

CURRICULUM VITAE

Gunther Uhlmann

Date of Birth: February 9, 1952, Chile.

Education: Licenciado en Matemáticas, Univ. de Chile, Santiago, Chile 1973.
Ph.D., M.I.T., September 1976.

Professional Experience:

- University of California Irvine Excellence in Teaching Chair in Mathematics, 2010-present.
- Walker Family Endowed Professor in Mathematics, University of Washington, 2006–present.
- Professor of Mathematics, University of Washington, 1987–present.
- Adjunct Professor Applied Mathematics, University of Washington, 2008-present.
- Associate Professor, University of Washington, 1984–1987.
- Assistant Professor, M.I.T., 1980–1985.
- Instructor, M.I.T., 1978–1980.
- Courant Instructor, Courant Institute, NYU, 1977–1978.
- Research Fellow, Harvard University, Winter, Spring 1977.
- Research Associate, M.I.T., Fall 1976.

Awards, Honors and Fellowships:

- Kleinman Prize, Society of Industrial and Applied Mathematics, 2011.
- Bocher Prize, American Mathematical Society, 2011.
- Einstein Public Lecture, AMS, March 2012.
- Rothschild Distinguished Visiting Fellow, Isaac Newton Institute for Mathematical Sciences, Oxford, England, Fall 2011.
- Distinguished Ordway Visitor, University of Minnesota, 2011-2012.
- The 10th van Winter Memorial Lecture, University of Kentucky, February, 2011.
- Invited Address, First Joing Meeting AMS-SOMACHI, Pucón, Chile, Dec. 2010.
- Fellow of Society of Industrial and Applied Mathematics, elected 2010.
- Chancellor Professor, University of California, Berkeley, Fall 2010.
- Clay Senior Scholar at MSRI, Fall 2010.
- Invited Lecturer, SIAM Annual Meeting, Pittsburgh, July, 2010.
- Plenary Speaker Summer Meeting Canadian Mathematical Society, June 2010.
- Arne Magnus Lectures, Colorado State University, April, 2010.

- Fellow American Academy of Arts and Sciences, elected 2009.
- Emil Grosswald Lectures, Temple, April 2009.
- Eisenbud Professor at MSRI, Fall 2008 (could not serve due to personal problems).
- Zygmund-Calderón Lectures, University of Chicago, April, 2008.
- Plenary Lecturer, International Congress of Industrial and Applied Mathematics 2007, Zurich, Switzerland, July, 2007.
- Plenary Lecture, Annual Meeting, MITACS, Calgary, Canada, May, 2005.
- Invited hour address, Annual Meeting American Math Society, Atlanta, January, 2005.
- Institute of Scientific Information (ISI) Highly Cited Researcher, 2004-present.
- Fellow, Institute of Physics, elected 2004.
- PIMS Distinguished Chair, University of British Columbia, November 2002.
- John Simon Guggenheim Fellowship, 2001-2002.
- Corresponding Member of the Chilean Academy of Sciences, elected 2001.
- Visiting Distinguished Faculty Award, University of Kentucky, 2000.
- International Congress of Mathematicians, invited speaker, Berlin, 1998.
- Conference Board of Mathematical Sciences (CBMS), principal speaker, 1995.
- Fulbright Travel Fellowship, 1973.
- Fellowship from Ford Foundation through Technical State University, Chile, to pursue doctoral studies at M.I.T., 1973–1976.

Other Special Lectures

- Boeing Lecture, Wichita State University, April 1990.
- Invited address, Portland meeting American Mathematical Society, June 1991.
- Annual Memorial Lecture José Rubio de Francia, Universidad Autónoma de Madrid, Spain, June 1997.
- Lecture in Distinguished lecture series, The Institute of Applied Mathematics, University of British Columbia, Canada, October 1997.
- Plenary talk, invited by Korean Mathematical Society, at the conference “Mathematics in the New Millennium”, October, 2001.
- PIMS Distinguished Chair Lectures, November 2002 (3 lectures).
- Frontiers in Math Lectures, Texas A&M, March, 2004 (3 lectures).
- Richard Di Prima Annual Lecture, Rensselaer Polytechnic Institute, April, 2004.
- Lecture in Distinguished Lecturer Series, University of Central Florida, April, 2006.
- 10th Anniversary Celebration of Instituto de Matemáticas, Universidad Nacional Autónoma de México, Cuernavaca, Mexico, May, 2006.
- Plenary Lecture in Lars Ahlfors Centennial Conference Helsinki, Finland, August, 2007.

- Current Events Bulletin, Annual Meeting AMS, San Diego, January, 2008.
- Distinguished Lecture Series, Graduate School of Applied Sciences Naval Postgraduate School, Monterey, California, July 2010.
- MSRI MUSEION Lecture, October, 2010.
- Physical Sciences Breakfast Lecture Series, University of California, Irvine, January, 2011.

Editorial Boards

- Member of Editorial Board, SIAM Journal Math. Anal., September 1995-December 2000.
- Member of Editorial Board, Journal of Inverse and Ill-Posed Problems, 1997-present.
- Associate member of Editorial Board of Cubo, 1999-present.
- Member of Editorial Board of Inverse Problems, 2000-2010.
- Member of Editorial Board of Advances in Applied Math, 2002-present.
- Member of Editorial Board of Inverse Problems and Imaging, 2006-present.
- Member of Editorial Board of Analysis and PDE, 2007-present.
- Member of Editorial Board, Revista Matemática Iberoamericana, 2008-present.
- Member of Editorial Board, International Journal of Differential Equations, 2009-present.
- Member of Editorial Board of Journal of Spectral Theory, 2010-present.
- International Advisory Board, Inverse Problems, 2011-present.
- Advisory Board, Versita de Gruyter Book Publishing Program in Mathematics, 2011-present.

Grants:

- Co-PI of NSF Collaborative Mathematics and Geosciences (CMG), “ Nonlinear Elastic-Wave Inverse Scattering and Tomography - from Cracks to Mantle Convection” , 2010-2014 (UW part \$229,950).
- PI of NSF Research Training Grant (RTG) on “Inverse Problems and Partial Differential Equations”, 2009-2014 (\$2,070,940).
- PI of NSF grant, 2008-2013 (\$667,736).
- Co-PI of NSF Travel Grant for First Pacific Rim Mathematical Association (PRIMA) first meeting in Sydney, Australia, July, 2009 .
- Co-PI of NSF Collaborative Mathematics and Geosciences (CMG), “Multi-Scale (Wave Equation) Tomographic Imaging with USArray Waveform Data, 2007-2011.
- Co-PI of NSF Focused Research Grant (FRG) on “Inverse Problems in Radiative Transfer”, 2006-2010.
- PI of U.S. team of of Civilian Research & Development Foundation (CRDF) grant on “Geometric Rigidity, Inverse Problems and Integral Geometry”, 2007-2009.
- PI of NSF grant to support the conference “Applied Inverse Problems 2007”, held in Vancouver, Canada, June 25-29, 2007.

- Co-PI of Period of Concentration of PIMS Collaborative Research Group (CRG) on Inverse Problems, 2005-2007.
- Co-PI of Collaborative Mathematics and Geosciences (CMG) program 2003-2007.
- PI, International collaboration Novosibirsk-Seattle, 2003-2007.
- Co-PI (1977-1980) and PI (1980-2013) of NSF summer grants.
- Ky and Yu-Fen Fan Fund Travel Grant to support visit of Jin Cheng (Fudan University, China) for the month of February 2004.
- PI of NSF grant to support the workshop “Inverse Problems and Medical Imaging”, 2003.
- PI of NSF and DOE grant to support a Pan-American Advanced Studies Institute (PASI) in Santiago, Chile, on “Partial Differential Equations, Inverse Problems and Non-Linear Analysis”, 2002.
- PI of NSF and DOE grant to support a “Pan-American Advanced Studies Institute” (PASI) at MSRI, Berkeley, on Inverse Problems, 2001.
- Royalty Research Fund (RRF), “Electrical Impedance Tomography”, one month support in summer 1998.
- Co- PI of grant from ONR in Accelerated Research Initiative on ”Electromagnetic Properties of Sea Ice”, 1993-1997.

Visiting Positions

- Universidad Federal de Pernambuco, Brazil, August 1979 (one month.)
- Universidad Nacional Autónoma de México, Mexico, August 1981 (two weeks.)
- Instituto Venezolano de Investigaciones Científicas, Venezuela, January 1982 (two weeks).
- Mathematical Sciences Research Institute (MSRI), Berkeley, 1982-1983 (participant for one year in program on Non-linear Partial Differential Equations and Geometry).
- Universidad de Chile, January, 1984 (two weeks).
- MSRI, October 1988 (participant for one month in the Symplectic Geometry program).
- MSRI, March 1991 (participant for two weeks in the Partial Differential Equations program).
- Universidad Autónoma de Madrid, Madrid, Spain, June-July 2002 (one month).
- Fields Institute, Toronto Canada, September-October 1997 (participant for two weeks in the Microlocal Analysis program).
- Professeur Invitée, Université de Versailles, France, June-July 2000 (one month).
- Erwin Schrödinger Institute, Vienna, Austria, March 2001 (participant for two weeks in Scattering Theory Programme).
- MSRI, April-May 2001 (participant for three weeks in Spectral Invariants program).
- Chair of organizing Committee of Inverse problems and Applications program at MSRI, August-December, 2001.
- MIT, Berkeley, Cambridge, March-April, 2002 (three weeks).

- University of Chicago, September-October, 2002 (four weeks).
- École Normale Supérieure, France, March, 2010 (two weeks).
- Chair of organizing committee of Inverse Problems and Applications program at MSRI, Berkeley, August-December 2010.
- Professeur Invitée, École Normale Supérieure, Paris, France, March-April, 2011.

Minicourses :

- “Well-posedness of Cauchy problem for hyperbolic equations with double characteristics”, Universidad Federal de Pernambuco, Recife, Brazil, August 1979 (eight lectures).
- “Conical Refraction and Equations with Double Characteristics”, IIMAS, Univ. Autónoma México, August 1981 (four lectures).
- “Scattering by a Potential”, IVIC, Venezuela, January 1982 (four lectures).
- “Introduction to Microlocal Analysis”, Universidad de Chile, January 1984 (four lectures).
- “Microlocal Analysis and Scattering theory”, VIII Escuela Latinoamericana de Matemáticas on Partial Differential Equations Río de Janeiro, Brazil, July 1986 (five lectures).
- “Inverse Boundary Value Problems with Applications to Inverse scattering”, École D’Été , Nantes, France, June 1991 (five lectures).
- “Nondestructive Evaluation and Inverse Problems”, CBMS-NSF conference , June 1995, Principal Lecturer (10 talks).
- “The Dirichlet to Neumann Map and Inverse Problems”, Summer Course in Cortona, Italy, July 1996 (17 lectures).
- “Inverse Problems in Anisotropic Media”, Summer School on Partial Differential Equations with Applications in Mathematical Physics, Oulu, Finland, June 1997 (10 lectures).
- “Inverse Problems in Anisotropic Media”, EuroSummerSchool on “New Analytic and Geometric Methods in Inverse Problems”, Edinburgh, July 2000 (five lectures).
- “Microlocal Analysis and Inverse Problems”, Mathematical Sciences Research Institute, Berkeley, August, 2001 (four lectures).
- “Electrical Impedance Tomography”, Pan-American Advanced Studies Institute (PASI) on Inverse Problems, October-November, 2001 (three lectures).
- “Geometrical Optics and Inverse Problems”, 3rd Summer School in Mathematical Analysis, Cuernavaca, Mexico, June 2002 (5 lectures).
- “The Dirichlet to Neumann Map and Inverse Problems”, PIMS Distinguished Lectures, Vancouver, Canada, November 2002 (three lectures).
- “Inside-Out, Inverse Problems, Frontiers in Mathematics Lectures, Texas A&M, March 2004 (three lectures).

- “Electrical Impedance Tomography” Graduate Summer School on Inverse Problems, UW, August, 2005 (three lectures).
- “Travel Time Tomography”, CIMPA School on Wave Propagation, Cuernavaca, Mexico, January 2006 (three lectures).
- Minicourse on “Applied Inverse Problems”, Florence, Italy, May 2006 (5 lectures).
- “Invisibility”, Taipei, Taiwan, March 2008 (3 lectures).
- “An Introduction to Calderón’s Problem”, Summer Graduate Workshop on Inverse Problems, MSRI, Berkeley, July 2009 (5 lectures).
- “The Calderón Problem with Partial Data”, CIMPA School on Inverse Problems, Santiago Chile, January, 2010 (5 lectures).
- “The Radon Transform and the X-Ray Transform”, Research Training Grant Summer School on Inverse problems and PDE, July 2010, taught jointly with Peter Kuchment, UW, Seattle, July 2010 (16 lectures).
- “30 Years of Calderón’s Problem”, Introductory Workshop on Inverse Problems, MSRI, Berkeley, August 2010 (4 lectures).

Invited Plenary Talks in Conferences since 2000.

- RCP264: Inverse Problems and Nonlinearity, Montpellier, France, June 2000.
- AMS-IMS-SIAM Summer Research Conference on “Radon transforms and tomography”, Mount Holyoke, Massachusetts, June 2000.
- Recent Developments in the Wave Field and Diffuse Tomographic Inverse Problems, EuroConference, Edinburgh, August, 2000.
- Hyperbolic Equations and Scattering: A Conference in Honor of Gerard Friedlander, MIT, Cambridge, Mass., September, 2000.
- Workshop on Scattering Theory, Erwin Schrödinger International Institute on Mathematical Physics, March, 2001.
- Function Spaces, Differential Operators and Nonlinear Analysis, Teistungen, Germany, July, 2001.
- Geometric Methods in Inverse Problems and PDE Control, IMA, Minnesota, July 2001.
- Q-Math8, Mathematical Results in Quantum Mechanics, Taxco, Mexico, December 2001.
- Geometric Analysis in the 21st Century, a conference in honor of Richard B. Melrose, MIT, Cambridge, Massachusetts, March 2002.
- INdAM workshop on “Inverse Problems and Applications”, Cortona, Italy, June 2002.
- First Mummy Range Workshop on Electrical Impedance Tomography, Pingree Park, Colorado, August 2002.
- MaPhySto Workshop on Inverse Problems, Aalborg, Denmark, September 2002.
- International Workshop on Spectra of Differential Operators and Inverse Problems, RIMS, Kyoto, Japan, October, 2002.

- Applied Inverse Problems: Theoretical and Computational Aspects, Lake Arrowhead, California, May 2003.
- Geophysical Inversion, Calgary, Canada, July 2003.
- Symposium on Inverse Problems, Fields Institute, Toronto, Canada, October 2003 (two lectures).
- Interdisciplinary Inverse Problems: Opening Conference for IPRPI, RPI, April 2004.
- Southern California PDE and Analysis Seminar (SCAPDE 2004), San Diego, CA, April, 2004.
- Perspectives in Inverse Problems, Finland, Helsinki, June 2004.
- First LNCC (Laboratório Nacional de Computação Científico) conference on Computational Modelling, Petropolis, Rio de Janeiro, Brazil, August 2004.
- 9th international conference on Differential Geometry and Its Applications, Czeck Republic, Prague, September 2004.
- Pan American Advanced Studies Institute (PASI) on Partial Differential Equations and Non-Linear Analysis, Santiago, Chile, January 2005.
- The 2005 UAB International Conference on Mathematical Physics and Differential Equations, Birmingham, Alabama, March 2005.
- Midwest PDE seminar, Purdue University, April 2005.
- Scattering theory and Singular Spaces, Northwestern, May 2005.
- Waves 2005, Brown University, Providence, Rhode Island, June 2005
- Inverse Problems, Multi-scale Analysis and Homogenization, Seoul Korea, June 2005.
- New Directions in Partial Differential Equations, BIRS, Canada, July, 2005.
- Algebraic Analysis of Differential Equations (in honor of Prof. Takahiro Kawai on the occasion of his sixtieth birthday) RIMS, Kyoto, Japan, July 2005.
- Imaging from Wave Propagation, IMA, Minneapolis, Minnesota, October, 2005.
- Seminar on Inverse Problems and Applications in honor of Alberto P. Calderón, Rio de Janeiro, Brazil, March 2006.
- Inverse Problems in Applied Sciences- Towards Breakthrough, Sapporo, Japan, July 2006.
- Analysis and Probability in Quantum Physics, PASI 2006, Santiago, Chile, August, 2006.
- Hyperbolic Equations and Scattering, meeting in honor of V. Petkov, Bordeaux, France, May, 2007.
- Analyse des équations aux dérivées partielles, Évian-les-Bains, France, June 2007.
- Geometric Aspects of Analysis and Mechanics, a conference in honor of Hans Duistermaat 65th birthday, Utrecht, The Netherlands, August 2007
- Random Media Opening Workshop, SAMSI, North Carolina, September, 2007.
- 7th Symposium of Chilean Mathematics, Punta de Tralca, Chile, November, 2007.
- International Conference on Applied Mathematics: Modeling, Analysis and Computation, Hong-Kong, June, 2008.
- Workshop on Imaging Microstructures, June, 2008, Paris, France.

- From Wave Propagation to K-Theory: A conference in the Honour of the 60th Birthday of Richard Melrose, Stanford University, October 2008.
- Mathematics Research Communities (MRC) Meeting on Inverse Problems, Snowbird, Utah, June 2009.
- 1st PRIMA Congress, Sydney, Australia, July, 2009.
- 7th ISAAC Congress, London, England, July, 2009.
- The Mathematics Institutes' Modern Math Workshop, Dallas, Texas, October, 2009.
- Workshop on Inverse Problems and Applications, Valparaíso, Chile, January, 2010.
- 17th Southern California Geometric Analysis Conference, Irvine, California, February, 2010.
- International Workshop on Inverse Problems, Hong Kong, April, 2010.
- International Conference on Inverse Problems, Wuhan, China, April 2010.
- 8th AIMS International Conference on Dynamical Systems, Differential Equations and Applications, Dresden, Germany, May, 2010.
- 3 Lectures on Inverse Problems, University of Helsinki, Finland, June 2010.
- 5th Pacific Rim Conference on Mathematics, Stanford, California, June 2010.
- Microlocal Analysis in Imaging, RPI, New York, August, 2010.
- Texas Geometry and Topology Conference, College Station, Texas, November, 2010.
- 2nd Interdisciplinary Workshop on Applied Mathematics, Hangzhou, China, December 2010.
- Geometric Analysis, CIRM, Luminy, France, Jan. 2011.
- Spectral and Scattering Theory and Related Topics, RIMS, Kyoto, Japan, Feb. 2011 (A conference in celebration of H. Isozaki's 60th birthday).
- Asymptotic properties of solutions to hyperbolic equations, Imperial College, London, April 2011.
- Colloque ondes en limite semi-classique, Paris, April, 2011.

Invited Colloquium and Seminar Talks (since 2000):

- Colloquium, University of Kentucky, April 2000.
- Seminar, University of Kentucky, April 2000.
- Seminar, IIMAS, UNAM, Mexico, May 2000 (two talks)
- Applied Mathematics Colloquium, Université de Bordeaux, June 2000.
- Seminar talk, École Polytechnique, France, July 2000.
- Colloquium, Seoul National University, October 2000.
- Colloquium, Northwestern University, November 2000.
- Current Problems in Mathematics, UW, February 2001.
- Seminar, Yale University, February, 2001.
- Seminar, Johns Hopkins University, March 2001.
- Colloquium, Purdue University, April 2001.
- Colloquium, Michigan State University, April 2001.

- Seminar, MSRI (Spectral Invariants program), May 2001.
- Seminar, Erwin Schrödinger Institute in Vienna, Austria, July, 2001 (Scattering theory Program).
- Colloquium, University of California, Berkeley, October 2001.
- Colloquium, Stanford University, November 2001.
- Colloquium, Rensselaer Polytechnical Institute, January 2002.
- Colloquium, MIT-Harvard-Brandeis-Northeastern Colloquium, April 2002.
- Colloquium, University of Chicago, May 2002.
- Seminar, University of Bologna, Italy, July 2002.
- Colloquium, University of Chicago, Illinois, September, 2002.
- Colloquium, University of Minnesota, October, 2002.
- Calderón-Zygmund seminar, University of Chicago, October, 2002.
- Colloquium, University of California, Irvine, May 2003.
- Seminar, Northwestern University, November, 2003.
- General Colloquium, IPAM, UCLA, December, 2003.
- Colloquium, Penn State, September, 2004.
- Seminar (Differential Geometry and Dynamics), Penn State, September 2004.
- Colloquium, University of California, Santa Barbara, November, 2004.
- Colloquium, Yale University, September, 2005.
- Great Ideas Series, University of Washington, April, 2005.
- Colloquium Stanford University, April, 2006.
- Seminar, École Polytechnique, France, June 2006.
- Colloquium, University of California, Berkeley, October, 2006.
- Colloquium, University of Wisconsin, Madison, October, 2006.
- Colloquium, Colorado State University, Fort Collins, November, 2006.
- Colloquium, Purdue University, November, 2006.
- Colloquium, UC Irvine, February, 2007.
- Seminar, University of Missouri, Columbia, March, 2007.
- Colloquium, Caltech, April, 2007.
- Seminar, Stanford University, October, 2007.
- Seminar, UBC, November, 2007.
- Colloquium, UBC, November, 2007.
- Seminar, MIT, December, 2007
- Colloquium, Applied Math UW, March, 2008.
- Colloquium, University of Southern California, October 2008.
- Colloquium, University of Toronto, November 2008.
- Seminar, University of Toronto, November 2008.

- Colloquium, Michigan State University, September, 2009.
- Colloquium, University of Wyoming, Laramie, September, 2009.
- Seminar, Colorado State University, Fort Collins, September, 2009.
- Colloquium, Texas A&M, September 2009.
- Undergraduate seminar, Hanoi University of Science, Vietnam, September, 2009.
- Colloquium, Hanoi University of Science, Vietnam, September, 2009.
- Seminar, MIT, October, 2009.
- Colloquium, Purdue, November, 2009.
- Colloquium, Northwestern University, November, 2009.
- UW-PIMS Colloquium, University of Washington, November, 2009.
- Colloquium, Purdue, November, 2009.
- Colloquium, Michigan State, December, 2009.
- Seminar, Universidad Católica de Chile, January, 2010.
- Colloquium, University of California, Irvine, March, 2010.
- Seminar, École Normale Supérieure, Paris, March, 2010.
- Colloquium, University of California, Berkeley, September 2010.
- Colloquium, Ohio State University, October, 2010.
- Seminar, University of British Columbia, Vancouver, November, 2010.
- Colloquium, University of British Columbia, Vancouver, November, 2010.
- Colloquium, Applied and Computational Mathematics, Caltech, Jan. 2011.
- Seminar, University of Kentucky, Feb. 2011.
- Colloquium, University of Utah, March 2011.
- Colloquium, University of Bordeaux, France, March 2011.
- Seminar, Laboratoire Jacques-Louis Lions, Paris, France, April 2011.
- Colloquium, University of Bourgogne, France, April, 2011.
- Applied Math Colloquium, Columbia University, New York, May, 2011.

Other Professional Experience:

- Simons Foundation Review Advisory Panel, 2011-present.
- Nominating Committee American Mathematical Society, 2011-present.
- Member Selection Committee of SIAM's John Von Neumann Lecture, 2010-present.
- Member of the Organizing Committee of Inverse Problems program at Mittag-Leffler Institute, Spring 2013.
- Member of Scientific Committee of Inverse Problems Program at the Newton Institute, Cambridge, England, Fall 2011.
- President, Inverse Problems International Association (IPIA), July 2010-present.

- Advisory Board Member of ICIP2010 held in Hong Kong, December 2010.
- Member Selection Committee CMR-Fields-PIMS Prize, 2009-2010, chair 2010.
- PIMS site director at University of Washington, 2003-present.
- Member of Scientific Advisory Board Banff International Research Station (BIRS), 2008-present.
- Member of committee to review the graduate program at Case Western Reserve, 2009.
- Scientific Committee of meeting on Inverse problems in PDE, CIRM, Luminy, 2009.
- Advisory Board, conference on Integral Geometry and Tomography, Stockholm, Sweden, August 2008
- International Advisory Committee of Functional Analysis, Differential Operators and Nonlinear Analysis (FSDONA) conference, Helsinki, August 2008.
- Member International Scientific Committee of the 6th International Conference on Inverse Problems in Engineering: Theory and Practice (ICIPE 2008) held in Dourdan (Paris), France on June 15-19, 2008
- Member of the International Program Committee of "Inverse Problems : Modeling and Simulation", Fethiye, TURKEY, May 2008.
- Member of Scientific Committee of 3rd Latin Congress of Mathematicians, 2008-2009.
- Reviewer of FONDAP Center "Centro de Modelamiento Matemático" (CMM) in Chile, September, 2006
- Member of International Program Committee of International Conference on Inverse and Ill-Posed Problems of Mathematical Physics, Novosibirsk, Russia, August, 2007.
- International Program Committee of VII Americas School in Differential Equations and Nonlinear Analysis Cartagena, Colombia, July 23, 2007 - July 27, 2007
- Chair committee to select speakers of AMS Western regional Meetings, 2006-2007.
- Chair AMS-SIAM committee to select winner of 2006 Birkhoff Prize.
- International Review Committee of FONDAP Center for Mathematical Modelling (CMM), Chile, March 2005.
- Committee to select speakers of AMS Western regional Meetings, 2005-2007.
- Member of Scientific Review Panel of PIMS, January 2002-July 2007.
- Steering committee of Applied Inverse Problems (AIP) conferences since 2003.
- Scientific Committee of PICO'06, Nice, France.
- Scientific Committee 5th International Conference on Inverse Problems in Engineering: Theory and Practice, Cambridge, England, July 2005.
- Scientific Committee, International Conference Inverse Problems: Modeling and Simulation, Fethiye, Turkey, June, 2004.
- Member of organizing committee of special semester on inverse problems at IPAM, UCLA, Fall 2003.
- Member of International Advisory member for theme year in inverse problems in Finland, 2003-2004.
- International Scientific Committee, International Conference on on Ill-Posed Inverse Problems in honour of the 70th anniversary of the birth of Prof. M.M. Lavrent'ev, Novosibirsk, Russia, August, 2002.

- Chair, Organizing Committee of Semester on Inverse Problems and Applications at MSRI, Berkeley, Fall 2001.
- Member of AMS Council 1992-1994.
- Reviewer, Mathematical Reviews 1981-1991.

Conferences and Special Years Organized

- Co-organized workshop in scattering theory at MIT, April 1984 (jointly with V. Guillemin, D. Jerison and R. Melrose).
- Co-organized special session on Inverse problems, AMS meeting, June 1991 (jointly with J. Sylvester).
- Co-Chairman Summer Research Conference on Electrical Impedance Tomography, July, 1995 (jointly with J. Sylvester and M. Vogelius).
- Organized a session on “Inside Out: Inverse Boundary Problems”, for the AAAS 1997 Annual Meeting and Science Innovation Exposition.
- Organized the first ”Inverse Problems Seminar of the Pacific Northwest”, May 1999.
- Co-organizer of Special Session of AMS on “Microlocal Analysis and Applications”, September 1999 (partly supported by MSRI).
- Co-organizer of Workshop on ”Mathematics of Imaging”, MSRI, Berkeley, November 1999 jointly with A. Grunbaum).
- Co-organizer of the first “Pacific Northwest PDE” meeting, Vancouver, Canada, May 2000 (jointly with R. Froese and N. Ghoussoub).
- Co-organizer of the second “Pacific Northwest PDE” meeting, UW, Seattle, May 19, 2001 (jointly with R. Froese and N. Ghoussoub).
- Co-organizer PIMS-MITACS workshop on “Inverse Problems and Imaging”, June 9-10, 2001, Vancouver, Canada (jointly with M. Lamoureaux and G. Margrave).
- Co-organizer IMA summer workshop on “Geometric Methods in Inverse Problems and PDE Control”, July 16-27, 2000 (jointly with C. Croke, I. Lasiaka and M. Vogelius).
- Co-organizer Introductory workshop on “Inverse Problems and Integral Geometry”, MSRI, Berkeley, August 13-24, 2001 (jointly with L. Borcea, D. Colton, M. Eastwood A. Goncharev and S. Gindikin).
- Chair organizing committee Pan American Advanced Studies Institute (PASI) on Inverse Problems, MSRI, Berkeley, October 28-November 2, 2001.
- Chair of organizing committee of workshop on “Inverse Problems and Applications”, MSRI, Berkeley, November 2-16, 2001.
- Co-chair of Instituto di Alta Matematica (INdAM) workshop on “Inverse Problems and Applications”, Cortona, Italy, June 2-8, 2002 (jointly with G. Alessandrini).
- Co-chair of Special Session on “Inverse Boundary Problems and Applications”, in First AMS-UNI meeting, Pisa, Italy, June 12-16, 2001 (jointly with G. Alessandrini).

- Coordinator of 2003 PIMS thematic year on inverse problems. As part of this thematic year I co-organizer five workshops on the theory and applications of inverse problems.
- Co-organizer of IPAM special semester in fall 2003 on “Inverse Problems: Computational Methods and Emerging Applications.”
- Co-organizer of Special Session AMS on ”Theoretical And Computational Aspects of Inverse Problems”, Atlanta meeting, January, 2005.
- Co-chair of minysymposium on “Inverse Problems in Wave Propagation”, Applied Inverse Problems, Great Britain, June, 2005 (jointly with W. Symes).
- Organizer of Summer Graduate School on Inverse Problems, University of Washington, August, 2005.
- Co-chair of 4th Pacific Northwest PDE meeting, UBC, Vancouver, December, 2005 (jointly with R. Froese and T. Toro.)
- Co-organizer of “Seminar on Inverse Problems and Applications” in honor of Alberto P. Calderón, Rio de Janeiro, Brazil, March 2006.
- Co-chair of BIRS workshop on “Inverse Problems and Applications”, Banff, August 20-24, 2006 (jointly with G. Margrave).
- Co-chair of Symposium on Inverse Problems Honoring Alberto Caldern IMPA, Rio de Janeiro, Brazil, January 10 to 19, 2007 (jointly with A. Sa Barreto and J. Zubelli).
- Co-organizer of Conference on “Microlocal Analysis and Harmonic Analysis in Inverse Problems”, CIRM, Luminy, France, March 26-30, 2006.
- Organizer of Summer School on “Inverse Problems and Radiative Transfer”, Seattle, June 18-22, 2007.
- Chair of Applied Inverse Problems 2007 Conference and First International Congress of IPIA, Vancouver, Canada, June 25-29, 2007.
- Co-organizer of meeting on “Mathematics of Oil Exploration”, Monterrey, Mexico, October 17-18, 2007.
- Co-organizer of meeting on “Electromagnetic Metamaterials and their Approximations: Practical and Theoretical Aspects”, Center for Scientific Computation and mathematical Modeling, University of Maryland, September 2008.
- Chair or Organizing Committee of “Mathematics Research Communities” meeting on Inverse Problems, Snowbird, Utah, June 2009.
- Organizer of Summer Graduate school on “Inverse Problems and Applications”, MSRI, July 2009.
- Co-chair of summer school on “Seismic Imaging”, Seattle, August, 2009.
- Co-chair of Research Training Grant Summer School on Inverse Problems and PDE, UW, Seattle, July, 2010.
- Chair of organizing committee on program at MSRI, Berkeley, in Fall 2010 on “Inverse Problems and Applications”.
- Chair of organizing committee of “Connections for Women” workshop at MSRI, Berkeley, August, 2010.
- Chair of organizing committee of “Introductory Workshop” at MSRI, August, 2010.

- Chair of organizing committee of "Inverse Problems and Applications" workshop at MSRI, November, 2010.
- Co-organizer of special session on "Inverse Problems and PDE Control", Pucón, Chile, December 2010.

PhD Students

- José Antoniano, PhD 1983.
- Fernando Brambila, PhD 1985.
- Kurt Bryan, PhD 1990.
- Charles Curtis, PhD 1994.
- Carlos Tolmasky, PhD 1996.
- Lizabeth Rachelle, PhD 1996.
- Jenn-Nan Wang, PhD 1997.
- Steve McDowall, PhD 1998.
- Eduardo Chappa, PhD 2002.
- Alexandru Tamasan, PhD 2002.
- Karthik Ramaseshan, PhD 2003.
- Michal Skokan, PhD 2004.
- Mikko Salo, PhD 2004 (coadvisor with L. Päivärinta).
- Bela Frygik, PhD 2006 (coadvisor with P. Stefanov).
- Matias Courdurier, PhD 2007.
- Venkateswaran Krishnan, PhD 2007 (coadvisor with P. Stefanov).
- Leo Tzou, PhD 2007.
- Ian Langmore, PhD 2008.
- Sean Holman, PhD 2009.
- James Vargo, PhD 2010.
- Ting Zhou, PhD, December 2010.
- Jie Chen, current PhD student.
- Mark Hubenthal, current PhD student.
- Ilker Kocyigit, current PhD student.
- Juha-Matti Perkkiö, current PhD student (coadvisor with M. Lassas).
- Lee Petroia, current PhD student.
- Justin Tittlefitz, current PhD student.
- Yang Yang, current PhD student.

Postdoctoral Advising

- Edoh Amiran, 1986-1989.
- Ziqi Sun, 1987-1990.

- Ramon Mendoza, 1991-1992.
- Masaru Ikehata, 1992-1993.
- Clifford Nolan (NSF postdoc), 1997-2000.
- Elisa Francini, 1998-1999.
- Matti Lassas, 1998-1999.
- Gleb Dyatlov, Spring 2002.
- Stephen McDowall, Summer 2002.
- Peter Gibson (NSCER postdoc), November 2001-August 2002
- Kim Knudsen, August 2004-June 2005.
- Mikko Salo, January 2005-July 2005.
- Horst Heck, August 2005-February 2006.
- Mikko Salo, March 2006-June 2006 (joint with Hart Smith).
- Xiaosheng Li, September 2005-July 2008.
- Hongyu Liu, September 2007-June 2010.
- Alberto Mercado, November 2007-July 2008.
- Ben Stephens, September 2009-present (joint with Tatiana Toro).
- Tu Nyugen, August 2009-present (joint with Tatiana Toro).
- Frederic de Gournay, Feb. 2010-June 2010.

Publications.

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2. With R. B. Melrose, “Lagrangian intersection and the Cauchy problem”, *Comm. on Pure and Appl. Math.*, **32**(1979), 483–519.
3. “Parametrices for operators with multiple involutive characteristics”, *Comm. in PDE*, **4**(1979), 571–582.
4. With R. B. Melrose, “Microlocal structure of involutive conical refraction”, *Duke. Math. J.*, **43**(1979), 571–582.
5. With V. Guillemin, “Oscillatory integrals with singular symbols”, *Duke. Math. J.*, **48**(1981), 251–267.
6. “Light intensity distribution in conical refraction”, *Comm. on Pure and Appl. Math.*, **35**(1982), 69–80.
7. With G. Mendoza, “A necessary condition for local solvability for a class of operators with double characteristics”, *J. Funct. Anal.*, **52**(1983), 252–256.
8. With G. Mendoza, “A sufficient condition for local solvability for a class of operators with double characteristics”, *Amer. J. Math.*, **106**(1984), 187–217.
9. With C. Callias, “Singular asymptotics approach to partial differential equations with isolated singularities in the coefficients”, *Research Announcements Bull. AMS.*, **11**(1984), 172–176.
10. “A boundary canonical transformation for a class of operators with double characteristics”, “Analysis, Geometry and Probability”, Proceedings of the First Chilean Symposium on Mathematics, *Lecture Notes in Pure and Appl. Math.*, **93**(1985), 53–68, Marcel Dekker Publisher.
11. With C. Callias, “Asymptotics of the scattering amplitude for singular potentials”, MSRI preprint (1983).
12. With J. Antoniano, “A functional calculus for a class of pseudodifferential operators with singular symbols”, *Proceedings of Symposia in Pure Mathematics*, **43**(1985), 5–16.
13. With J. Sylvester, “A uniqueness theorem for an inverse boundary value problem in electrical prospection”, *Comm. on Pure and Appl. Math.*, **39**(1986), 91–112.
14. “Product type conormal distributions in scattering theory”, in *Proceedings VII ELAM in Dynamical Systems and Partial Differential Equations*, 155–160(1986), Universidad Simón Bolívar.
15. “On L^2 -estimates for singular Radon transforms”, preprint, MIT, (1985).
16. With J. Sylvester, “A global uniqueness theorem for an inverse boundary value problem”, *Annals of Math.*, **125**(1987), 153–169.
17. With J. Sylvester, “Remarks on an inverse boundary value problem”, Proceedings Oberwolfach Conference on topics in Pseudodifferential Operator, *Lecture Notes in Math.* **1256**(1987), 430–441, H. Cordes, B. Gramsch and H. Widom, editors.
18. With J. Sylvester, “Inverse boundary value problems at the boundary-continuous dependence”, *Comm. on Pure and Appl. Math.*, **41**(1988), 197–219.

19. “Scattering by a potential”, Lecture notes in Spanish, *Acta Científica Venezolana*, **36**(1985), 1–18.
20. “Microlocal Analysis and Scattering theory”, Lecture notes in Spanish of series of talks given at VIII ELAM, Río de Janeiro, Brazil (1986).
21. With J. Sylvester, “Inverse boundary value problems”, *Proceedings VIII ELAM, Lecture Notes in Math.*, **1324**(1986), 320–328.
22. With A. Nachman and J. Sylvester, “An n -dimensional Borg-Levinson theorem”, *Comm. Math. Phys.*, **115**(1988), 595–605.
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