Rodrigo G. Schaefer

Ph.D student in Applied Math

Av Diagonal. 647 ETSEIB, 08028,Barcelona, Spain

(+34) 673 84 58 11 | rodrigo.schaefer@upc.edu | schaeferrodrigo.github.io/ | schaeferrodrigo

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

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

Arnold diffusion for a complete family of perturbations (Preprint)   *2016*

DELSHAMS, A. AND SCHAEFER, R.G.

- ArXiv

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

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

Salou, Spain

Dance-net

2016

13th Workshop on interactions between Dynamical Systems and PDE's

Barcelona, Spain

Universitat Politècnica de Catalunya

2015

Global Dynamics in Hamiltonian Systems

Vall de Núria, Spain

Universitat Politècnica de Catalunya

2015

Winter School : Recents Trends in Nonlinear Sciences

Valladolid, Spain

Universidad de Valladolid and Dance-net

2015

Barcelona Mathematical Days.

Barcelona, Spain

Societat Catalana de Matemàtiques

2014

DDAYS.

Badajoz, Spain

Dance-net

2014

Hamiltonian Dynamics, Non-Autonomous System and Patterns in PDE's.

Nizhny Novgorod, Russia

Lobachevsky State University of Nizhni Novgorod

2014

Shilnikov Workshop.

Nizhny Novgorod, Russia

Lobachevsky State University of Nizhni Novgorod

2014