**STANLEY ALAMA**
**CURRICULUM VITAE**
*McMaster University, Dept. of Mathematics & Statistics*
*Hamilton, Ontario, L8S 4K1 Canada*
alama@mcmaster.ca

## PERSONAL:

Date of birth: 15 July, 1962.
Citizenship: USA. Permanent resident of Canada.

## EDUCATION:

Ph.D. (Mathematics) N.Y.U., Courant Inst. of Math. Sci., 1988.
M.S. (Mathematics) N.Y.U., Courant Inst. of Math. Sci., 1986.
B. S. (Applied Math.) Columbia University, 1984.

## POSITIONS:

McMaster University, Dept. of Mathematics and Statistics.
Professor, since 07/01.
Associate Professor, 7/95-6/2001.
Assistant Professor, 7/92-6/94.
Carnegie-Mellon Univ., Center for Nonlinear Analysis (Dept. of Mathematics.)
Postdoctoral fellow, 8/91-6/92.
University of Pennsylvania, Dept. of Mathematics.
Postdoctoral Lecturer, 7/89-6/91.
Brown University, Dept. of Applied Mathematics.
Visiting Scholar, 9/88-6/89.

## FIELD OF RESEARCH:

Partial Differential Equations, variational methods, nonlinear analysis, mathematical physics.

## RESEARCH GRANTS

NSERC (Canada) research grants:
2009-2014, $16,000/per annum
2004-2009, $25,000/per annum
2000-2004, $21,000/per annum
1999-2000, $18,400
1998-1999, $17,600
1996-1998, $16,000/per annum
1993-1996, $12,000/per annum.
SERB (McMaster University) grants: 1992-1993, $15,000.

## PUBLICATIONS:

Articles in peer-reviewed journals:

[**1**] S. Alama, L. Bronsard, A. Contreras, D. Pelinovsky, *Domain walls in the coupled Gross-Pitaevskii equations.* Accepted for publication in *Archive for Rational Mechanics and Analysis,* May 2014.

[**2**] S. Alama, Q. Gao, *Symmetric vortices for two-component Ginzburg–Landau systems.* Journal of Diff. Eq., **255** (2013), pp. 3564-3591.

[**3**] S. Alama, L. Bronsard, B. Galvo-Sousa, *Singular Limits for Thin Film Superconductors in Strong Magnetic Fields.* Asymptotic Analysis, **83**, no. 1-2, 127-156, May 2013. arXiv:1209.3696v1

[**4**] S. Alama, L. Bronsard, P. Mironescu, *On compound vortices in a two-component Ginzburg–Landau functional.* Indiana Univ. Math. J. **61** No. 5 (2012), 18611909.

[**5**] S. Alama, L. Bronsard, E. Sandier, *Minimizers of the Lawrence-Doniach Functional with Oblique Magnetic Fields.* Comm. Math. Phys. 310 (2012), no. 1, 237266.

[**6**] S. Alama, L. Bronsard, E. Sandier, *On the Lawrence–Doniach Model of Superconductivity: Magnetic Fields Parallel to the Axes.* J. Eur. Math. Soc. (JEMS) 14 (2012), no. 6, 18251857.

[**7**] S. Alama, L. Bronsard, V. Millot, *Gamma-convergence of 2D Ginzburg-Landau functionals with vortex concentration along curves.* J. Anal. Math. 114 (2011), 341391.

[**8**] S. Alama, L. Bronsard, B. Galvo-Sousa, *Thin film limits for Ginzburg–Landau with strong applied magnetic fields.* SIAM Jour. of Mathematical Analysis, 42 (2010), no. 1, pp. 97124.

[**9**] S. Alama, Q. Lu, *Compact support and dead cores for stationary degenerate diffusion equations.* J. Differential Equations 246 (2009) 32143240.

[**10**] S. Alama, L. Bronsard, E. Sandier, *Periodic Minimizers of the Anisotropic Ginzburg-Landau Model.* Calc. Var. Partial Differential Equations 36 (2009), no. 3, 399–417.

[**11**] S. Alama, L. Bronsard, P. Mironescu, *On the structure of fractional degree vortices in a spinor Ginzburg-Landau model.* Journal of Functional Analysis 256 (2009) 11181136.

[**12**] S. Alama, L. Bronsard, A.J. Montero, *Vortices for a rotating toroidal Bose–Einstein Condensate.* Arch. Rat. Mech. Anal. vol. 187 (2008), no. 3, pp. 481-522.

[**13**] S. Alama, L. Bronsard, E. Sandier, *On the shape of interlayer vortices in the Lawrence-Doniach model.* Trans. Amer. Math. Soc. 360 (2008), 1-34.

[**14**] S. Alama, L. Bronsard, *Vortices and pinning effects for the Ginzburg-Landau model in multiply connected domains.* Comm. Pure Appl. Math. vol. 59 (2006), no. 1, 36-70.

[**15**] S. Alama, L. Bronsard, A.J. Montero, *On the Ginzburg-Landau model of a superconducting ball in a uniform field.* Ann. Inst. H. Poincaré Anal. Non Linéaire, vol. 23 (2006), no. 2, 237-267.

[**16**] S. Alama, L. Bronsard, *Fractional degree vortices for a spinor Ginzburg-Landau model.* Commun. Contemp. Math. vol. 8 (2006), no. 3, 355-380.

[**17**] S. Alama, L. Bronsard, *Pinning effects and their breakdown for a Ginzburg-Landau model with normal inclusions.* J. Math. Phys. vol 46 (2005), no. 9, 095102, 39 pp.

[**18**] A. Aftalion, S. Alama, L. Bronsard, *Giant vortex and the breakdown of strong pinning in a rotating Bose-Einstein Condensate.* Archive for Rational Mechanics and Analysis, Volume 178 (2005), Issue 2, pp.247-286.

[**19**] S. Alama, L. Bronsard, "Vortices and the lower critical field for a Ginzburg–Landau model with ferromagnetic interactions," Proc. Roy. Soc. Edinburgh, Sect. A, vol. 135 (2005), no. 2, 223–252.

[**20**] S. Alama, L. Bronsard, "On the second critical field for a Ginzburg–Landau model with ferromagnetic interactions," Rev. Math. Phys., vol. 16, No. 2 (2004), 147-174.

[**21**] S. Alama, L. Bronsard, "Des vortex fractionnaires pour un modèle Ginzburg–Landau spineur / Half Degree Vortices for a Spin–Coupled Ginzburg–Landau Model". C. R. Acad. Sci. Paris, série I, vol. 337 (2003), 243–247.

[**22**] S. Alama, A.J. Berlinsky, L. Bronsard, "Minimizers of the Lawrence–Doniach energy in the small-coupling limit: finite width samples in a parallel field". *Annales IHP-Analyse nonlinéaire*, vol. 19 (2002), 281–312.

[**23**] S. Alama, A.J. Berlinsky, L. Bronsard, "Periodic vortex lattices for the Lawrence–Doniach model of layered superconductors in a parallel field", *Commun. Contemp. Math.*, vol. 3 (2001), no. 3, 457–494.

[**24**] S. Alama, L. Bronsard, "Analysis of some macroscopic models of high–$T_c$ superconductivity." *CRM Proceedings and Lecture Notes*, AMS, vol. 27, pp.1–16, 2001.

[**25**] S. Alama, L. Bronsard, T. Giorgi, "Vortex Structures for an $SO(5)$ Model of High-$T_C$ Superconductivity and Antiferromagnetism". *Proc. Roy. Soc. Edin., ser. A.* Proc. Roy. Soc. Edinburgh Sect. A 130 (2000), no. 6, 1183–1215.

[**26**] S. Alama, J. Berlinsky, L. Bronsard, T. Giorgi, "Vortices with antiferromagnetic cores in the $SO(5)$ model of superconductivity", *Physical Review B*, vol. 60, no. 9, pp. 6901–6906, 1999.

[**27**] S. Alama, L. Bronsard, T. Giorgi, "Uniqueness of Symmetric Vortex Solutions in the Ginzburg–Landau Model of Superconductivity," *Journal of Functional Analysis*, vol. 167, pp. 399–424, 1999.

[**28**] S. Alama, "Semilinear elliptic equations with sublinear indefinite nonlinearities," *Advances in Differential Equations*, vol. 4, pp. 813–842, 1999.

[**29**] S. Alama, L. Bronsard, C. Gui, "Stationary layered solutions in $R^2$ for an Allen-Cahn system with multiple well potential," *Calculus of Variations and P.D.E.*, vol. 5, pp. 359-390, 1997.

[**30**] S. Alama, G. Tarantello, "An elliptic equation with nonlinearity indefinite in sign," *Journal of Functional Analysis*, vol. 141, pp. 159-215, 1996.

[**31**] S. Alama, M. Del Pino, "Solutions of Elliptic Equations with Indefinite Nonlinearities via Morse Theory and Linking," *Annales de l'Institut Henri Poincaré– Analyse nonlinéaire*, vol. 13, pp. 95-115, 1996.

[**32**] S. Alama, G. Tarantello, "On the solvability of a semilinear elliptic equation via an associated eigenvalue problem," *Mathematische Zeitschrift.* vol. 221, pp. 467-493, 1996.

[**33**] S. Alama, G. Tarantello, "Some remarks on $C^1$ versus $H^1$ minimizers", *C. R. Acad. Science Paris*, série I, tome 319, pp. 1165-1169, 1994.

[**34**] S. Alama, M. Avellaneda, P. Deift, R. Hempel,"On the existence of eigenvalues of a divergence form operator $A + \lambda B$ in a gap of $\sigma(B)$," *Asymptotic Analysis*, vol. 8, pp. 311-344, 1994.

[**35**] S. Alama, G. Tarantello, "On Semilinear Elliptic Equations with Indefinite Nonlinearities," *Calculus of Variations and P.D.E.*, 1, pp. 439-475, 1993.

[**36**] S. Alama, YanYan Li, "On 'Multibump' Bound States for Certain Semilinear Elliptic Equations," *Indiana U. Math. Jour.*, 41, pp. 983-1026, 1993.

[**37**] S. Alama, YanYan Li, "Existence of Solutions for Semilinear Elliptic Equations with Indefinite Linear Part," *Jour. of Diff. Eq.* 96, pp. 89-115, 1992.

[**38**] S. Alama, P. Deift, R. Hempel, "Eigenvalue Branches of the Schrödinger Operator $H - \lambda W$ in a Gap of $\sigma(H)$," *Comm. Math. Phys.* 121, pp. 291-321, 1989.

**Preprints submitted for publication in refereed journals:**

[**39**] S. Alama, Q. Gao, *Stability of symmetric vortices for two-component Ginzburg–Landau systems.* Submitted to *Journal of Functional Analysis*, August 2013.

**Books edited**

[**40**] Alama, Stan; Bronsard, Lia; Sternberg, Peter, (ed.), "Singularities in PDE and the Calculus of Variations", CRM Proceedings and Lecture Notes, vol. 44. American Mathematical Society: Providence, 2008.

**Papers in Refereed Conference Proceedings**

[**41**] S. Alama, L. Bronsard, *Symmetric Vortex solutions in the U(1) and SO(5) Ginzburg-Landau Models of Superconductivity,* in Nonlinear PDEs in Condensed Matter and Reactive Flows, H. Berestycki and Y. Pomeau (eds.), pp. 323–337, Kluwer Academic Publishers, 2002.

**PRESENTATIONS:**

**Conferences, 1992-2013:**

• Minisymposium on "The Ginzburg–Landau Model and Related Topics", SIAM Conference on Mathematical Aspects of Materials Science, Philadelphia, PA, June 9-12, 2013.

• Special Session on "Elliptic Systems and Their Applications", AMS Western Sectional Meeting; Boulder, CO; April 13-14, 2013.

• "Analysis of PDEs for Condensed Matter Systems." Invited talk in the Minisymposium at the 7th International Congress on Industrial and Applied Mathematics (ICIAM), Vancouver BC, July 18-22, 2011.

• "Superconductivity, Bose-Einstein Condensation and Liquid Crystals." Invited talk at the conference at Aarhus University, Denmark, June 29-July, 2011.

• "Differential and topological problems in modern theoretical physics." Workshop at SISSA, Trieste, Italy, April 26-30, 2010. Invited plenary lecture.

• "Singularities in the Calculus of Variations and PDE", minisymposium in the SIAM Conference on Partial Differential Equations, Miami, December 7-10, 2009.

• "Asymptotic analysis in the calculus of variations and PDEs", workshop at PIMS, Vancouver, July 6-10, 2009.

• "Variational and Numerical Methods in Geometry, Physics and Chemistry," workshop at the *Second congrès Canada–France des sciences mathèmatiques,* Montreal, June 1–6, 2008.

• "Ginzburg–Landau Theory and Related Topics" minisymposium at the SIAM Conference on Analysis of Partial Differential Equations, Dec 10-12, 2007, in Mesa, AZ.

• "Critical Behavior of Superconducting Systems" minisymposium at the SIAM Conference on Analysis of Partial Differential Equations, Dec 10-12, 2007, in Mesa, AZ.

• "Variational and Topological Methods: Theory, Applications, Numerical Simulations, and Open Problems," May 23-27, 2007, at the University of Northern Arizona, Flagstaff AZ.

• "Workshop on Analysis and its Applications," University of Athens, Greece, June 18, 2007.

• "Loss of compactness in nonlinear PDE: Recent trends," workshop at BIRS, Banff AB, August 26–31, 2007.

• "Mathematical Aspects of Continuum Physics: Analysis, Computation, and Modelling," special session at the Canadian Math Society 2006 Winter Meeting, December 9-11, 2006, in Toronto.

• "Superconductivity, Ginzburg-Landau Theory, and Related Topics," minisymposium at the SIAM Conference on Analysis of Partial Differential Equations, July 10-12, 2006, in Boston MA.

• "Nonlinear PDE," special session at the Sixth International Conference on Dynamical System, Differential Equations and Applications, June 25-28, 2006, in Poitiers, France.

• "Conference on Differential Equations and Computational Simulations", Miss State Univ, May 13-14, 2005. Invited talk in the Special Session in honor of Louis Nirenberg.

• "Conference on Topological and variational methods in partial differential equations," December 5-9, 2005, Guanajuato, Mexico. Invited talk.

• "Singularities in Materials", workshop at the IMA, Minneapolis (MN), October 25-29, 2004.

• "Premier congrès Canada–France des sciences mathèmatiques," Toulouse (France), July 12-16, 2004. In the Special session on Partial Differential Equations.

• SIAM Meeting on the Mathematics of Materials Science, Los Angeles (CA), May 22–26, 2004. In the Mini-symposium on "Ginzburg–Landau equations".

• "New developments on variational methods and their applications." Workshop at BIRS, Banff (Alberta), May 16-20, 2004.

• "Variational Methods and the Nonlinear Schrödinger Equation", workshop at the Bernoulli Center, Lausanne, Switzerland. Feb. 9–13, 2004.

• SIAM Annual Meeting, in the Mini-symposium, "Superconductivity, Ginzburg-Landau theory and related topics." Philadelphia, PA, July 8-12, 2002.

• PIMS Thematic Programme in Nonlinear Partial Differential Equations, in the workshop "Concentration Phenomena". Pacific Institute for Mathematical Sciences, UBC, Vancouver, 19-28 July, 2001.

• "Singular Variational Problems", workshop at the Isaac Newton Institute for Mathematical Sciences, University of Cambridge, UK, 25–30 June, 2001.

• "Partial Differential Equations in Mathematical Physics", workshop at the Fields Institute, Univ. of Toronto, 16–21 April, 2001.

• "Midwest PDE conference", principal speaker, Indiana U., Bloomington, USA, 7-8 April, 2001.

• "Singularities in Ginzburg–Landau systems", workshop at the Leiden Center, University of Leiden, Netherlands, 27 March–6 April, 2000.

• Workshop on "Dynamiques non linéaires et les groupes de renormalisation", Centre de Recherche Mathématique, Montréal. 22–27 August, 1999.

• "Edmonton Workshop on Methods of Nonlinear Analysis," Edmonton, Alta., 16–20 August, 1999.

• "PDE's in models of superfluidity, superconductivity and reactive flows," NATO Advanced Study Institute, Institut d'Etudes Scientifiques de Cargèse, Corsica, 21 June–2 July, 1999.

• "Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory". Athens, GA. 12–15 April, 1999. In the special session on "Nonlinear Dispersive Waves."

• "Topological and Variational Methods in Nonlinear Analysis." Cuernavaca, Mexico. 21–27 February, 1999.

• Winter Meeting, Societé Mathématique du Canada, Victoria BC, 14-17 December, 1997. In the special section on Partial Differential Equations.

• "International Conference on Differential Equations and Dynamical Systems," Waterloo ON, 1-4 August, 1997. In the special section, "Nonlinear elliptic equations."

• "Nonlinear eigenvalue problems," Oberwolfach, Germany, 15-21 December, 1996.

• AMS Meeting (#915), Chattanooga, TN, 10-12 October, 1996. In the special section on "Nonlinear Partial Differential Equations."

• "Conference on Dynamical Systems and Differential Equations", Southwest Missouri State University, 29 May-1 June, 1996. In the special section, "Nonlinear Elliptic Equations."

• AMS Meeting (#892), Brooklyn, NY, 8-10 April, 1994. In the special section on "Partial Differential equations."

• Joint Mathematics Meetings AMS-CMS-MAA, Vancouver BC, 15-19 August, 1993. In the special section on "Variational Methods in Partial Differential Equations."

• "Conference on Differential Equations", Ohio Univ., Athens OH, 2-7 August, 1993.

• "Differential Equations & Computer Simulations", Mississippi State, MS, 19-20 March, 1993.

• "Evolution Equations", Baton Rouge LA, 7-10 January, 1993.

• "International Congress on Nonlinear Analysis: Variational and Topological Methods." Xalapa, Mexico, 30 August- 5 September, 1992.

• Workshop on "Nonlinear Problems with Critical Growth". Center for Nonlinear Analysis, Carnegie-Mellon Univ., Pittsburgh PA, 20 April, 1992.

• "International Conference on Differential Equations and Mathematical Physics." Georgia Inst. of Tech., Atlanta, Ga., 22-28 March, 1992.

**Conference organization.** I have been co-organizer of the following workshops and sessions at conferences:

• "Singularities in the Calculus of Variations and PDE", minisymposium in the SIAM Conference on Partial Differential Equations, Miami, December 7-10, 2009. (Co-organized with L. Bronsard.)

• "Singular Perturbations and the Ginzburg-Landau Model," CAIMS minisymposium at the *Second congrès Canada–France des sciences mathèmatiques,* Montreal, June 1–6, 2008. (Co-organized with L. Bronsard.)

• "Singularities in PDE and the Calculus of Variations," workshop at CRM, Montral, July 17-21, 2006. (Co-organized with L. Bronsard, P. Sternberg.)

• "Calculus of Variations: Geometrical Problems, Superconductivity, and Material Microstructures", workshop at the Fields Institute, August 24–29, 2003, as part of the focus year in Partial Differential Equations. (Co-organized with L. Bronsard, R. Choksi, R. Jerrard, R. McCann.)

• "Workshop on the Mathematics of Superconductivity", Brockhouse Insitute of Materials Research, McMaster University. (co-organized with L. Bronsard.) Sept. 13, 1997.

**INVITATIONS for longer–term visits:**

• Université Denis Diderot-Paris 7, Sept.-Dec. 2012.
• Université de Paris VI, Laboratoire J.-L. Lions, Jan.–July, 2010.
• INdAM (Italy) invited Visiting Research Professor, at Univ. di Roma 2, Univ. di Napoli Federico II, April 10–24, 2006.
• Université de Paris VI, Laboratoire J.-L. Lions, Jan.–July, 2006.
• Université de Paris VI, Laboratoire J.-L. Lions, Jan.–July, 2003.
• Courant Institute (NYU), Sept.–Dec. 1999.
• Ecole Normal Superieure, Cachan (France), January–June 2000.
• Université Claude-Bernard Lyon I, August 1998.
• Institute for Mathematics and its Applications (Univ. of Minnesota) August–December 1995.
• U.N.A.M. (Mexico City) June 1994.
• Univ. di Roma "Tor Vergata" May 1994 and June 1993.

**Invited Seminars**

RWTH-Aachen University, Aachen, Germany, July 16, 2013; Institut Henri Poincare/Univ. Pierre et Marie Curie (Paris 6), Nov. 27, 2012. Universite Paris 11-Oray, Dec. 13, 2012. George Washington University (2009), Guelph University (2009), Univ. Roma-II, Italy (2006), Univ. Napoli, Italy (2006), Université de Franche-Comté, France (2006), Univ. Sophia-Antipolis, Nice (France) (2003), Laboratoire J.-L. Lions (Univ. Paris-6) (2003), Univ. of Toronto (1996, 1999, 2002), Université de Paris XII (2001), Univ. de Tours (2000), ENS-Cachan (2000), Univ. di Roma "Tor Vergata" (1993, 1994, 2000), Brown Univ. (1999), Rutgers Univ. (1999), Courant Institute (1999), Univ. of British Columbia (1994, 1999), Univ. Catolica de Chile (1997), Univ. of Colorado at Boulder (1997), Polytechnic University–Brooklyn (1997), Universitat Bonn, SFB- 256 (1996), Univ. of Wisconsin–Madison (1995), Purdue Univ.(1995), Univ. of Minnesota (1993,1995), Univ. Autonoma Nacional de Mexico (1994, 1996), Univ. de Padova (1994), York Univ. (1993), Carnegie-Mellon Univ. (1992), Univ. Mainz (Germany) (1991), Univ. Cologne (Germany) (1991), Indiana Univ. (1991), Univ. de Montréal (1990), U. Q. A. M. (1990), Columbia Univ. (1990), McMaster (1990), Georgia Tech. (1988).

**HONORS:**

- McMaster Student Union, Teaching Award, Faculty of Science, 2005.
- Nomination for a teaching award, McMaster Student Union: 1992-93, 1993-94, 1995-96 and 1998-99.
- "Good Teaching Awards", Dept. of Mathematics, University of Pennsylvania: 1989-90, 1990-91.
- National Science Foundation (U.S.) Graduate Fellowship, 1984-87.

**STUDENT SUPERVISION**

- Cong Zhou, PhD 2013-2017 (projected). Co-supervised with L. Bronsard.
- Tyler Meadows, MSc 2013-2015 (projected). Thesis option.
- Qi Gao, PhD 2009-2013. Thesis on two-component Ginzburg-Landau models.
- Ben Goodman, MSc 2012-13. Project on vortices in two-component Ginzburg-Landau models.
- Ben Goodman, USRA 2012. Simulation of vortices in the Ginzburg-Landau model. Co-supervised with L. Bronsard
- Adam Gerlings, USRA 2012. Variational problems in cell biology. Co-supervised with L. Bronsard
- Bilal Abbasi, BSc summer project 2012. Geometrical problems in cell biology. Co-supervised with L. Bronsard.
- Chi Zhang, MSc 2010-2011. Project on heteroclinic solutions to nonlinear pendulum equations.

• Alexandra Terrana, USRA 2011. Project on the Calculus of Variations and Differential Game Theory.

• Quiping Lu, PhD 2004–2008, McMaster U. Thesis: "Compact support and dead cores for stationary degenerate diffusions".

• Qi Gao, MSc 2007-08. Project on Ginzburg–Landau models with prescribed degree boundary conditions.

• Jeff Mesaric, MSc 2002-03, McMaster University. Masters thesis on vortices in a rotating superfluid.

• Silogini Somasundaram, MSc 2001-02, McMaster University. Masters thesis on Lotka–Volterra systems with diffusion.

**SUPERVISION OF POSTDOCS**

• Andrés Contreras 2012-2014 (Co-supported with L. Bronsard.) Vortices in the Ginzburg-Landau model.
• Bernardo Galvão Sousa 2008-2011 (Co-supported with L. Bronsard.) Gamma-convergence questions for thin-film superconductors.
• José Alberto Montero 2003-05 (Co-supported with L. Bronsard.) We are working on three-dimensional Ginzburg–Landau models. Produced papers [12, 15].
• Seong-A Shim 2001-03 (Co-supported with L. Bronsard) Worked on a problem of vortex dynamics.
• Xuefeng Wang 1998-2000 (Co-supported with L. Bronsard) Discussed problems in phase transitions.
• Tiziana Giorgi 1997-1999 (Co-supported with L. Bronsard) Produced papers [25,26,27].
• C. Gui 1993-1995. (Co-supported with L. Bronsard) Produced a paper [29].

**SUPERVISORY COMMITTEE for masters and doctoral students:**

A. Sakovich (2009-present), X. Fu (2008-2011), S. Alzaid (2009-present), F. Su (2007-2010), Z. Yan (2004-2007), S. Rodney (2002-2007), M.S. Noor (2003-2008), S. Stoyan (2002-2004), D. Hender (1998-2000), R. Smith (1997-2001), D. Rusu (1995-1997), C.S. Chen (1993-1996).
*Master thesis examination committees:*
S. Alzaid (2011), A. Sakovich (2008-09), I. Kowalik (2006-2008), J. Bowen (1997-99), R. Smith (1996-97), R. Stamicar (1993).

*Written comprehensive exam committees.:*
Analysis: 2000-01, 1998-99 , 1997-98, 1994-95.
Applied Math: 2002, 1997-98, 1996-97, 1994-95.
Preliminary Exams: 2005, 2007, 2008, 2009, 2010, 2011

*Undergraduate research project:*
Autumn 1996: Reading project on chaotic dynamical systems for R. Austin, D. Urminsky et B. Zimmer.

**ADMINISTRATIVE RESPONSIBILITIES**

• Graduate Advisor (Math), 2001-02. I administered the mathematics graduate program. My responsibilities included recruitment, selection, and finding funding for masters and doctoral students in mathematics, and advising students who do not already have a thesis advisor. Under my direction the department recruited its largest and most talented entering class in over 15 years.

McMaster University, Department of Mathematics & Statistics:
Departmental committees:

2010-2011-2012: Undergraduate curriculum committee
2008-2009: Liason committee.
2006-2007: Graduate committee.
2004-2005: Graduate committee.
2003-2004: Graduate committee.
2001-2002: Graduate committee (chair).
2000-2001: Undergraduate curriculum committee.
1998-99: Graduate Admissions committee; Liason committee; Colloquium chair; Co-organizer of Analysis Seminar.
1997-98: Appointments committee; Undergraduate Curriculum committee; Colloquium chair; Co-organizer of Analysis Seminar.
1996-97: Undergraduate Curriculm committee; Graduate Curriculum committee; Co-organizer of Analysis Seminar.
1994-95: Graduate Curriculum committee; Co-organizer of Applied Analysis Seminar.
1993-94: Graduate Curriculum committee; Co-organizer of Applied Analysis Seminar.

I have been co-organizer of the PDE/Analysis Seminar since 2003.

**Languages:**

My native tongue is English. I speak, read, and write fluently in French. I can converse in and read some Italian and Spanish.