

constanza rojas-molina

Born on April 7th, 1983 in La Serena, Chile.

Married, no children.

*Address: Center for Applied Mathematics
and Theoretical Physics (CAMTP)*

University of Maribor

Krekova 2, 2000 Maribor, Slovenia.

Tel : +386 22 355 364, +386 40 32 55 47 (mobile)

e-mail: crojasm@u-cergy.fr // constanza777@gmail.com

Education

- Sept 2008–Aug 2012 **Ph.D. in Mathematics**, *Laboratoire AGM, Université de Cergy-Pontoise, France.*
Thesis: The mathematical study of electronic transport in random Schrödinger operators with quasicrystalline structures.
Thesis defense: June 25 2012.
Advisor: Prof. François Germinet.
Members of the Jury: L. Bruneau (U. de Cergy-Pontoise), P. Hislop (U. of Kentucky) A. Joye (U. de Grenoble 1), A. Klein (U.C. Irvine), F. Klopp (U. Paris 6), P. Müller (LMU Munich).
- 2007–2008 **Master in Fundamental Mathematics (Master 2 Recherche)**, *mention "très bien"*,
Université Pierre et Marie Curie-Paris 6, France.
- 2005–2007 **Studies in the M.Sc. in Mathematics Program**, *Universidad de La Serena, Chile.*
- 2001–2005 **B. Sc. in Mathematics**, *obtained with honours, Universidad de La Serena, Chile.*

Experience

Publications

- C. Rojas-Molina, *The Anderson model with missing sites*, accepted for publication, 2013.
- F. Germinet, P. Müller, C. Rojas-Molina, *Dynamical localization for Delone-Anderson operators*, in preparation (announced in the Oberwolfach Workshop "Correlations and interactions for random quantum systems", Oct. 2011).
- C. Rojas-Molina, I. Veselić, *Scale-free unique continuation estimates and applications to random Schrödinger operators*, Commun. Math. Phys. (online first) 2013
- C. Rojas-Molina, *Characterization of the Anderson metal-insulator transport transition for non ergodic operators and application*, Ann. Henri Poincaré 13 (7) 1575-1611 (2012).
- F. Germinet, C. Rojas-Molina, *Dynamical mobility edge for various random Landau Hamiltonians*, RIMS Kokyuroku Bessatsu, Proceedings of the Conference "Spectra of Random Operators and Related Topics", B27, 25-34 (2011).

- M. Corgini, C. Rojas-Molina, D.P. Sankovich, *Coexistence of Non-Conventional Condensates in Two-Level Bose Atom System*, International Journal of Modern Physics B, Vol 22, (27): 4799-4815 (2008).

Teaching

- 2008–2011 **Undergraduate Teaching Assistant**, *Mathematics Department, Université de Cergy-Pontoise.*
Calculus, Variational Methods, C2I (Certification Informatique et Internet)
- 2005–2007 **Undergraduate Teaching Assistant**, *Mathematics Department, Universidad de La Serena, Chile.*
Calculus, Algebra, Functional Analysis, Analysis of Complex Variable

Talks

- April 2013 **Young Researchers Seminar**, *Program VSMQM, Institut Henri Poincaré, France.*
- January 2013 **Thematic School GDR CHANT**, *Grenoble, France.*
- October 2012 **Institute Mittag-Leffler Seminar**, *Stockholm, Sweden.*
- August 2012 **Conference on Spectral Theory**, *TU Graz, Austria.*
- June 2012 **PhD Students Seminar**, *Université de Cergy-Pontoise, France.*
- February 2012 **Annual Research Group Meeting-GDR Dynamique Quantique**, *Université de Toulouse, France.*
- January 2012 **Mathematical-Physics Seminar**, *University of Ljubljana, Slovenia.*
- January 2012 **Department Seminar**, *CAMTP and Department of Mathematics, University of Maribor, Slovenia.*
- October 2011 **MFO Workshop on Correlations and Interactions for Random Quantum Systems**, *M. F. Oberwolfach, Germany.*
- October 2011 **Spectral Problems Seminar**, *Université de Paris 11 Orsay, France.*
- July 2011 **Graduate Students Symposium-Summer School on Graphs and Spectra**, *TU Chemnitz, Germany.*
- July 2011 **Ph.D. Students Workgroup (GdTT)**, *Laboratoire CERMICS- École de Ponts Paris Tech, France.*
- June 2011 **Analysis Seminar**, *Ludwig-Maximilians-Universität, Munich, Germany.*
- May 2011 **Analysis Seminar**, *Friedrich-Schiller Universität Jena, Germany.*

- April/July 2011 **Analysis, Stochastics and Mathematical Physics Seminar**, *TU Chemnitz, Germany.*
- March 2011 **Ph.D. Students Workgroup (GdTT)**, *Laboratoire JLL-Paris 6 ,France.*
- September 2010 **Conference Spectral Days**, *Pontificia Universidad Católica de Chile, Santiago, Chile.*
- June 2010 **Journée Thématique “Electronic Transport in Disordered Media”** , *Laboratoire AGM, Université de Cergy-Pontoise.*
- June 2010 **Conference on Random Schrödinger Operators**, *Centre Interfacultaire Bernoulli, EPFL-Lausanne, Switzerland.*
Part of the Program “Spectral and Dynamical Properties of Quantum Hamiltonians”
- February 2010 **Workgroup on Mathematical-Physics and Semi-classical Analysis**, *Laboratoire LAGA, Université Paris 13, France.*
- November 2009 **Students Satellite Meeting, Kochi School on Random Schrodinger Operator**, *Kochi University, Japan.*

Visits

- April/June 2013 **Research visit**, *Institut Henri Poincaré, France*, Trimestre thématique "Variational and spectral methods in quantum mechanics".
- Sept. 3 -Dec. 15 2012 **Research visit**, *Mittag-Leffler Institute, Sweden.*
- Nov. 21 -Dec. 8 2011 **Research visit**, *TU Chemnitz, Germany*, (Prof. I. Veselić).
- July 10 -July 24 2011 **Research visit**, *TU Chemnitz, Germany*, (Prof. I. Veselić).
- May 22 -May 25 2011 **Research visit**, *Friedrich-Schiller Universität Jena, Germany* , (Prof. D. Lenz).
- April 1-June 30 2011 **Erasmus Ph.D. student**, *Ludwig-Maximilians-Universität, Munich, Germany.*
Under the direction of Prof. Peter Müller.
- May 15- June 15 2010 **Ph.D. Student visitor**, *Centre Interfacultaire Bernoulli, EPFL-Lausanne, Switzerland.*

Awards and Grants

- Sept 3-Dec 15 2012 **Postdoctoral grant - Mittag Leffler Institute**, *Participation in the program "Hamiltonians in magnetic fields".*
- April-June 2011 **Erasmus mobility fellowship for PhD students**, *Université de Cergy-Pontoise.*
- 2008- 2012 **PhD Student Member of ANR BLAN 0261 (French National Research Agency)**,
Coordinators: F. Klopp and F. Germinet.
- 2008-2012 **Grant CONICYT for Doctoral Studies**, *Beca de Gestion Propia para Doctorado en el Extranjero, Comisión Nacional de Investigación Científica y Tecnológica, Chile.*
- 2006 **Awards “Universidad de La Serena” and “Facultad de Ciencias”**, *Universidad de La Serena, Chile.*
For graduating with honours.

Attendance to Schools and Colloquiums

- November 2011 **Colloquium GDR CHANT**, *Institut Joseph Fourier, Grenoble, France*, "Interactions EDPs/Probas : modèles probabilistes pour la simulation moléculaire".
- August 2011 **Summer School in Mathematical Physics**, *Erwin Schrödinger Institute, Austria*.
- July 2011 **Summer School on Graphs and Spectra**, *TU Chemnitz, Germany*.
- November 2010 **10ème Forum des Jeunes Mathématiciennes**, *CIRM-Marseille, Association Femmes and Mathématiques et CNRS, France*.
- July 2008 **Anderson Localization Transition: Introductory Training Course**, *Isaac Newton Institute, Cambridge, UK*.
- January 2004 **Summer School in Mathematical Physics**, *Universidad de La Serena, Chile*.

Membership: IAMP (International Association of Mathematical Physics).

Languages

Spanish **Native**

English **Fluent**

French **Fluent**

Greek **Beginner+**

German **Beginner**

Language courses at Maison de la Grèce (2010) and ENS (2009) Paris, France

Language courses at Universidad de La Serena, Chile and Deutschkurse bei der Universität München e.V., Germany