Rodrigo G. Schaefer

Ph.D student in Applied Math

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Research interests

Arnold Diffusion

Current research

- Arnold diffusion using scattering maps in an a priori unstable Hamiltonian system with 3-1/2 degrees of freedom.

Celestial Mechanics

- N-body problem on surfaces

Education

Ph.D in Applied Mathematics   *Barcelona, Spain*

UPC (Universitat Politècnica de Catalunya)   *Sep. 2014 - PRESENT*

- Advisor: Amadeu Delshams
- Got a CNPq Scholarship (Brazil).

M.S. in Mathematics   *Rio de Janeiro, Brazil*

UFRJ(Federal University of Rio de Janeiro)   *Mar. 2012 - May 2014*

- Master's thesis: A dinâmica de N corpos sobre superfícies : um exemplo para 2 corpos
- Advisor: Stefanella Boatto
- Got a FAPERJ - Scholarship which is given to the two best students in Master program - Dept. of Math

B.S. in Mathematics   *Rio de Janeiro, Brazil*

UFRJ(Federal University of Rio de Janeiro)   *Mar. 2008 - Jan 2012*

Publications and Preprints

Arnold diffusion for a complete family of perturbations   *2017*

Delshams, A. and Schaefer, R.G.

- Regular and Chaotic Dynamics

N-body dynamics on closed surfaces: the axioms of mechanics   *2016*

Boatto, S., Dritschel, D.G. and Schaefer, R.G.

- Proceedings of the Royal Society of London A: Mathematical, Physical and Engineering Science

Work experience

Fixed-term Teacher   *Rio de Janeiro, Brazil*

UFRJ (Federal University of Rio de Janeiro)   *Mar. 2014 - Agu. 2014*

- Differential and Integral Calculus
- Linear Algebra

Monitor Student   *Rio de Janeiro, Brazil*

UFRJ (Federal University of Rio de Janeiro)   *2009 - 2011*

- Linear Algebra

Presentation

Arnold Diffusion for several examples using Scattering map (poster)   *Vigo, Spain*

14th Winter School of the Spanish Dance Network   *2017*

Global instability in Hamiltonian Systems and several Scattering maps   *Barcelona, Spain*

Barcelona UB-UPC DSG Seminar   *2016*

Arnold dffusion using several combinations of Scattering maps (poster)   *Seville, Spain*

13th Winter School of the Spanish Dance Network   *2016*

Arnold dffusion using several combinations of Scattering maps (poster)   *Barcelona, Spain*

14th Workshop on interactions between Dynamical Systems and PDE's.   *2016*

Global instability in Hamiltonian Systems   *Barcelona, Spain*

JuniorGesta   *2016*

Global instability in Hamiltonian Systems   *Barcelona, Spain*

II BGSMath Junior Meeting   *2016*

Propagação de um impulso elétrico em um axônio nervoso (poster)   *Águas de Lindóia, Brazil*

CNMAC - National Congress of Applied and Computational Mathematics   *2012*

Research Group and Networks

UPC Dynamical System Group   *Barcelona*

Member   *2014 - Present*

- Group of researchers in Dynamical Systems of Universitat Politècnica de Catalunya

DANCE   *Spain*

Member   *2016*

- Network of spanish reseachers in Dynamical Systems

Others Courses

Introduction to Python   *Barcelona*

Centre de Recerca Matamàtica   *2015*

R Programming   *Coursera*

Johns Hopkins University   *2016*

Getting and Cleaning Data   *Coursera*

Johns Hopkins University   *2016*

Languages

Portuguese	Native Fluent
English	Intermediate
Spanish	Advanced
Catalan	Intermediate

Programming Languages

Python	Intermediate
LaTeX	Intermediate
R	Basic

Congresses and conferences attended

DDays
Dance-net

Salou, Spain
2016

13th Workshop on interactions between Dynamical Systems and PDE's
Universitat Politècnica de Catalunya

Barcelona, Spain
2015

Global Dynamics in Hamiltonian Systems
Universitat Politècnica de Catalunya

Vall de Núria, Spain
2015

Winter School : Recents Trends in Nonlinear Sciences
Universidad de Valladolid and Dance-net

Valladolid, Spain
2015

Barcelona Mathematical Days.
Societat Catalana de Matemàtiques

Barcelona, Spain
2014

DDAYS.
Dance-net

Badajoz, Spain
2014

Hamiltonian Dynamics, Non-Autonomous System and Patterns in PDE's.
Lobachevsky State University of Nizhni Novgorod

Nizhny Novgorod, Russia
2014

Shilnikov Workshop.
Lobachevsky State University of Nizhni Novgorod

Nizhny Novgorod, Russia
2014