Curriculum Vitae

Eduardo Cerpa

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Contents

1 Personal Data

Name	Eduardo Cerpa
Born	October 23, 1979. Santiago, Chile
Nationality	Chilean
Address	Avda. Vicuña Mackenna 3939, San Joaquín, Santiago, Chile
Email	eduardo.cerpa@usm.cl
Website	http://ecerpa.mat.utfsm.cl/

2 Academic Positions

Since 2016	Associate Professor, Dep. Mathematics, Universidad Técnica Federico Santa María, Chile.
2012–2015	Assistant Professor, Dep. Mathematics, UTFSM, Chile.
2009–2011	Research and teaching position, Dep. Mathematics, UTFSM, Chile.
2008/2009	Postdoc with Miroslav Krstic, Dep. Mechanical and Aerospace Engineering, UCSD, USA.
2007/2008	Research and teaching position (ATER), Dep. Mathematics, Université Paris-Sud, France.

3 Education

2005–2008	PhD in Mathematics. Advisor: Jean-Michel Coron. Université Paris-Sud, France.
2004/2005	Master in Numerical Analysis and PDE, Université Pierre et Marie Curie, France.
1998–2004	Mathematical Engineering, Universidad de Chile, Chile.

4 Awards and Fellowships

2015	*SIAM Activity Group on Control and Systems Theory Prize.*
'12, '13, '14	*Maestro Destacado* (outstanding lecturer), UTFSM.
2004–2008	*Graduate Scholarship*, Conicyt (Chile) and French Government.
2003	*Fundación Andes* Scholarship. 3-month Internship at Pôle Scientifique Dassault-Aviation.
'98, '99, '03	*Alumno Destacado* (outstanding undergraduate student), Universidad de Chile.

5 Scientific Community Service

Since 2018	Associate Editor for Systems and Control Letters.
Since 2018	Associate Editor for Boletim da Sociedade Paranaense de Matemática.
Since 2017	Associate Editor for IEEE Transactions on Automatic Control.
2017 – 2018	Coordinator of the Mathematical Sciences Committee for Graduate Fellowships, Conicyt.
2017	Member of Selection Committee, SIAM SIAG Control and Systems Theory Prize.
2014 – 2016	Reviewer for Graduate Fellowships, Conicyt.
Since 2014	Member of the Conference Editorial Board of the IEEE Control Systems Society. Associate Editor for American Control Conference and IEEE Conference on Decision and Control.
Since 2010	Reviewer for MathReviews (MathScinet).
Since 2009	Referee for *American Control Conference*, *IEEE Conference on Decision and Control*, and *IFAC Symposium on Nonlinear Control Systems*.
Since 2008	Referee for the following journals: SIAM Journal on Control and Optimization, Automatica, IEEE Transactions on Automatic Control, Systems and Control Letters, ESAIM Control Optimisation and Calculus of Variations, Mathematical Control and Related Fields, Mathematics of Control Signals and Systems, International Journal on Robust and Nonlinear Control, International Journal of Control, IMA Journal of Mathematical Control and Information, Journal of Dynamical and Control Systems, International Journal of Systems Science, Annals de IHP Analyse non linéaire, Journal of Functional Analysis, Journal of Differential Equations, Nonlinearity, Journal of Optimization Theory and Applications, Acta Applicandae Mathematicae, Applicable Analysis, Mathematical Methods in the Applied Sciences, Journal of Mathematical Analysis and Applications, Archiv der Mathematik, ZAMP, Discrete and Continuous Dynamical Systems Series B, Nonlinear Analysis Real World Application, Applied Mathematics & Optimization, S$\vec{e}$MA journal.

6 University Service

Since 2017	Responsible of Department of Mathematics in Campus Santiago, UTFSM.
2014–2016	Responsible of Mathematical Engineering, CS, UTFSM.
2015–2016	Member of *Comisión Universitaria*, CS, UTFSM.
2015	Member of Hiring Committees for D. of Physics and D. of Mathematics, CS, UTFSM.
2011–2013	Responsible of teaching activities at Math Department, CS, UTFSM.
2009–2010	Responsible of the Seminar at Math Department, UTFSM.

7 Teaching Experience

2018/2 CS	*Real Analysis*. UTFSM.
2018/1 CS	*Differential Calculus*. Coordinator and lecturer, UTFSM.
2017/2 CS	*Real Analysis*. UTFSM.
2017/2 CS	*Integral Calculus*. UTFSM.
2017/1 CS	*Ordinary Differential Equations*. Coordinator and lecturer, UTFSM.
2016/2 CS	*Complex Variables*. UTFSM.
2016/1 CS	*Linear Algebra*. UTFSM.
2016/1 CC	*PDE Control*. UTFSM.
2015/2 CS	*Integral Calculus*. UTFSM.
2015/1 CS	*Ordinary Differential Equations*. UTFSM.
2015/1 CS	*Introduction to Mathematical Engineering*. UTFSM.
2014/1 CC	*PDE Control*. UTFSM.
2014/1 CC	*Calculus of Variations and Optimal Control*. UTFSM.
2014/1 CS	*Differential Calculus*. UTFSM.
2014/1 CS	*Introduction to Mathematical Engineering*. UTFSM.
2013/2 CS	*Integral Calculus*. Coordinator and lecturer, UTFSM.
2013/1 CS	*Ordinary Differential Equations*. UTFSM.
2013/1 CS	*Differential Calculus*. UTFSM.
2012/2 CS	*Vector Calculus*. UTFSM.
2012/1 CC	*Calculus of Variations and Optimal Control*. UTFSM.
2012/1 CS	*Differential Calculus*. UTFSM.
2011/2 CC	*PDE Control*. UTFSM.
2011/1 CS	*Differential Calculus*. UTFSM.
2011/1 CS	*Linear Algebra*. UTFSM.
2010/2 CC	*Control of ODE*. UTFSM.
2010/2 CC	*Functional Analysis*. UTFSM.
2009/2 CC	*Control of ODE*. UTFSM.
2009/1 CC	*Vector Calculus, MAT024*. UTFSM.
2007/2008	*Geometry*. Université Paris-Sud, Francia.
2000–2003	Teaching Assistant in *PDE's, Numerical Analysis, Multivariable Calculus, Calculus, Applied Mathematics* and *Linear Algebra*. Universidad de Chile.

8 Students and Postdocs

Graduate students

Since 2017	Esteban Hernández, PhD in Mathematics, UTFSM.
Since 2016	Claudia Moreno, PhD in Mathematics, UTFSM.
Aug 2017	Patricio Guzmán, PhD in Mathematics, UTFSM. Thesis: Contribution to the control of high-order partial differential equations.
Mar 2017	Esteban Hernández, Master in Mathematics, UTFSM. Thesis: Adaptive control for a parabolic model of batteries.
Aug 2016	Nicolás Molina, Master in Mathematics, U. de Chile. Thesis: On some controllability problems for Saint-Venant equations. Co-direction with Axel Osses.
Aug 2012	Patricio Guzmán, Master in Mathematics, UTFSM. Thesis: Analysis and control of the Kuramoto-Sivashinsky equation. Co-direction with Alberto Mercado.

Undergraduate students

May 2015	Esteban Hernández, Mathematical Engineering, UTFSM. Thesis: Adaptive control of bio-process associated to microalgae models. Co-direction with Francis Mairet.
Nov 2013	Esteban Paduro, Master in Mathematics and Mathematical Engineering, UTFSM. Thesis: Approximate controllability for the Two-Trapped ions system. Co-direction with Alberto Mercado.
Dec 2011	Patricio Guzmán, Mathematical Engineering, UTFSM. Thesis: Lipschitz stability for some inverse problems for the Kuramoto-Sivashinsky equation. Co-direction with Alberto Mercado.

Evaluation Committees

Aug 2018	Gina Sierra, PhD in Electrical Engineering, U. de Chile. Advisor: M. Orchard.
Aug 2018	Christophe Roman, PhD in Automatic Control, U. Grenoble. Advisors: D. Bresch-Pietri, C. Prieur, and O. Sename.
Mar 2018	Matías Benavides, Master in Electrical Engineering, U. de Chile. Advisor: M. Orchard.
Sep 2017	Diego Vicencio, Qualifying Exams, PhD in Mathematics, UTFSM. Advisor: P. Gajardo.
Sep 2017	Swann Marx, PhD in Automatic Control, U. Grenoble. Advisors: C. Prieur and V. Andrieu.
Jan 2017	Bojan Mavkov, PhD Automatic Control, U. Grenoble. Advisors: C. Prieur and E. Witrant.
Sep 2016	Alejandro Rojas-Palma, PhD in Mathematics, U. de Chile & U. de Montpellier. Advisors: H. Ramírez and A. Rapaport.
Jun 2015	Andrei Rodríguez, Qualifying Exams, PhD in Mathematics, UTFSM. Advisor: A. Quaas.
Jul 2014	Mauricio Cardoso Santos, PhD in Mathematics, Universidade Federal da Paraiba, Brasil. Advisors: F. Araruna y E. Fernández-Cara.
Aug 2012	Pammella Queiroz de Souza, Master in Mathematics, Universidade Federal da Paraiba, Brasil. Advisor: F. Araruna.
Aug 2012	Mauricio Cardoso Santos, Qualifying Exams, PhD in Mathematics, Universidade Federal da Paraiba, Brasil. Advisor: F. Araruna.
Aug 2012	Digeo Araujo de Souza, Qualifying Exams, PhD in Mathematics, Universidade Federal da Paraiba, Brasil. Advisor: F. Araruna.
Jun 2011	Omar Risco Pedraza, BS in Mathematics, UTFSM. Advisor: P. Gajardo.

Postdocs

Since 2018	Cristhian Montoya, funded by Postdoc Fondecyt No. 3180100.
2014–2016	Nicolás Carreño, funded by Postdoc Fondecyt No. 3150089.
2013–2016	Mamadou Gueye, funded by Postdoc Fondecyt No. 3140059.
2013–2014	Laurent Bakri, funded by Proyecto Basal CMM-U.de Chile.
2014	Ivonne Rivas, funded by Anillo ACT-1106.
2013	Thuy Nguyen, funded by Anillo ACT-1106.

Undergraduate research assistants

2018	Hugo Parada, student at UTFSM. Funded by Basal AC3E.
2014	Eduardo Nuñez, student at UTFSM. Funded by DGIIP and Basal AC3E.
2014	Swann Marx, student at Ecole Normale Supérieure Cachan (France). Funded by ENS.
2014	Daniel Quero, student at UTFSM. Funded by DGIIP.
2013	Esteban Paduro, student at UTFSM. Funded by DGIIP.
2012	Consuelo Moreno, student at UTFSM. Funded by DGIIP.
2011–2013	Esteban Hernández, student at UTFSM. Funded by DGIIP.

9 Publications

Journal papers

25. N. Carreño, E. Cerpa, A. Mercado, *Boundary controllability of a cascade system coupling fourth- and second-order parabolic equations*, submitted.
24. E. Cerpa, E. Crépeau, C. Moreno, *On the boundary controllability of the Korteweg-de Vries equation on a star-shaped network*, submitted.
23. E. Cerpa, I. Rivas, *On the controllability of the Boussinesq equation in low regularity*, Journal of Evolution Equations, Vol. 18, No. 3, 2018, pp. 1501-1519.
22. E. Cerpa, E. Crépeau, *On the control of the improved Boussinesq equation*, SIAM J. Control Optim., Vol. 56, No. 4, 2018, pp. 3021-3034.
21. C. Roman, D. Bresch-Pietri, E. Cerpa, C. Prieur and O. Sename, *Backstepping control of a wave PDE with unstable source terms and dynamic boundary*, IEEE Control Systems Letters, Vol. 2, No. 3, 2018, pp. 459-464.
20. S. Marx, E. Cerpa, *Output feedback stabilization of the Korteweg-de Vries equation*, Automatica, Vol. 87, 2018, pp. 210-217.
19. S. Marx, E. Cerpa, C. Prieur, V. Andrieu, *Global stabilization of a Korteweg-de Vries equation with saturating distributed control*, SIAM J. Control Optim., Vol. 55, 2017, pp. 1452-1480.
18. E. Cerpa, P. Guzmán, A. Mercado, *On the control of the linear Kuramoto-Sivashinsky equation*, ESAIM Control Optim. Calc. Var., Vol. 23, No. 1, 2017, pp. 165-194.
17. B. Calsavara, N. Carreño, E. Cerpa, *Insensitizing controls for a phase field system*, Nonlinear Anal., Vol. 143, 2016, pp. 120-137.
16. N. Carreño, E. Cerpa, *Local controllability of the stabilized Kuramoto-Sivashinsky system by a single control acting on the heat equation*, J. Math. Pures Appl., Vol. 106, No. 4, 2016, pp. 670-694.
15. F. Araruna, E. Cerpa, A. Mercado, M. Santos, *Internal null controllability of a linear Schrodinger-KdV system on a bounded interval*, J. Differential Equations, Vol. 260, No. 1, 2016, pp. 653-687.
14. E. Cerpa, A. Mercado, A. Pazoto, *Null controllability of the stabilized Kuramoto-Sivashinsky system with one distributed control*, SIAM J. Control Optim., Vol. 53, No. 3, 2015, pp. 1543-1568.
13. L. Baudouin, E. Cerpa, E. Crépeau, A. Mercado, *On the determination of the principal coefficient from boundary measurements in a KdV equation*, J. Inverse Ill-Posed Probl., Vol. 22, No. 6, 2014, pp. 819-846.
12. E. Cerpa, *Control of a Korteweg-de Vries equation: a tutorial*, Math. Control Relat. Fields, Vol. 4, No. 1, 2014, pp. 45-99.
11. E. Cerpa, I. Rivas, B.-Y. Zhang, *Boundary controllability of the Korteweg-de Vries equation on a bounded domain*, SIAM J. Control Optim., Vol. 51, No. 4, 2013, pp. 2976-3010.
10. E. Cerpa, J.-M. Coron, *Rapid stabilization for a Korteweg-de Vries equation from the left Dirichlet boundary condition*, IEEE Trans. Automat. Control, Vol. 58, No. 7, 2013, pp. 1688-1695.
9. L. Baudouin, E. Cerpa, E. Crépeau, A. Mercado, *Lipschitz stability in an inverse problem for the Kuramoto-Sivashinsky equation*, Appl. Anal., Vol. 92, No. 10, 2013, pp. 2084-2102.
8. E. Cerpa, A. Mercado, A. Pazoto, *On the boundary control of a parabolic system coupling KS-KdV and Heat equations*, Scientia Series A: Math. Sciences, Vol. 22, 2012, pp. 55-74.
7. E. Cerpa, A. Pazoto, *A note on the paper "On the controllability of a coupled system of two Korteweg-de Vries equations"*, Comm. Contemp. Math., Vol. 13, 2011, pp. 183-189.
6. E. Cerpa, A. Mercado, *Local exact controllability to the trajectories of the 1-D Kuramoto-Sivashinsky equation*, J. Differential Equations, Vol. 250, No. 4, 2011, pp. 2024-2044.
5. A. Smyshlyaev, E. Cerpa, M. Krstic, *Boundary stabilization of a 1-D wave equation with in-domain anti-damping*, SIAM J. Control Optim., Vol. 48, 2010, pp. 4014-4031.
4. E. Cerpa, *Null controllability and stabilization of a linear Kuramoto-Sivashinsky equation*, Commun. Pure Appl. Anal., Vol. 9, No. 1, 2010, pp. 91-102.
3. E. Cerpa, E. Crépeau, *Rapid exponential stabilization for a linear Korteweg-de Vries equation*, Discrete Contin. Dyn. Syst. Ser. B, Vol. 11, No. 3, 2009, pp. 655-668.
2. E. Cerpa, E. Crépeau, *Boundary controllability for the nonlinear Korteweg-de Vries equation on any critical domain*, Ann. Inst. H. Poincaré Anal. Non Linéaire, Vol. 26, No. 2, 2009, pp. 457-475.
1. E. Cerpa, *Exact controllability of a nonlinear Korteweg-de Vries equation on a critical spatial domain*, SIAM J. Control Optim., Vol. 46, No. 3, 2007, pp. 877-899.

Conference papers and others

10. C. Roman, D. Bresch-Pietri, E. Cerpa, C. Prieur and O. Sename, *Backstepping control of a wave PDE with unstable source terms and dynamic boundary*, IEEE Conf. on Decision and Control, Miami, 2018.
9. E. Cerpa and C. Prieur, *Effect of time scales on stability of coupled systems involving the wave equation*, IEEE Conference on Decision and Control, Melbourne, 2017.
8. C. Roman, D. Bresch-Pietri, E. Cerpa, C. Prieur and O. Sename, *Backstepping Observer Based-Control for an Anti-Damped Boundary Wave PDE in Presence of In-Domain Viscous Damping*, IEEE Conference on Decision and Control, Las Vegas, 2016.
7. S. Marx, E. Cerpa, C. Prieur, V. Andrieu, *Global stabilization of a Korteweg-de Vries equation with a distributed control saturated in L^2-norm*, IFAC Symposium for Nonlinear Control, Monterey, 2016.
6. E. Cerpa, *Boundary control of Korteweg-de Vries and Kuramoto-Sivashinsky PDEs*, Encyclopedia of Systems and Control, edited by Tariq Samad and John Baillieul, Springer-Verlag London, 2015.
5. S. Marx, E. Cerpa, C. Prieur, V. Andrieu, *Stabilization of a linear Korteweg-de Vries equation with a saturated internal control*, European Control Conference, Linz, 2015.
4. S. Marx, E. Cerpa, *Output Feedback Control of the Linear Korteweg-de Vries Equation*, IEEE Conference on Decision and Control, Los Angeles, 2014.
3. A. Smyshlyaev, E. Cerpa, M. Krstic, *Boundary stabilization of an anti-stable wave equation with in-domain anti-damping*, IEEE Conference on Decision and Control, Shanghai, 2009.
2. E. Crépeau, E. Cerpa, *Rapid stabilization of a linear Korteweg de Vries equation*, IFAC Workshop on Control of Distributed Parameter Systems, Toulouse, 2009.
1. E. Crépeau, E. Cerpa, *Controllability of the nonlinear Korteweg-de Vries equation for critical spatial lengths*, IFAC Workshop on Control of Distributed Parameter Systems, Namur, 2007.

10 Organization/Committees for Workshops/Schools

Sep 2019	Encuentro Conjunto Somachi-UMA, Mendoza, Argentina.
May 2019	IFAC Workshop on Control of Systems Governed by PDE, Oaxaca, Mexico.
Dec 2018	Workshop on Inverse and control problems for physical systems, Valparaíso, Chile.
May 2018	IFAC Workshop on Lagrangian and Hamiltonian Methods for Nonlinear Control, Chile.
Jan 2018	Mini-Workshop on Control and Inverse Problems of PDEs, Valparaíso, Chile.
Jul 2017	Parallel Session, Mathematical Congress of the Americas, Montreal, Canada.
Jul 2017	SIAM Conference on Control and Its Applications, Pittsburgh, USA.
Jun 2016	Nonlinear Partial Differential Equations and Applications. A conference in the honor of Jean-Michel Coron for his 60th birthday, Paris, France.
Jan 2016	Mini-Workshop on Control and Inverse Problems of PDEs, Valparaíso, Chile.
Jan 2015	Workshop on Control Systems and Identification Problems, Valparaíso, Chile.
Dec 2014	Parallel session "Problemas Inversos y Control de EDP", LXXXIII Encuentro SOMACHI, Quinamávida, Chile.
Oct 2014	School *3a Escuela de Verano en Matemática*, Valparaíso, Chile.
Oct 2014	Spring School: *Modelling and control of complex physical systems*, Valparaíso, Chile.
Nov 2013	School *Escuela de Control y Optimización*, Quito, Ecuador.
Nov 2013	School *2a Escuela de Verano en Matemática*, Valparaíso, Chile.
Jan 2012	School *PASI - Inverse Problems and PDE Control*, Santiago, Chile.
Jan 2012	3rd LAWOC, *Latin American Workshop on Optimization and Control*, Valparaíso, Chile.
Jan 2010	School *CIMPA Summer School on Inverse Problems*, Santiago, Chile.
Jan 2010	*Workshop on Inverse Problems and Applications*, Valparaíso, Chile.
Dec 2006	Workshop *Journée des doctorants en théorie du contrôle*, Université Paris Sud, Francia.

11 Research Talks / Seminars

Nov 2018	Invited speaker, GAFEVOL, Santiago, Chile.
Jul 2018	Parallel Session, COMCA, Antofagasta, Chile.
Aug 2017	Parallel Session, COMCA, Arica, Chile.
Jul 2017	Parallel Session, II Mathematical Congress of the Americas, Montreal, Canada.
Jun 2017	Colloquium, Universidad Austral, Valdivia, Chile.
April 2017	Control Theory Seminar, University of Waterloo, Waterloo, Canada.
Dec 2016	Plenary Talk, I Encuentro Conjunto, SOMACHI y UMA, Valparaíso, Chile.
Nov 2016	Invited speaker, GAFEVOL, Santiago, Chile.
Sep 2016	Colloquium, Departamento de Ingeniería Matemática, Universidad de Concepción, Chile.
Jul 2016	Parallel Session, UMALCA, Barranquilla, Colombia.
Ene 2016	Seminar, Departamento de Matemáticas, Universidad del Valle, Cali, Colombia.
Dec 2015	Invited Speaker, Escuela de Control y Optimización, Santiago, Chile.
Dec 2015	Parallel Session, SIAM Conference on Analysis of PDEs, Scottsdale, USA.
Nov 2015	Parallel Session, Encuentro SOMACHI, Pucón, Chile.
Oct 2015	Colloquium, Department of Applied Mathematics, University of Waterloo, Canada.
Oct 2015	Invited speaker, Semana de la Matemática, Valparaíso, Chile.
Aug 2015	Parallel Session, COMCA, Iquique, Chile.
Jul 2015	Plenary Talk, SIAM Conference on Control and its Applications, Paris, France.
Jun 2015	Seminar V-Coloquio, Pontificia Universidad Católica de Valparaíso, Chile.
May 2015	Seminar CAPDE, Universidad de Chile, Chile.
Dec 2014	Parallel Session, 53rd IEEE Conference on Decision and Control, Los Angeles, USA.
Jul 2014	Invited speaker, Encontro de controle de EDPs e aplicacoes, Joao Pessoa, Brazil.
Jul 2014	Parallel Session, 10th Conference AIMS, Madrid, Spain
Mar 2014	Invited speaker, Workshop Control of PDEs, Paris, France.
Nov 2013	Parallel Session, Encuentro SOMACHI, Olmué, Chile.
Aug 2013	Parallel Session Control and Stabilization of PDE, MCA2013, Guanajuato, México.
Jun 2013	Seminar, Departamento de Matemáticas, Universidad de Chile, Chile.
May 2013	Seminar, ModeMat, Escuela Politécnica Nacional de Quito, Ecuador.
Dec 2012	Invited speaker, GAFEVOL, Santiago, Chile.
Nov 2012	Invited speaker, Encuentro SOMACHI, Olmué, Chile.
Mar 2012	Colloquium, Departamento de Ingeniería Matemática, Universidad de Concepción, Chile.
Nov 2011	Invited speaker, Conference "Control of Partial Differential Equations", Marsella, France.
Sep 2011	Seminar, *Control Theory Group*, Université Pierre et Marie Curie, Paris, France.
Sep 2011	Invited speaker, Workshop Control of dispersive equations, Maringa, Brazil.
Apr 2011	Parallel Session EDP, Jornadas de la Zona Sur, Pucón, Chile.
Feb 2011	Seminar, Departamento de Ecuaciones Dif. y An. Num., Universidad de Sevilla, Spain.
Dec 2010	Parallel Session, First Joint Meeting AMS-SOMACHI, Pucón, Chile.
Nov 2010	Invited Speaker, Workshop on Control of Dispersive Equations, Paris, France.
Jul 2010	Seminar, Instituto de Matematica, Universidade Federal Rio de Janeiro, Brazil.
Jun 2010	Seminar, Department of Mathematical Sciences, University of Cincinnati, USA.
Sep 2009	Seminar, Control Theory Group, Université Pierre et Marie Curie, France.
Jun 2009	Parallel Session, Conference on System Modelling and Optimization, Buenos Aires.
Jan 2009	Invited Speaker, Workshop in honor of Professor A.V. Balakrishnan, Los Angeles, USA.
Nov 2008	Invited Speaker, 16th Southern California Nonlinear Control Workshop, San Diego, USA.
Oct 2008	Seminar, Department of Mathematical Sciences, University of Cincinnati, USA.
Oct 2007	Invited Speaker, Workshop Dispersive long waves models, Vienna, Austria.
Jun 2007	Parallel Session, Workshop Analysis and Control of PDE, Pont à Mousson, France.
Apr 2008	Seminar, Departamento de Matemáticas, Universidad de Chile, Chile.
Apr 2008	Seminar, Departamento de Matemáticas y CC, Universidad de Santiago, Chile.
Mar 2008	Invited Speaker, Workshop Méthodes et problèmes de contrôle en EDP, Nancy, France.
Mar 2006	Parallel Session, International Congress Applications of Mathematics, Santiago, Chile.

12 Short Courses

Nov 2018	*Control of PDE*, Universidad de Buenos Aires, Argentina.
Jan 2017	*PDE Control Methods*, Gipsa-lab, Grenoble, France.
Nov 2016	*Control and stabilization of the pendulum*, II Encuentro Nacional de Ingeniería Matemática, UTFSM, Valparaíso, Chile.
Oct 2015	(With P. Gajardo) *Control and optimization of dynamical systems*, Escuela de Doctorado, Valparaíso, Chile.
Dec 2014	*Control Theory: the pendulum*, Jornadas de Matemática, Universidad de Valparaíso, Chile.
Oct 2013	(With A. Mercado) *Inverse Problems*, Escuela de Control y Optimización, Escuela Politécnica Nacional, Quito, Ecuador.
Sep 2012	*Stabilization methods for the Korteweg-de Vries equation*, Summer School on Automatic Control, Gipsa-lab, Grenoble, France.
Jan 2012	*Control and stabilization of the KdV equation*, PASI Inverse Problems and PDE Control, Pontificia Universidad Católica de Chile, Santiago, Chile.
Oct 2010	*Introduction to Control Theory*, Semana de la Matemática, Pontificia Universidad Católica de Valparaíso, Valparaíso, Chile.

13 Outreach Talks

Oct 2017	Explora Program at high school *Colegio Elena Bettini*, Independencia, Chile.
Oct 2017	Explora Program at high school *Colegio El Bosque*, Puente Alto, Chile.
Oct 2016	Explora Program at high school *Colegio Los Aromos*, Puente Alto, Chile.
Oct 2016	Explora Program at high school *Colegio Santo Cura de Ars*, San Miguel, Chile.
Sep 2016	*Viernes de Cultura + Ciencia* at museum *Museo Fonck*, Valparaíso, Chile.
Oct 2015	Explora Program at high school *Juanita Fernández Solar B-39*, Recoleta, Chile.

14 Research Grants

2018 – 2022	Responsible, Fondecyt Regular No. 1180528.
2018 – 2021	Tutor, Fondecyt Postdoc No. 3180100. Responsible: Cristhian Montoya.
2017 – 2019	Coordinator in Chile, Project ECOS-CONICYT C16E06 (France-Chile).
2017 – 2018	Associate Researcher, Project Math-AmSud 17-MATH-04 (France-Chile-Colombia).
2014 – 2019	Associate Researcher, Basal Project FB0008 *Advanced Center for Electrical and Electronic Engineering.*
2014 – 2018	Responsible, Fondecyt Regular No. 1140741.
2014 – 2016	Tutor, Fondecyt Postdoc No. 3150089. Responsible: Nicolás Carreño.
2015 – 2016	Associate Researcher, REDES14018 (Chile-Ecuador), CONICYT.
2014 – 2016	Associate Researcher, INRIA Associated Team Greencore (France-Chile).
2014 – 2015	Coordinator in Chile, Project Math-AmSud 14MATH-03 COSIP (France-Brazil-Chile).
2013 – 2016	Tutor, Fondecyt Postdoc No. 3140059. Responsible: Mamadou Gueye.
2012 – 2015	Main Researcher, Project Anillo ACT 1106 (Chile).
2009 – 2013	Responsible, Fondecyt Iniciación, No. 11090161.
2009 – 2011	Associate Researcher, Project Math-AmSud 08MATH-04 CIP-PDE (France-Brazil-Chile).
2007 – 2008	PhD student, Project ANR C-QUID (France).