

Curriculum Vitae

Personal Data

- Name: Rui António Loja Fernandes
- Civil Status: Married, 3 Children
- Nationality: Portuguese
- Date of birth: July 20, 1965
- Place of birth: Coimbra, Portugal
- Web page: www.math.ist.utl.pt/~rfern

Table of Contents

1. Academics (Degrees, Professional Experience, Appointments, Awards)	2
2. Research (Visiting Positions, Projects, Talks, Meetings, Editor and Referee).....	4
3. Teaching	10
4. Publications	11

1. Academics (Degrees, Professional Experience, Appointments, Awards)

Academic Degrees

2002 – Habilitation (“Agregação”) in Mathematics, Instituto Superior Técnico
1994 – Ph.D. in Mathematics, University of Minnesota, USA
1991 – M.Sc. In Mathematics, University of Minnesota, USA
1988 – B.Sc. (“Licenciatura”) in Physics Engineering, Instituto Superior Técnico

Professional Experience

2007 – --- Full Professor
Department of Mathematics, Instituto Superior Técnico

2003 – 2007 Associate Professor
Department of Mathematics, Instituto Superior Técnico

1994 – 2002 Assistant Professor
Department of Mathematics, Instituto Superior Técnico

2001 – Scientific Adviser
Quadriga - Telemática e Comunicações, SA

1992 – 93 Teaching Assistant
Department of Mathematics, University of Maryland, USA

1989 – 92 Teaching Assistant
School of Mathematics, University of Minnesota, USA

1986 – 89 Teaching Assistant (“Monitor” and “Assistente”)
Department of Mathematics, Instituto Superior Técnico

Appointments

2010 – --- Member of the Executive Committee of the European Mathematical Society
www.euro-math-soc.eu

2010 -- --- Head of the Mathematics Department of Instituto Superior Técnico
www.math.ist.utl.pt

2005 – -- Member of the Scientific Board of CIM - Centro Internacional de Matemática (ERCOM Center) www.cim.pt

2009 – -- Member of the Senate of the Technical University of Lisbon

2009 – 2010 Member of the Scientific Board of Instituto Superior Técnico

2009 – 2010 Director of the PhD Program in Mathematics at Instituto Superior Técnico

2002 – 2006 Member of the council of the Mathematics Department of Instituto Superior Técnico

2001 – 2008 Member of the Senate of Instituto Superior Técnico

1999 – 2000 Director of the Master Program in Mathematics at Instituto Superior Técnico

1997 – 1999 Member of the Pedagogical Council of Instituto Superior Técnico

1995 – 1997 Director of the Undergraduate Program in Mathematics at Instituto Superior Técnico

Awards and distinctions

- Corresponding member of the Lisbon Academy of Sciences since December 2006.
- Calouste Gulbenkian Foundation Award for the Basic Sciences, 2001
- Outstanding Thesis Award, University of Minnesota, USA, 1994
- Research Assistantship of the School of Mathematics da University of Minnesota, USA, 1993
- Research Studentship in the Theory Division of JET-Joint European Torus, Abingdon, UK. 1987

Special Grants

- Beca del Ministerio de Educación y Ciencia 2008 for sabbatical at Centre de Recerca Matemàtica (CRM), Barcelona, Spain
- Chercheur invité CNRS at Université de Poitiers, France, 2007
- Research Assistantship at University of Minnesota 1993-94
- NATO PhD Grant at University of Minnesota 1989-93
- Fulbright-Hays Travel Grant 1989-90
- Fellowship of the Luso-American Development Foundation, 1989
- Research Studentship in the Low Energy Antiprotons Ring at CERN, Geneva, Switzerland, 1987

Students

- Hassan Najafi, current PhD student at IST (2008--)
- Juan Pablo Roggiero, PhD Thesis: Lie Algebroids Over Quotient Spaces, IST (2007-2011)
- Pedro Walmsley Frejlich, PhD Thesis: h -principles in Poisson geometry, IST (2007-2011)
- Ivan Struchiner, PhD Thesis: The Classifying Lie Algebroid of a Geometric Structure, UNICAMP, Brazil, (2006-2009).
- Luís Alexandre Pereira, MSc Thesis: Integrability of Lie algebroids by proper groupoids, IST (2008) (moved on to PhD at MIT)
- Ricardo Joel Andrade, BSc Thesis: *The h -principle*, IST (2006) (moved on to PhD at MIT)
- João P. Boavida, BSc Thesis: *Singular Foliations and Lie Algebroids*, IST (2001) (moved on to PhD at University of Minnesota)
- António Serra, BSc Thesis: *The Sklyanin Bracket*, IST (1997) (moved on to PhD at University of California at Berkeley)
- João P. Santos, MSc Thesis: *Linearization of a Lotka-Volterra System in the Jacobian of an hyperelliptic curve*, IST (1996) (moved on to PhD at Stanford University)

Post-Doctoral supervision

- Matias del Hoyo, 2011 - -- (*Groupoids and Topology*)
- Florian Schaetz, 2009-2011 (*Poisson geometry*)
- Olivier Brahic, 2006-2011 (*Poisson geometry*)
- Oana Dragulete, 2007-2008 (*symplectic and contact geometry*)
- Bart Van Steirteghem, 2004-2008 (*algebraic and symplectic Geometry*)
- Iakovos Androulidakis, 2001-2002 (*Lie groupoids and algebroids*)
- Phillipe Monnier, 2002-2004 (*singularities and Poisson geometry*)

2. Research (Visiting Positions, Projects, Talks, Meetings, Editor and Referee)

Short Term

Visiting Positions (since 2000)

- IMEC, Universidade de Campinas, Campinas, SP, Brazil, January 2009
- Instituto de Matemática Pura e Aplicada, IMPA, Rio de Janeiro, Brazil, January 2009
- Department of Mathematics, University of Utrecht, October 2008
- Centre de Recerca Matemàtica, Barcelona, Spain, April 2008
- Erwin Schrödinger International Institute for Mathematical Physics, Vienna, Austria, August 2007
- Instituto de Matemáticas y Física Fundamental, CSIC, Madrid, Spain, June 2007
- Chargé des Recherches, CNRS, Departamento de Matemática, Université Paul Sabatier, Toulouse, France, February-April 2007
- Dipartimento di Matematica e Applicazioni, Università degli studi di Milano-Bicocca, Italy, October 2006
- Erwin Schrödinger International Institute for Mathematical Physics, Vienna, Austria, July 2006
- Instituto de Matemática Pura e Aplicada, IMPA, Rio de Janeiro, Brazil, April 2006
- Department of Mathematics, École Polytechnique Fédérale de Lausanne, Switzerland, January 2006
- International Centre for Theoretical Physics, Trieste, Italy, July 2005
- Department of Mathematics, University of Toronto, Canada, May 2005
- Department of Mathematics, University of Utrecht, The Netherlands, December 2004
- Centre Bernoulli, École Polytechnique Fédérale de Lausanne, Switzerland, August 2004
- Erwin Schrödinger International Institute for Mathematical Physics, Vienna, Austria, August-September 2003
- Department of Mathematics, Université de Poitiers, France, April 2003
- Department of Mathematics, University of Minnesota, USA, November 2001
- Department of Mathematics, ETH Zurich, Switzerland, June 2001
- Department of Mathematics, University of Utrecht, The Netherlands, February 2001
- Department of Mathematics, University of Cyprus, Nicósia, Cyprus, July, 2000
- Department of Mathematics, University of California at Berkeley, USA, April 2000

Research Projects

- 2010 – - - - Principal Investigator of the Portuguese Science Foundation Research Project “Symplectic and related geometries”, PTDC/MAT/098936/2008 (122,000 €)
- 2010 – - - - Member of "CAST - Contact and Symplectic Topology" Program “à la carte” of the European Science Foundation (ESF): <http://cast.ulb.ac.be/>
- 2010 – - - - Principal Investigator of the cooperation research project Portugal-France, Pessoa nº 441.00 FRANÇA-2010/2011 (5,700 €)
- 2008 – 2009 Principal Investigator of the cooperation research project Portugal-Spain FCT-CSIC nº 14/CSIC/08 (3,640 €)
- 2008 – 2009 Principal Investigator of the cooperation research project Brazil-Portugal GRICES-CAPES nº 201/08 (9,000 €)
- 2005 – 2009 Principal Investigator of the Portuguese Science Foundation Research Project “Symplectic Topology and related geometries”, FCT POCTI/MAT/57888/2004 (60,000 €)
- 2004 – 2009 Member of “MISGAM – Methods of Integrable Systems, Geometry, Applied Mathematics”, Program “à la carte” of the European Science Foundation (ESF): <http://misgam.sissa.it/> e <http://www.esf.org/misgam>
- 2004 – 2009 Member of "ENIGMA – European Network in Geometry, Mathematical Physics and Applications", Marie Curie Research Training Network, FP6-2002-Mobility 1 Proposal 005652.
- 2001 – 2004 Member of the Research Project “Symplectic and related geometries”, FCT, POCTI/1999/MAT/33081
- 2000 – 2004 Member of "EDGE - European Differential Geometry Endeavour", European Contract Human Potential Programme, Research Training Network HPRN-CT-2000-00101: <http://edge.imada.sdu.dk/>
- 1993 – -- Member of the Center for Mathematical Analysis, Geometry and Dynamical Systems, research unit funded by the Portuguese Science Foundation. Member of its executive board between 1997 and 2002: <http://www.math.ist.utl.pt/cam>
- 1997 – 2000 Member of the Research Project “Topology and Quotient Spaces”, FCT, PCEX/C/MAT/ 44/96
- 1995 – 1998 Principal Investigator of the Portuguese Science Foundation Research Project “Geometric and Topological Methods in Hamiltonian Dynamical Systems and Ergodic Theory”, FCT, PBIC/C/MAT/2140/95 (15,000 €)

Talks

(selection since 2000)

- *A h-principle in Poisson Geometry*, XX International Workshop on Geometry and Physics, Madrid, Spain, September 2011
- Non-commutative integrable systems, Workshop on Mathematical Physics, SigmaPhi2011 - International Conference on Statistical Physics, Cyprus, July 2011.
- Stability of Leaves, Seminário de Física-Matemática, IMPA, April 2011.
- *The Equivariant Picard group in Poisson geometry*, Conference 'Quantization of Singular Spaces', Center for Quantum Geometry of Moduli Spaces, Aarhus, Dinamarca, December 2010.

- *A universal stability theorem*, Conference Higher Structures in Mathematics and Physics – 2010, Erwin Schrödinger Institute, Vienna, Austria, October 2010.
- *A universal stability theorem*, 3rd Meeting IST – IME, Universidade de São Paulo, SP, Brasil, September 2010.
- *Stability and Lie algebroid Theory*, III Latin American Conference on Lie Groups in Geometry, Universidad de Los Andes, Bogotá, Colombia, July 2010.
- *The Modular Class of a Poisson Map*, AIMS Conference-Special Session in Geometric Mechanics, Dresden, Germany, April 2010.
- *The Equivariant Picard Group*, Séminaire Géométrie des Crochets, Université de Luxembourg, Luxembourg, January 2010.
- *Picard groups of Poisson manifolds*, Centre de Mathématiques Laurent Schwartz, École Polytechnique, Paris, December 2009.
- *Stability of symplectic leaves*, Conference Paulette Libermann, Héritage et Descendance, Institut Henri Poincaré, Paris, December 2009.
- *A geometric approach to Conn's linearization theorem*, XVIII Oporto Meeting on Geometry, Topology and Physics, Porto, July 2009
- *The Symplectization Functor*, Instituto de Matemática Pura e Aplicada, Rio de Janeiro, Brazil, January 2009.
- *Integrability of Lie Algebroids*, Departamento de Matemática, Indian Institute of Technology, Mumbai, India, November 2008.
- *Stability of symplectic leaves*, Geometry and Topology Seminar, University of Utrecht, The Netherlands, October 2008.
- *Poisson geometry and topology*, CSIC, Madrid, Spain, September 2008.
- *Poisson Structures of Compact Type*, Poisson 2008 Conference, EPFL, Lausanne, July 2008
- *Stability of leaves*, 9th Conference on Geometry and Topology of Manifolds, Krakow, June 2008
- *Hidden Symmetries and Lie's Third Theorem*, Colloquium Dep. de Matemàtiques, Universitat Autònoma de Barcelona, Spain, April 2008.
- *Reduction and integrability*, Workshop on Poisson geometry and sigma models, Erwin Schrödinger Institute, Vienna, Austria, August 2007
- *Singular reduction of Poisson manifolds and integrability*, BIRS Workshop Geometric Mechanics: Continuous and discrete, finite and infinite dimensional, Banf, Canada, August 2007.
- *Singular Reduction of Poisson manifolds and Integrability*, First French-Spanish Congress of Mathematics, Zaragoza, Spain, July 2007
- *Singular reduction in Poisson geometry*, Simumat Day: Geometric Methods in Mechanics and Control, CSIC, Madrid, Spain, June 2007
- *Integration of Poisson fibrations*, Institut Henri Poincaré, Paris, France, March 2007
- *Moment maps in Poisson Geometry*, Departamento de Matemática, Université Paul Sabatier, Toulouse, France, March 2007
- *Poisson structures of compact type*, Departament des Matemàtiques, Université Paul Sabatier, Toulouse, France, October 2006
- *Integrable hierarchies and the modular class*, Dipartimento di Matematica e Applicazioni, Università degli studi di Milano-Bicocca, Italy, October 2006
- *The Symplectization Functor*, XV International Workshop on Geometry and Physics, Tenerife, Spain, September 2006

- *Poisson structures of Compact type*, Workshop on Generalized Geometries, Erwin Schrödinger International Institute for Mathematical Physics, Vienna, Austria, July 2006
- *Poisson fibrations*, Séminaire Itinérant de Géométrie et Physique IV, Hanoi University of Education, Vietnam, June, 2006
- *Stability of symplectic leaves*, Poisson 2006-Poisson Geometry in Mathematics and Physics, Tokyo, Japan, June, 2006
- *Integrability of Lie brackets*, Seminário de Geometria USP-UNICAMP, Departamento de Matemática, Universidade de Campinas, Brazil, April 2006
- *Stability of symplectic leaves*, Seminário de Geometria, IMPA, Brazil, April 2006
- *Integrability of Lie algebroids: theory and applications*, 20th International Workshop on Differential Geometric Methods in Theoretical Mechanics, Ghent, Belgium, August 2005
- *Moment maps in Poisson geometry*, Workshop on Moment maps in various geometries, Banff International Research Station, Banff, Canada, May 2005
- *Linearization of Poisson brackets*, Symplectic Geometry Seminar, University of Toronto, Canada, May 2005
- *Stability of symplectic leaves*, Geometry and Topology Seminar, University of Utrecht, The Netherlands, December 2004
- *Stability of symplectic leaves*, Séminaire Gaston DARBOUX, Université Montpellier, France, November 2004
- *Momentum maps in Poisson geometry*, 10th International Conference in Modern Group Analysis, Larnaca, Cyprus, October 2004
- *Rigidity vs softness in Poisson Geometry*, XIII Workshop on Geometry and Physics, Murcia, Spain, September 2004
- *Stability of symplectic leaves*, Séminaire de Geometrie, Université de Genève, Switzerland, August 2004
- *Poisson Fibrations*, Centre Bernoulli, École Polytechnique Fédérale de Lausanne, Switzerland, August 2004
- *First Steps in Poisson Topology*, 4th Conference on Poisson Geometry and related fields, University of Luxembourg, Luxembourg, June 2004
- *Deformation vs. Linearization of Poisson structures*, Structures de Contact, Structures de Poisson, Singularités, Colloque en l'honneur de Claude Albert et Jean-Paul Dufour, Université Montpellier II, France, June 2004
- *Linearization of Poisson Brackets*, in the program “Poisson Geometry and Moment Maps” do Erwin Schrödinger International Institute for Mathematical Physics, Vienna, Austria, September 2003
- *The geometry of deformation and linearization*, International Euroschool and Euroconference PQR2003, Université Libre de Bruxelles, Belgium, June, 2003
- *Integrability of Poisson brackets*, École Normale Supérieure de Paris, France, April 2003.
- *Integrability of Lie brackets*, Département de Mathématiques, Université de Poitiers, France, April 2003.
- *Symplectic realizations of Poisson manifolds*, International Workshop on Quantum Field Theory and Noncommutative Geometry, Sendai, Japan, November 2002
- *Integrability of Poisson brackets*, XI Encuentro de Otoño de Geometría y Física, Oviedo, Spain, September 2002.
- *Integrability of Lie brackets*, Geometry Seminar, Université de Genève, Switzerland, June 2002

- *Integrability of Lie algebroids*, Groupoid Fest 2001, University of California at Berkeley, USA, November 2001
- *New Invariants of Poisson manifolds*, Geometric Analysis Seminar, University of Minnesota, USA, October 2001
- *More on Integrability of Lie brackets*, Workshop of the LMS, Manchester, UK, July 2001
- *Integrability of Lie brackets*, ETH Zurich, Switzerland, June 2001
- *Lie algebroids and Characteristic Classes*, Micro-course and Opening Lecture in the Meeting Geometry and Topology of Manifolds, Krynica, Poland, April 2001
- *Topological Invariants and Lie algebroids*, University of Utrecht, The Netherlands, February, 2001
- *Lotka-Volterra Integrable Systems*, Department of Mathematics, University of Cyprus, Nicosia, Cyprus, August 2000
- *Connections and Characteristic Classes in Poisson Geometry*, Colloque Poisson 2000, CIRM Luminy, France, June 2000
- *Connections in Poisson Geometry*, Symplectic Geometry Seminar, University of California at Berkeley, USA, April 2000

Organization of Meetings, Conferences and Seminars

- *Poisson 2010 - Poisson Geometry in Mathematics and Physics*, IMPA, Rio de Janeiro, July 20-30 (http://www.impa.br/opencms/pt/eventos/store_old/evento_1001) head of the scientific committee.
- *XVI International Workshop on Geometry and Physics*, September 5-8, 2007, Instituto Superior Técnico, (<http://ifwgp2007.ist.utl.pt/>) main organizer
- *Poisson Geometry and Applications*, Oberwolfach Workshop, Germany, April 29 – May 5, 2007 (<http://www.mfo.de/cgi-bin/tagungsdb?type=21&tr=0718a>) – co-organizer
- *XV International Workshop on Geometry and Physics*, Tenerife, Spain, September 11-16, 2006, (<http://www.gt.matfun.ull.es/15iwgp2006/>) – member of the scientific committee
- *EMS Mathematical Weekend*, September 12-14, 2003, Fundação Calouste Gulbenkian (<http://www.math.ist.utl.pt/ems/>) – main organizer
- *Poisson 2002 - Conference on Poisson Geometry*, 2-7 September, 2002, Instituto Superior Técnico (<http://math.ist.utl.pt/Poisson2002/>) main organizer
- *Geometry and Topology of Manifolds*, Krynica, Poland, 29 May - 5 June, 2002 – member of the scientific committee
- *Conference on Differential Equations and Dynamical Systems*, 26-30 June 2000, Instituto Superior Técnico, member of the organizing committee
- *Smooth Ergodic Theory Workshop*, 29-31 March 1999, Instituto Superior Técnico, member of the organizing committee
- Ω^{99} - *Conference on Symplectic Geometry*, June 21-26, 1999, Instituto Superior Técnico, member of the organizing committee
- Founder of the “Geometry in Lisbon Seminar” and co-organizer 2001-2003 (<http://data.math.ist.utl.pt/sem/geolis/>)
- Founder of the “Mathematical Physics Seminar” and co-organizer 1995-2000 (<http://data.math.ist.utl.pt/sem/fismat/>)

**Editorial and
Refereing Activity**

2008 – -- Editor of *Journal of Geometric Mechanics* aimsciences.org/journals/

2004 – -- Editor of *Portugaliae Mathematica* (presently Editor-in-Chief) www.ems-ph.org/journals/journal.php?jrn=pm

Referee for the following journals:

- Annales de l'ENS
- Annales de l'Institut Fourier
- Canadian Journal of Mathematics
- Communications in Mathematical Physics
- Compositio Mathematica
- Differential Geometry and Applications
- International Mathematics Research Notices
- Inventiones Mathematicae
- Israel Journal of Mathematics
- Journal für die reine und angewandte Mathematik (Crelle's Journal)
- Journal of the American Math Society
- Journal of Differential Geometry
- Journal of Differential Equations
- Journal of Geometry and Physics
- Journal of Physics A: Mathematical and General
- Journal of Symplectic Geometry
- Letters in Math. Phys.
- Mathematische Annalen
- SIGMA
- Topology
- Transactions of the Amer. Math. Society

Evaluator for the following national research councils:

- ANEP (Spain)
- EPSRC (UK)
- FCT (Portugal)
- NWO (Netherlands)
- SNSF (Switzerland)

Reviewer for:

- MathSciNet
- Zentralblatt

3. Teaching

Lecturer at IST

- Lie groups and Lie algebras (MSc and PhD in Mathematics)- 4 semesters
- Differential Geometry (MSc and PhD in Mathematics) – 2 semesters
- Differential Topology (MSc and PhD in Mathematics) – 1 semester
- Linear Algebra (Science and Engineering students) – 2 semesters
- Algebra II (BSc in Mathematics)– 4 semesters
- Differential and Integral Calculus I (Science and Engineering students) – 4 semesters
- Mathematical Analysis I (Science and Engineering students) – 1 semester
- Mathematical Analysis III (Science and Engineering students) – 5 semesters
- Mathematical Analysis IV (Science and Engineering students) – 4 semesters
- Mathematical Analysis Honors (all students) – 4 semesters
- Differential Equations (Science and Engineering students) – 1 semester
- Seminar in Mathematics (BSc in Mathematics) – 2 semesters

Short Courses (elsewhere)

- *An introduction to Lie groupoids through Poisson geometry*, The 5th Summer School on Geometry, Mechanics and Control, La Cristalera, Miraflores de la Sierra, Spain, July 2011.
- *Stability of symplectic leaves*, Short Course (6 lectures) at Workshop on Topology and Geometry of Foliations, Indian Statistical Institute, Kolkata, Nov/Dec 2008.
- *Stability of Symplectic leaves*, Short Course (3 lectures) at GESTA 2008 Meeting, CRM, Barcelona, Spain, May 2008.
- *(Proper) Lie groupoids and Poisson geometry*, Short Course (4 lectures) at the Erwin Schrödinger Institute, Vienna, Austria, August 2007.
- *Integrability and Quantization*, Short Course (3 lectures) at the Séminaire Itinérant de Géométrie et Physique III, Perugia, Italy, July 2005
- *Lie Algebroids and Lie Groupoids*, Short course (4 lectures) in the Summer School and Conference on Poisson Geometry, ICTP, Trieste, Italy, July 2005
- *Invariants of Lie algebroids*, Short course (2 lectures) in the Congreso de la Real Sociedad Matemática Española, Tenerife, Spain, January 2002

4. Publications

Research Papers

R.L. FERNANDES and Struchiner, I., “The Classifying Lie Algebroid of a Geometric Structure I: Classes of Coframes”, Preprint [arXiv:1103.5850](https://arxiv.org/abs/1103.5850).

Caseiro, R. and FERNANDES, R.L., “Modular classes of Poisson maps”, Preprint [arXiv:1103.4305](https://arxiv.org/abs/1103.4305).

FERNANDES, R. L., and Frejlich, P., “A h-principle for symplectic foliations”, To appear in *International Mathematics Research Notices*. Preprint [arXiv:1010.3447](https://arxiv.org/abs/1010.3447).

Crainic M. and FERNANDES, R. L., “A geometric approach to Conn's linearization theorem”, *Annals of Math* 173 (2011), 1119-1137.

Crainic M. and FERNANDES, R. L., "Stability of symplectic leaves", *Invent. Math.* **180**, no. 3, (2010), 481-533.

FERNANDES, R. L., and Iglesias, D., Integrability of Poisson-Lie group actions, *Lett. Math. Phys.* **90**, (2009) 137-159.

FERNANDES, R. L., Ortega J.P and Ratiu, T., Momentum maps in Poisson geometry, *Amer. J. of Math.* **131**, no. 5, (2009) 1261-1310.

FERNANDES, R. L., and Struchiner, I., *São Paulo Journal of Mathematical Sciences* (formerly Resenhas IME-USP) **2** no. 2, (2008) 263-284.

FERNANDES, R. L. and Damianou P., “Integrable hierarchies and the modular class”, *Annales de l'Institut Fourier*, **58** no. 1, (2008) 107-137.

FERNANDES, R. L., “The symplectization functor”, *Publ. R. Soc. Mat. Esp.*, **11** (2008) 67-82 .

Crainic M. and FERNANDES, R. L., "Rigidity and Flexibility in Poisson Geometry", *Trav. Math.* **16**, (2005) 53-68.

FERNANDES, R. L. and P. Monnier, "Linearization of Poisson brackets", *Lett. Math. Phys.* **69**, (2004) 89-114.

Crainic, M. and FERNANDES, R. L., "Integrability of Poisson brackets", *J. Differential Geom.* **66**, (2004) 71-137.

FERNANDES, R. L., "Invariants of Lie Algebroids", *Diff. Geom. Appl.* **19**, (2003) 223-243.

Crainic, M. and FERNANDES, R. L., "Integrability of Lie brackets", *Ann. of Math. (2)* **157**, (2003) 575-620.

FERNANDES, R. L. and Damianou P., "From the Toda lattice to the Volterra lattice and back", *Reports on Math. Phys.* **50**, (2002) 361-378.

FERNANDES, R. L., "Lie Algebroids, Holonomy and Characteristic Classes", *Adv. in Math.* **170**, (2002) 119-179. (*featured review* em Mathematical Reviews; *New Hot Paper* in November 2003 ISI Essential Science Indicators: <http://esi-topics.com/nhp/nhp-november2003.html>)

FERNANDES, R. L. and Vanhaecke P., "Hyperelliptic Prym Varieties and Integrable Systems", *Commun. Math. Phys.*, **221** (2001) 169-196.

FERNANDES, R. L., "Connections in Poisson Geometry I: Holonomy and Invariants", *J. Differential Geom.*, **54** (2000) 303-366.

FERNANDES, R. L., "Deformation Quantization and Poisson Geometry", *Resenhas*, **4** (2000), 327-361.

Duarte, P., FERNANDES, R. L. and Oliva, W. M., "Dynamics on the Attractor of the Lotka-Volterra Equations", *J. of Differential Equations*, **149** (1998), 143-189.

FERNANDES and R. L., Santos, J. P., "Integrability of the periodic KM system", *Reports on Math. Phys.*, **40** (1997), 475-484.

FERNANDES, R. L., "Completely Integrable Bi-Hamiltonian Systems", *J. of Dynamics and Differential Equations*, **6** (1994), 53-69.

FERNANDES, R. L., "On the Master Symmetries and Bi-Hamiltonian Structure of the Toda Lattice", *J. of Physics A*, **26** (1993), 3797-3803.

Books and Lecture Notes

Crainic, M. and FERNANDES, R. L., *Lectures on Integrability of Lie Brackets*, [*Geometry & Topology Monographs* **17** \(2011\) 1-107.](#)

FERNANDES, R. L. e Ricou, M, *Introdução à Álgebra*, Coleção Ensino da Ciência e da Tecnologia, vol. 15, IST Press, Lisboa, 2004 (484 pages).

FERNANDES, R. L., *Lições de Geometria Diferencial*, (in Portuguese) Lecture notes for the Differential Geometry course taught to the students in the Master and PhD Programs in Mathematics at IST. Available in the Portuguese archive: <http://arquivoescolar.org/handle/arquivo-e/27>

M. Abreu, FERNANDES, R. L., M. Ricou, *Cálculo Diferencial e Integral I*, (in Portuguese) lecture notes for the first course in Calculus taught to students in Science and Engineering at IST:
http://www.math.ist.utl.pt/~rfern/CI/CDI_FolhasMA.pdf

FERNANDES, R. L., “O integral de Lebesgue” (in Portuguese) lectures notes on the Lebesgue integral for an advance honours course in Mathematical Analysis. Available in the Portuguese archive:
<http://arquivoescolar.org/handle/arquivo-e/28>

Chapters in Books

Brahic, O. and FERNANDES, R. L., Poisson fibrations and fibered symplectic groupoids, in Poisson Geometry in Mathematics and Physics, 41-60, *Contemporary Mathematics*, **450**, American Mathematical Society, Providence, RI; 2008.

FERNANDES, R. L., “Uma breve excursão à Rua das Matemáticas” (in Portuguese) notes from a short course lectured in the Summer School in the Gulbenkian Foundation Talented Young Students Program (2006).
<http://www.math.ist.utl.pt/escola/escola2005.pdf>

Crainic, M. and FERNANDES, R. L., Exotic Characteristic Classes of Lie Algebroids, in Quantum Field Theory and Noncommutative Geometry, Lecture Notes in Physics, Vol. 662 Eds. Carow-Watamura, Ursula; Maeda, Yoshiaki; Watamura, Satoshi, Springer-Verlag, Berlin, 2005.

Conference Proceedings

FERNANDES, R. L., “A note on proper Poisson actions”, *Proceedings of the The Tenth International Conference in Modern Group Analysis*, Larnaca, Cyprus, 2004.

FERNANDES, R. L., “Contravariant Connections on Poisson Manifolds”, in *Proceedings of the Summer School on Differential Geometry*, Eds. A. M. Breda, F. Carvalho, J. Costa, B. Wegner, Univ. Coimbra, 1999.

FERNANDES, R. L. and Oliva, W. M., “Hamiltonian Dynamics of the Lotka-Volterra Equations”, in *Proc. of the International Conference on Differential Equations - Equadiff 95*, eds. L. T. Magalhães, C. Rocha and L. Sanchez (1998), World Scientific, USA.

FERNANDES, R. L., “A Note on Poisson symmetric spaces”, in *Proc. of the Cornelius Lanczos International Centenary Conference*, eds. J. David Brown, Moody T. Chu, Donald C. Ellison, Robert J. Plemmens (1994), SIAM, Philadelphia, USA, 638-642.

Book Editor

Geometry and Physics: XVI International Fall Workshop, R.L. Fernandes and R. Picken (eds.), AIP Conference Proceedings Volume 1023, 228 p., 2008.

Poisson geometry and applications. Abstracts from the workshop held April 29--May 5, 2007. Organized by Anton Alekseev, RUI LOJA FERNANDES, Eckhard Meinrenken and Markus Pflaum. Oberwolfach Reports. Vol. 4, no. 2. Oberwolfach Rep. 4 (2007), no. 2, 1243--1298.

Science policy papers

R.L. Fernandes, “Evaluation of Faculty at IST-a case study”, to appear in the *Newsletter of the EMS*. Preprint available at:

<http://www.math.ist.utl.pt/~rfern/ArtigoEMS.pdf>

Thesis

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