CURRICULUM VITAE OF GUILLAUME ROY-FORTIN

ACADEMIC POSITIONS

École de technologie supérieure, Montréal, Qc.

· Maître d'enseignement (Professor of Instruction) in mathematics

(2017-)

Northwestern University, Evanston, IL.

· Ralph Boas Assistant Professor of Mathematics (postdoctorate)

(2015-2017)

EDUCATION

Université de Montréal, Montréal, Qc.

· Ph.D. in pure mathematics.

(2010-2015)

Topic: Croissance et ensemble nodal de fonctions propres du laplacien sur des surfaces.

Received with exceptional mention, the highest possible distinction.

Supervisor: Iosif Polterovich.

· B.Sc. in mathematics.

(2008-2010)

Academic year 2009-2010 spent at Aarhus Universitet, Aarhus, Danemark.

Université de Sherbrooke, Sherbrooke, Qc.

· B.A. en Psychologie

(2001-2004)

Academic year 2002-2003 spent at Université Louis-Pasteur, Strasbourg, France.

College of Sainte-Foy, Québec City, Qc.

· D.E.C. (Technical Collegial Diploma) in Computer Science.

(1998-2001)

LANGUAGES

- · French, English, German, Spanish, Danish.
- · Basics of Russian, Finnish.

PUBLICATIONS

- · B. Georgiev, G. Roy-Fortin, Polynomial upper bounds on Steklov nodal sets. To appear in Journal of Spectral Theory, (2018).
- · G. Roy-Fortin, Average L^q growth and nodal sets of eigenfunctions of the Laplacian on surfaces, (2015) Submitted, arXiv:1510.02376.
- · C. Rousseau, G. Roy-Fortin, La géométrie intégrale, Accromath, 10.2, (2015), 14-19.
- · G. Roy-Fortin, *Nodal sets and growth exponents of Laplace eigenfunctions on surfaces*, Analysis & PDE, 8-1, (2015), 223-255.
- · G. Poliquin, G. Roy-Fortin, *Wolf-Keller Theorem for Neumann Eigenvalues*, Ann. Sci. Math. Québec, 36, (2012), 169-178.

AWARDS

Dean's List of Academic Excellence (Ph.D.)

(2016)

· Université de Montréal. Recognizes the top 10% of the year's finishing Ph.D. cohort.

Carl Herz Prize (2015)

- \cdot Given once a year for a major research contribution made by a doctoral student in mathematics.
- · Awarded by Institut des Sciences Mathématiques, a consortium of 9 higher learning institutions in the province of Quebec.

Excellence in Teaching Award

(2015)

- · Université de Montréal. Given once a year across the whole institution.
- · Category: Lecturer.

Serge Bissonnette Prize

(2014)

· Université de Montréal. Awarded once a year to a Ph.D. student in mathematics.

· Recognizes academic excellency, quality of research, leadership.

	Excellence in Teaching Award Université de Montréal. Given once a year across the whole institution. Category: Teaching Assistant.	(2013) on.	
	Dean's list of Academic Excellence (B.Sc.)	(2010)	
· Université de Montréal. Recognizes the top 10% of the year's finishing B.Sc. cohort.			
	Fédration Informatique du Québec Academic Excellence Award · Given to the highest academic average in the computer science depart	(2001) rtment.	
GRANTS AND SCHOLARSHIPS	· FRQNT Mobility Scholarship, Hebrew University Jerusalem	(2015)	
	· NSERC Alexander Graham-Bell CGS-D3 Scholarship	(2012-2015)	
	· FRQNT-D3 Scholarship (declined)	(2012)	
	· NSERC Alexander Graham-Bell CGS-M Scholarship	(2011)	
	· FESP/Université de Montréal Direct access to Ph.D. grant	(2010-2012)	
	· MELS/Quebec Government Mobility Grant	(2009-2010)	
	· Institut des Sciences Mathématiques Research Grant	(2009)	
	· MELS/Quebec Government Mobility Grant	(2002-2003)	
CONFERENCES AND WORKSHOPS	· Dirichlet-to-Neumann Maps: Spectral Theory, Inverse Problems and A	pplications CMO Oaxaca (2016)	
	· AMS Special Session on Geometric PDE	Loyola University, Chicago (2015)	
	· Workshop on Spectral Theory of Laplace and Schrödinger Operators	BIRS, Banff (2013)	
	· Workshop on Eigenvalues of Laplace Operator	Université de Neuchâtel (2013)	
	· EWS-IAMP Summer School on Quantum Chaos Erwin Schrödinger Institute, Vienna (2012)		
	CRM - Géométrie des valeurs propres et des fonctions propres Université de Montréal (2012)		
	· LMS-EPSRC Short Course on Spectral Analysis	University College, London (2011)	
	· NSF-CBMS Conference on Global Harmonic Analysis	University of Kentucky (2011)	
Referee	· Geometry and Topology		
ORGANIZATION	· Montreal Spectral Theory Seminar, Co-organizer with I. Polterovich an	nd D. Jakobson. (2014-2015)	
	· Colloque des étudiants de l'ISM, Organizing committee.	(2011)	
TALKS	· Summer Northwestern Analysis Program, (Mini course, Summer 2017))	
	· Geometric Analysis Seminar, Northwestern University (3 talks).		
	· Montreal Analysis Seminar, Université de Montréal (4 talks).		
	· Harmonic Analysis and Differential Equations Seminar, University of Illinois, Urbana-Champaign.		
	· AMS Special Session on Geometric PDE, Loyola University, Chicago.		
	· Colloque de l'Institut des Sciences Mathematiques, Plenary speaker, HEC, Montreal.		

· PDE and Applied Math Seminar, Technion, Haifa, Israel.

· Analysis Seminar, Northwestern University.

- · Geometry and Topology Seminar, Dartmouth College.
- · Séminaire d'analyse, Université Laval.
- · Séminaire des étudiants gradués, Université de Montréal (4 talks).
- · Workshop on Eigenvalues of Laplace Operator, Université de Neuchâtel.

EMPLOYMENT IN

OZ Communications / NOKIA, Montreal, Qc.

(2006-2008)

COMPUTER SCIENCE

· Programmer (C, C++, Java, SQL), promoted to product lead.

Gameloft, Montreal, Qc.

(2005)

- · Programmer (C++, Java, J2ME) promoted to team lead after 5 months.
- · Managed a team of 15 programmers, led technical interviews.

TEACHING EXPERIENCE

Instructor, Northwestern University.

· MAT230 - Advanced Linear Algebra

(Fall 2016, Winter 2017)

· MAT224 - Integral Calculus of One-Variable Functions

(Winter 2016)

· MAT230 - Differential Calculus of Multivariable Functions

(Fall 2015, Fall 2016, Winter 2017)

Instructor, Université de Montréal.

· MAT1000 - Real Analysis I

(Summer 2015)

· MAT1400 - Multivariable Calculus I

(Winter 2013, Fall 2014)

· MAT1923 - Integral Calculus

(Winter 2014)

Teaching assistant, Université de Montréal.

· MAT2300 - Differential Geometry

(Fall 2011, 2012, 2013)

· MAT2466 - Fourier Analysis

(Fall 2011, 2012) (Winter 2010, 2013)

MAT1000 - Analysis IMAT2050 - Analysis II

(Winter 2011)

· MAT1410 - Multivariable Calculus II

(Winter 2012)

· MAT19XX - Various calculus courses

(2011-2014)

REFEREE · Geometry and Topology

ORGANIZATION

· Montreal Spectral Theory Seminar, Co-organizer with I. Polterovich and D. Jakobson.

· Colloque des étudiants de l'ISM, Organizing committee.

(2014-2015) (2011)

VOLUNTEER WORK

Senior Connections Evanston, Evanston, IL

(2016-2017)

 $\cdot\,$ One on one matching with a senior citizen on a weekly basis.

Centre Jeunesse Emploi Côte-des-Neiges, Montréal, Qc.

(Winter 2014)

· Weekly homework support to new immigrants teenagers.

Big Brothers and Big Sisters of Montréal, Montreal, Qc.

(2008-2009)

· Big brother for a teenager with integration difficulties in high school.

Radio Oxy-Jeunes, Dakar, Senegal.

(Spring 2004)

· Volunteer cultural journalist for a local radio station in the suburbs of Dakar.

· Implemented internet streaming for the radio to be listened worldwide.

Big Brothers and Big Sisters Sherbrooke, Qc.

(2003-2004)

 $\cdot\,$ Big brother for a boy with behaviour and attention problems in a primary school.

Centre Entraide le Relais, Strasbourg, France.

(2002-2003)

 $\cdot\,$ Social and integration work with immigrants recently arrived in France.