local Stability Analysis of a Vibrating Problem Excited by a Limited Power Supply](#)

José Balthazar, UNESP

[Saddle-node Bifurcations for Hyperbolic Sets](#)

Sylvain Crovisier, Université Paris-Sud

[Center Manifold and Exponentially Bounded Solutions of a Forced Newtonian System with Dissipation](#)

Luis Garcia, Universidade de Los Andes

[Combinatorial Properties and Distortion Control for Unimodal Maps](#)

Vilton Pinheiro, IMPA

[Birational Symmetry and Integrability of Functional Equations Defined by Birational Maps](#)

Konstantin Rerikh, Joint Institute for Nuclear Research - Dubna, Moscow

[Theory Put to Work: Periodicity Versus Chaos in Certain Population Models](#)

Hans Thunberg, Mälardalens University

July, 28 - Friday

9:00 - 9:45 Auditorium Ricardo Mañé	A. Chenciner, Bureau des Longitudes, Paris <u>A New Class of Periodic Solutions of the n-body Problem in the Case of Equal Masses</u>
10:15 - 11:00 Auditorium Ricardo Mañé	E. Pujals, UFRJ Generic Dynamics on Surfaces
11:15 - 12:00	<u>Invited Sessions</u>
12:30 - 15:00	<u>Posters</u>
15:30 - 16:15 Auditorium Ricardo Mañé	S. Smale, Hong Kong Univ. Some Math Problems for this Century

Invited Sessions

	11:15 - 12:00
Auditorium I	M. Zinsmeister, Université d'Orleans <u>Phase Dependence of Hausdorff Dimension of Julia-Lavaurs Sets</u>
Auditorium Ricardo Mañé	J. Bochi, IMPA <u>C¹ Genericity of Zero Lyapunov Exponents</u>

Auditorium II	T. Nowicki, University of Warsaw Sinks and Cycles in Newton's Means
Room 232	J. Roberts, LaTrobe University Symmetries and Reversing Symmetries of Toral Automorphisms
Room 228	K. Hiraide, Ehime University A Simple Proof of Franks-Newhouse's Theorem on Codimension One Anosov Diffeomorphisms

Posters

[Properties of the Minimal Power Points Bifurcation Surface for a Controlled Fitzhugh-Nagumo Clamped Nerve Equation](#)

Luciano Barbanti, IME/USP

[Differentiable Maps with Hyperbolic Measures](#)

Yong Moo Chung, Hiroshima University, Japan

[Synchronism and Communication](#)

Patrícia E. Domingues, UNESP

[Asymptotic Integrals for Polynomial Hamiltonians in two Dimensions](#)

Jesús Palacián, Universidad Publica de Navarra

[Spectra of Recurrence Dimension for Substitution Dynamical Systems](#)

Victor Sirvent, Universidad Simón Bolívar, VE

[Plenty of Homoclinic Bifurcations in a 2-parameter Family of Twist Maps, and Periodic and Quasi-periodic Orbits Appearing after the Break-up of the Last Invariant Circle](#)

Addas Zanata, IME-USP/Pedro Antonio S. Salomão, IME-USP