Curriculum vitae

PERSONAL INFORMATION

Rodrigo Gonçalves Schaefer

Carrer del Comte de Güell, 35, baixos, 08028 Barcelona (Spain)

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schaeferrodrigo.github.io

Sex Male | Date of birth 24/03/1990 | Nationality Brazilian

WORK EXPERIENCE

01/03/2009–31/12/2011

Teaching Assistant

Universidade Federal do Rio de Janeiro, Rio de Janeiro (Brazil)

Exercises classes of Linear Algebra at the undergraduate level

01/03/2014–01/08/2014

Temporary Lecturer

Universidade Federal do Rio de Janeiro, Rio de Janeiro (Brazil)

Lecturer at the undergraduate level of the subjects: Calculus and Linear Algebra.

EDUCATION AND TRAINING

01/03/2008–31/12/2011

Bachelor in Mathematics

EQF level 6

Universidade Federal do Rio de Janeiro, Rio de Janeiro (Brazil)

01/03/2012–30/05/2014

Master in Mathematics

EQF level 7

Universidade Federal do Rio de Janeiro, Rio de Janeiro (Brazil)

Master's thesis: A dinâmica de N corpos sobre superfícies : um exemplo para 2 corpos (N-body dynamics on surfaces: an example for 2 bodies)

Advisor: Stefanella Boatto.

01/09/2014–31/07/2018

PhD in Applied Mathematics

EQF level 8

Universitat Politècnica de Catalunya, Barcelona (Spain)

Focus: Arnold Diffusion using Scattering maps

Advisor: Amadeu Delshams

PERSONAL SKILLS

Mother tongue(s) Portuguese

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
Spanish	C1	C1	B2	B2	C1
Catalan/Valencian	B2	B2	B1	B2	B2
English	B2	C1	B2	B2	C1

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user
Common European Framework of Reference for Languages

Digital skills

Python - Intermediate

Latex - Advanced

R - Basic

ADDITIONAL INFORMATION

Publications

Arnold diffusion for a complete family of perturbations

Delshams, A. and Schaefer, R.G.

Journal: Regular and chaotic dynamics, 2017.

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

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

Journal: Proceedings of the Royal Society of London A: Mathematical, Physical and Engineering Science,2016.

Preprint:

Arnold diffusion for a complete family of perturbations with two independent harmonics

Delshams, A. and Schaefer, R.G.

Arxiv, 2017.

Presentations

Title: *GLOBAL INSTABILITY IN HAMILTONIAN SYSTEMS*
Event: *IV Congreso de Jóvenes Investigadores-Real Sociedad Matemática Española*
Valencia, Spain, 2017

Title: *ARNOLD DIFFUSION FOR SEVERAL EXAMPLES USING SCATTERING MAPS (POSTER)*
Event: *Satellite Dynamics and Space Missions: Theory and Applications of Celestial Mechanics*
San Martino al Cimino, Italy
2017

Title: *ARNOLD DIFFUSION FOR SEVERAL EXAMPLES USING SCATTERING MAPS (POSTER)*
Event: *Llavefest: A Broad Perspective on Finite and Infinite Dimensional Dynamical Systems*
Barcelona, Spain
2017

Title: *ARNOLD DIFFUSION FOR SEVERAL EXAMPLES USING SCATTERING MAP (POSTER)*
Event: *14th Winter School of the Spanish Dance Network*
Vigo, Spain
2017

Title: *ARNOLD DIFFUSION USING SEVERAL COMBINATIONS OF SCATTERING MAPS (POSTER)*

Event: *13th Winter School of the Spanish Dance Network*

Seville, Spain

2016

Title: *ARNOLD DIFFUSION USING SEVERAL COMBINATIONS OF SCATTERING MAPS (POSTER)*

Event: *14th Workshop on interactions between Dynamical Systems and PDE's*

Barcelona, Spain

2016

Title: *GLOBAL INSTABILITY IN HAMILTONIAN SYSTEMS*

Event: *GestaJunior*

Barcelona, Spain

2016

Title: *GLOBAL INSTABILITY IN HAMILTONIAN SYSTEMS*

Event: *II BGSMath Junior Meeting*

Barcelona, Spain

2016

Certifications

Introduction to Python

Institution: Centre de Recerca Matemàtica

Barcelona, 2015

R Programming

Institution: John Hopkins University via Coursera.org

2016

Getting and Cleaning Data

Institution: John Hopkins University via Coursera.org

2016

Courses

Courses in the 15th winter school " Recent Trends in Nonlinear Sciences" (2018):

Chaos and averaging. *Lecturer: Charlangelo Liverani.*

Network dynamics and bifurcations. *Lecturer: Peter Ashwin.*

Resonances: from stability to chaos. *Lecturer: Anne Lemaitre.*

Courses in the 14th winter school " Recent Trends in Nonlinear Sciences"(2017):

Differential geometry in high-frequency averaging, bicycle geometry and the stationary Schrödinger

equation. *Lecturer: Mark Levi.*
Dynamical systems defined by incompressible fluid flows. *Lecturer: Daniel Peralta-Salas.*
Global dynamics for delay differential equations. *Lecturer: Tibor Krisztin.*

Courses in the 13th winter school " Recent Trends in Nonlinear Sciences"(2016):
Numerical methods for large-scale dissipative dynamical systems. *Lecturer: Juan Sánchez Umbría.*
Perturbation theory, KAM theorem and celestial mechanics. *Lecturer: Alessandra Celletti.*
Multidimensional symbolic dynamics. *Lecturer: Ronnie Pavlov*

Symplectic techniques in dynamical systems and mathematical physics. *Lecturers: Eva Miranda (UPC), Amadeu Delshams (UPC) and Ignasi Mundet (UB).*
BGSMath Graduate course of 60h.

Courses in the 12th winter school " Recent Trends in Nonlinear Sciences"(2015):
Introduction to Dynamical Systems through basic examples. *Lecturer: Maria José Pacífico.*
Nonautonomous Dynamical Systems. *Lecturer: Stefan Siegmund.*
Numerical techniques for large dimensional dynamical systems. *Lecturer: Bosco García Archilla.*

Memberships

Member of the Laboratory of Geometry and Dynamical Systems (Universitat Politècnica de Catalunya)
2017 - Present

Member of the UPC Dynamical Systems group
2014 - Present

Member of the DANCE - Network of Spanish researchers in Dynamical Systems
2016 - Present

Honours and awards

CNPq - scholarship 2012/2013 (Master)

FAPERJ - Aluno nota 10 scholarship 2013/2014 (Master)
Scholarship which is given to the two best students in Master program - Dept. of Math.

CNPq - scholarship 2014/2018 (PhD)

Conferences

CSF Hamiltonian Systems,
ETH Institute for Theoretical Studies
Ascona, Switzerland, 2017.

Finite Dimensional Integrable Systems in Geometry and Mathematical Physics
Universitat Politècnica de Catalunya
Barcelona, Spain, 2017.

15th Workshop on interactions between Dynamical Systems and PDE's
Universitat Politècnica de Catalunya
Barcelona, Spain, 2017.

Winter School in Conservative Dynamics

ETH Institute for Theoretical Studies
Engelberg, Switzerland, 2017.

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.

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.

References

Amadeu Delshams - amadeu.delshams@upc.edu

Stefanella Boatto - boattostefanella@gmail.com

Marcel Guardia - marcel.guardia@upc.edu