

CURRICULUM VITAE

Gunther Uhlmann

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

Professional Experience:

- 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.
- Senior CARMIN position, IHES and IHP, Paris, France, Spring 2015.
- Si Yuan Professor, Institute for Advanced Study, Hong Kong University of Science and Technology, 2014–2018.
- Chair of Excellence Fondation Mathématiques de Paris, 2012–2013.
- Finish Distinguished Professor, University of Helsinki, 2013–2017.
- Rothschild Distinguished Visiting Fellow, Cambridge University and Isaac Newton Institute for Mathematical Sciences, Cambridge, England, Fall 2011.
- Chancellor Professor, UC Berkeley, Fall 2010.
- University of California Irvine Excellent in Teaching Chair in Mathematics, 2010–2012.
- 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:

- AMS-SIAM Birkhoff Prize in Applied Mathematics, 2021.
- Senior Clay Scholar at MSRI, Fall 2019.
- Distinguished Visitor, Institute of Mathematical Sciences, National University of Singapore, August, 2018.
- Solomon Lefschetz Medal, Mathematical Council of the Americas, 2017.
- Plenary Lecture, V Latin America Congress of Mathematics, Barranquilla, Colombia, July, 2016.
- Plenary Lecture International Congress of Mathematical Physics, Santiago, Chile, July 2015.

- Senior CARMIN position, IHES and IHP, Paris, France, Spring 2015.
- Institute for Advanced Study Si Yuan Professor, Hong Kong University of Science and Technology, 2014-2018.
- Foreign Member of the Finnish Academy of Sciences, elected 2013.
- Simons Fellow, 2013-2014.
- Finnish Distinguished Professor, 2013-2017.
- Fellow, American Mathematical Society, elected 2012.
- Member Washington State Academy of Sciences, elected 2012.
- Chaire d'Excellence 2012-2013 of the Fondation Sciences Mathématiques de Paris.
- Einstein Public Lecture, AMS, March 2012.
- Ordway Visiting Professor, University of Minnesota, 2011-2012.
- Rothschild Distinguished Visiting Fellow, Cambridge University and Isaac Newton Institute for Mathematical Sciences, Cambridge, England, Fall 2011.
- Kleinman Prize, Society of Industrial and Applied Mathematics, 2011.
- Bocher Prize, American Mathematical Society, 2011.
- 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.
- Fellow American Academy of Arts and Sciences, elected 2009.
- Plenary Lecturer, International Congress of Industrial and Applied Mathematics, Zurich, Switzerland, July, 2007.
- Institute of Scientific Information (ISI) Highly Cited Researcher, 2001 list.
- 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.
- International Congress of Mathematicians, invited speaker, Berlin, 1998.
- Conference Board of Mathematical Sciences (CBMS), principal speaker, 1995.
- Annual Prize of Mathematics of Venezuela, 1982.
- Fulbright Travel Fellowship, 1973.
- Fellowship from Ford Foundation through Technical State University, Chile, to pursue doctoral studies at M.I.T., 1973–1976.

Named, Distinguished, Public and Special Lectures

- FONDAPRAT General Public Lecture, August, 2020.
- NAS Webinar on “Solving and Seeing”, February, 2020.
- Floer Lectures, Ruhr Universität, Bochum, Germany, June 2019.
- The Ronald Di Perna Lecture, UC Berkeley, January, 2019.
- Public Lecture, Universidad de Chile, Santiago, Chile, December, 2018.
- Public Lecture in Distinguished Lecture Series, Institute of Mathematical Sciences, National University of Singapore, August, 2018.
- Alexander Ziwet Lectures, University of Michigan, April, 2018.
- Public Lecture, Sydney Ideas, University of Sydney, Australia, March, 2018.
- Distinguished Lectures, University of California, Santa Barbara, February, 2018 (3 lectures).
- Plenary Lecture, SIAM Analysis of Partial Differential Equations, Baltimore, December, 2017.
- Hua Lookeng Distinguished Lecture, Institute of Applied Mathematics, Chinese Academy of Sciences, September, 2017.
- Distinguished Lecture, CMI-LMS Research School on Microlocal Analysis and Applications, Cardiff, UK June, 2017.
- Distinguished Lecture, Scientific Computing and Imaging Institute, University of Utah, April, 2017.
- William Benter Distinguished Lecture, City University of Hong Kong, February, 2017.
- Public Lecture, IMA, University of Minnesota, February, 2017.
- Academy lecture, Royal Swedish Academy of Sciences, Stockholm, October, 2016.
- Plenary Lecture V Latin American Congress of Mathematics, Barranquilla, Colombia, July, 2016.
- Public lecture at the Institute for Computational and Experimental Research in Mathematics, Providence, Rhode Island, April 2016.
- The Louis Nirenberg Lectures on Geometric Analysis, CRM, Canada, March, 2016 (3 lectures).
- Public Lecture, South University of Science and Technology, Shenzhen, China, December, 2015.
- Public Lecture, Zhejiang University, Hangzhou, China, December, 2015.
- Lecture on the 50th Anniversary of Faculty of Sciences, University of Chile, Santiago, Chile, August, 2015.
- Keynote Lecture, Summer School on Inverse Problems, Helsinki, June, 2015.
- Perspectivas Matemáticas (Mathematical Perspectives), Instituto de Matemáticas UNAM, Mexico, April, 2015.
- Public Lecture, Institute for Advanced Study Commons, HKUST, Hong Kong, November 2014.
- Distinguished Lecture, Hong Kong Baptist University, November 2014.
- The Eight Baylor Lecture Series in Mathematics, Baylor University, October 2014 (2 lectures).
- Public Talk at SIAM-SEAS Meeting held at Florida Institute of Technology, April, 2014. 1

- PensandoChile, lecture to the association of Chilean Students, Stanford, March, 2014.
- Institute for Advanced Study Si Yuan Professor Inaugural Lecture, HKUST, Hong Kong, November 2013.
- First Lecture of Leading Ideas Speaker Series organized by the Banff Center and BIRS, Banff, Canada, September, 2013 (Public Lecture).
- Finish Distinguished Professor (FiDiPro) Inaugural Lecture, University of Helsinki, September, 2013.
- II Congreso del Futuro, Santiago, Chile, January, 2013 (Public Lecture).
- Invited Speaker First Mathematical Congress of the Americas, Guanajuato, Mexico, August 2013.
- Einstein Public Lecture, AMS, March 2012.
- Institute for Advanced Study Distinguished Lecture, Hong Kong University of Science and Technology, Hong Kong, November, 2012.
- Taft Lectures, University of Cincinnati, November 2012.
- Boeing Distinguished Lecture in Applied Mathematics, Department of Applied Math, UW, October, 2012.
- Public Lecture, Pacific Science Center Cafe, Kirkland, Washington, July, 2012.
- Minicourse, Journées de L'EDP, Biarritz, France, June, 2012.
- Minitutorial, SIAM Conference on Imaging Science, Philadelphia, May, 2012.
- Public Lecture, The Science Behind Harry Potter's Cloak, University of California, Irvine, April, 2012.
- Ordway Lectures, University of Minnesota, November 2011 and March 2012.
- Public Lecture, The Science Behind Harry Potter's Cloak, Física Para las Tardes de Invierno, Pontificia Universidad Católica de Chile, September, 2011.
- Rothschild Lecture, Cambridge University and Isaac Newton Institute for Mathematical Sciences, Cambridge, England, September 2011.
- Institute for Advanced Study Distinguished Lecture, Hong Kong University of Science and Technology, August 2011.
- The 10th van Winter Memorial Lecture, University of Kentucky, February, 2011.
- Physical Sciences Breakfast Lecture Series, University of California, Irvine, January, 2011 (Public Lecture).
- MSRI MUSEION Lecture, October, 2010.
- Invited Address, First Joing Meeting AMS-SOMACHI, Pucón, Chile, Dec. 2010.
- Distinguished Lecture Series, Graduate School of Applied Sciences Naval Postgraduate School, Monterey, California, July 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.

- Emil Grosswald Lectures, Temple, April 2009.
- Current Events Bulletin, Annual Meeting AMS, San Diego, January, 2008.
- Zygmund-Calderón Lectures, University of Chicago, April, 2008 (3 lectures).
- Plenary Lecture in Lars Ahlfors Centennial Conference Helsinki, Finland, August, 2007.
- Plenary Lecturer, International Congress of Industrial and Applied Mathematics 2007, Zurich, Switzerland, July, 2007.
- 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.
- Richard Di Prima Annual Lecture, Rensselaer Polytechnic Institute, April, 2004.
- Frontiers in Math Lectures, Texas A&M, March, 2004 (3 lectures).
- PIMS Distinguished Chair Lectures, November 2002 (3 lectures).
- Plenary talk, invited by Korean Mathematical Society, at the conference “Mathematics in the New Millennium”, October, 2001.
- Lecture in Distinguished lecture series, The Institute of Applied Mathematics, University of British Columbia, Canada, October 1997.
- Annual Memorial Lecture José Rubio de Francia, Universidad Autónoma de Madrid, Spain, June 1997.
- Invited address, Portland meeting American Mathematical Society, June 1991.
- Conference Board of Mathematical Sciences (CBMS), principal speaker, 1995 (10 lectures).
- Boeing Lecture, Wichita State University, April 1990.

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, 1999-2019.
- Member of Editorial Board of Inverse Problems, 2000-2010.
- Member of Editorial Board of Advances in Applied Math, 2002-2012.
- 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, 2008-2012.
- 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.
- Member of Editorial Board of Evolution Equations and Control Theory, 2011-present.
- Member of Editorial Board of Asymptotic Analysis, 2012-present.
- Member of Editorial Advisory Board, Journal of Mathematical Physics, 2014-present.
- Editor in Chief, Inverse Problems and Imaging, 2015-present.
- Member of Editorial Board of Mathematical Control and Related Fields, 2018-present.
- Member of Editorial Board of Ars Inveniendi Analytica, 2020-present.

Grants:

- PI of NSF grant to travel to “Applied Inverse Problems Conference” held in Grenoble, France, July 8-12, 2019. (\$40,000).
- PI of NSF grant, 2018-2022 (\$270,000).
- PI of NSF grant, 2013-2019 (\$880,000).
- Simons Fellowship, 2013-2014.
- PI of NSF grant to travel to “Applied Inverse Problems Conference” held in Helsinki, Finland, May 25-29, 2015.
- PI of NSF grant for travel to “Applied Inverse Problems Conference” held in Daejeon, Korea, July 1-5, 2013.
- PI of NSF grant to support the workshop “Coupled-Physics Inverse Problems”, at the center of Modelamiento Matemático, Universidad de Chile, Santiago, Chile, Jan 3-5, 2013.
- PI of NSF grant to support the “International Conference on Inverse Problems and PDE Control” held at Sichuan University, Chengdu, China, July 30-August 3, 2012.
- Co-PI of NSF Travel Grant for Pacific Rim Mathematical Association (PRIMA) second meeting in Shanghai, China, June, 2013.
- PI of NSF and DOE grant to support a Pan-American Advanced Studies Institute (PASI) in January, 2012 in Chile, on “Inverse Problems and PDE Control”.
- Co-PI of NSF grant to support The Banff International Research Station (BIRS), Banff, Canada, 2010-2015.
- Co-PI of NSF Collaborative Mathematics and Geosciences (CMG), “Nonlinear Elastic-Wave Inverse Scattering and Tomography - from Cracks to Mantle Convection”, 2010-2014.
- PI of NSF Research Training Grant (RTG) on “Inverse Problems and Partial Differential Equations”, 2009-2014.
- PI of NSF grant, 2008-2013.
- 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”, 2003.
- 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 1997 (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 (one month).
- 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.
- Universidad Autónoma de Madrid, participant for two weeks in Special Trimester on Inverse Problems and Applications and Scattering Theory (weeks).
- Isaac Newton Institute, Cambridge, England, July 23-October 2, 2011.
- Ordway Visitor, University of Minnesota, November 2011 (two weeks) and March 2012 (two weeks).
- Fields Institute, participants in Thematic Program on Inverse Problems and Imaging, Fields Institute, Toronto, April 2012 (two weeks).
- Centro Modelamiento Matemático (CMM), Universidad de Chile, January 2013 (3 weeks).
- École Normale Supérieure, Paris, France, January-April, 2013 (3 months).
- Institut Mittag Leffler, Sweden, April-May, 2013 (3 weeks).
- University of Helsinki, Finland, June, August, September (2 1/2 months).
- Stanford University, January-March, 2014 (2 months).
- École Normale Supérieure, Paris, France, April-June, 2014 (3 months).
- University of Helsinki, August 2014.
- IAS and Department of Mathematics, Hong Kong University of Science and Technology, Fall 2014.
- Institut Henri Poincaré, Paris, France, April-June 2015 (two months).
- University of Helsinki, Finland, August 2015 (one month).
- IAS and Department of Mathematics Hong Kong University of Science and Technology, Fall 2015.
- University of Helsinki, Finland, June, 2015 and August, 2015 (2 months).
- IAS and Department of Mathematics Hong Kong University of Science and Technology, Fall 2016.
- IAS and Department of Mathematics Hong Kong University of Science and Technology, Fall 2017

- IAS and Department of Mathematics, Hong Kong University of Science and Technology, Fall, 2018.

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, taught jointly with Peter Kuchment, UW, Seattle, June-July 2010 (14 lectures).
- “Inverse Problems”, Workshop in special trimester on inverse problems, Universidad Autónoma de Madrid, Spain, June 2011 (4 lectures).
- “X-Ray Tomography and Inverse Transport”, Research Training Grant Summer School on Inverse Problems in PDE, taught jointly with G. Bal and S. McDowall, UW, Seattle, June-July 2011 (14 lectures).
- “Photoacoustic and Thermoacoustic Tomography”, Introductory Workshop Isaac Newton Institute, July 2011 (4 lectures).
- “Multi-Wave Methods Via Ultrasound”, Pan American Advanced Institute on Inverse Problems and PDE Control, Santiago, Chile, January, 2012 (3 lectures).
- “Travel Time Tomography, Boundary Rigidity and Lens Rigidity”, Fields Institute, Toronto, April 2012 (4 lectures).
- “Inverse Problems: Visibility and Invisibility”, Journées de l’EDP, Biarritz, France, June, 2012 (6 hours).
- “RTG Summer School on X-ray tomography”, University of Washington, Seattle, July 2012 (2 lectures).
- “Coupled-Physics Inverse Problems”, Chengdu, China, July-August 2012 (5 lectures).
- “Cloaking via Transformation Optics”, État de la Recherche, Inverse Problems and Imaging, Société Mathématique de France. The minicourse was held at the Institute Henri Poincaré, Paris (4 hours).
- “Progress and Challenges in Inverse Problems”, minicourse sponsored by the Fondation Sciences Mathématiques de Paris. The minicourse was held at the Institut Henri Poincaré (7.5 hours).
- “Microlocal Analysis and Inverse Problems”, RTG Summer School, University of Washington, Seattle, July 2013 (14 lectures).
- “Index of refraction inverse problems arising in the Geosciences”, MCPIT2013: Modelling, Control and Inverse Problems for the Planet Earth in all its states, Institute Henri Poincaré, Paris, November 2013 (5 hours).
- “Multiwave Imaging”, Hong Kong University of Science and Technology, October-December 2014 (5 lectures).
- “Inverse Problems: Seeing the Unseen”, PDE/Analysis Mini-School, University of North Carolina, Chapel Hill (5 lectures).
- “Calderón’s Inverse Problem”, Institute Henri Poincaré, Paris, France, April-May, 2015 (15 hours, 3 of the 10 lectures were given by guests).
- “Inverse Problems: Visibility and Invisibility”, Universidad Federico Santa Maria, Valparaiso, Summer School, International Congress of Mathematical Physics 2015 (4 lectures).

- “Multiwave Imaging”, Graduate Workshop on Inverse Problems, Colorado State University, Fort Collins, August, 2016 (4 lectures).
- “Introduction to Microlocal Analysis with Applications to Inverse Problems”, University of Helsinki, August 2016 (4 lectures).
- “The Calderón Problem”, Fall School on Control and Inverse problems of PDE, Zhejiang University, Hangzhou, October 2016 (9 lectures).
- “Calderón’s Problem”, Tutorial, Applied Inverse Problems conference, Hangzhou, China, May, 2017 (6 lectures).
- “Calderón’s Problem: Visibility and Invisibility”, Institute of Mathematical Sciences, National University of Singapore, August, 2018 (4 lectures).
- Calderón’s Inverse Problem, Giessen PDE week, Giessen, Germany, June 2019 (3 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.G
- 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.
- Bay Area Microlocal Analysis Seminar, February 2008.
- 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.
- Applied Inverse Problems, College Station, Texas, May, 2011.
- Workshop on Inverse Problems, Universidad Autónoma de Madrid, Spain, June 2011.
- International Conference on Interdisciplinary and Applied Mathematics, Zhejiang University, Hangzhou China, June 2011.
- Mathematics of Medical Imaging, Toronto, Canada, June, 2011.
- Recent Advances in Biomedical Imaging, Shanghai Jiao Tong University, Shanghai, China, August 2011.
- Analytic and Geometric Methods in Medical Imaging, Isaac Newton Institute, Cambridge, England, August, 2011.
- Geometric Analysis in Euclidean and Homogeneous Spaces (in honor of the 85th birthday of S. Helgason), Tufts University, Medford, January, 2012.
- Pan American Advanced Studies Institute (PASI) on Inverse Problems and PDE control, Santiago, Chile, January, 2012.
- Bay Area Microlocal Analysis Seminar, Berkeley, December 2012.

- Journées Mathématiques de Cergy on Inverse Problems, January, 2013.
- Opening Workshop of Inverse Problems Centre at University of College, London, March 2013.
- Paris-London Analysis Seminar, Imperial College, London, March, 2013.
- Inverse Problems and Applications, University of Linköping, Sweden, April, 2013.
- Analysis, Complex Geometry and Mathematical Physics: A Conference in Honor of Duong H. Phong, Columbia University, New York, May, 2013.
- Asymptotic Analysis in General Relativity, Université de Cergy-Pontoise, France, June 2013.
- Microlocal Analysis and Spectral Theory in honor of J. Sjöstrand,, Luminy, France, September 2013.
- Bay Area Microlocal Analysis Seminar, Stanford, January, 2014.
- SIAM SEAS 2014, Melbourne, Florida, March, 2014.
- Inverse Problems and Imaging, Institut Henri Poincaré, Paris, April, 2014.
- Three Days of Analysis and PDEs (in honor of A. Ruiz), Madrid, Spain, June, 2014.
- Recent Advances in Non-Linear and Non-Local Analysis: Theory and Applications, ETH, Zurich, Switzerland, June, 2014.
- Asymptotic Analysis in General Relativity, Grenoble, France, June, 2014.
- Multiwave Imaging, Grenoble, France, June, 2014.
- Distinguished Lectures on Inverse Problems, Helsinki, Finland, August 2014.
- Mathematics and Computation in Tomography, Oberwolfach, Germany, August 2014.
- Harmonic Analysis and Partial Differential Equations in honor of Carlos Kenig, U. Chicago, September, 2014.
- Inverse Problems and Spectral Theory in honor of P. Kuchment, College Station, Texas, October, 2014.
- International Conference on Inverse Problems and Optimal Control, Chinese University of Hong Kong, December, 2014.
- International Conference on Inverse Problems and Related Topics, National University of Taiwan, Taipei, December, 2014.
- Princeton-Tokyo Workshop on Geometric Analysis, University of Tokyo, Japan, March 2015.
- Wave Propagation and Inverse Problems, Mathematical and Computational Challenges in honor of William Symes, Michigan State University, April, 2015..
- IHP Summer Preschool on Inverse Problems at CIRM, Luminy, France, April 2015.
- Geometric Inverse Problems, Institute Henri Poincaré, Paris, June, 2015.
- International Congress of Mathematical Physics, Santiago, Chile, July 2015.
- Inverse Problems in the Physical Sciences, Centro de Modelamiento Matemático, Santiago, Chile, August, 2015.
- National Meeting of Mathematical Engineers, Universidad Católica de Chile, August, 2015.

- Hyperbolic Equations on Spacetimes: Stability, Microlocal Analysis and Quantum Field Theory, Erwin Schrödinger Institute, Vienna, September, 2015.
- Hong Kong Colloquium on Inverse Problems, Imaging and PDE's, IAS HKUST, November, 2015.
- Inverse Problems and Related Topics, Zhejiang University, Hangzhou, China, December 2015.
- Workshop on Inverse Problems in Scattering and Imaging, Purdue, West Lafayette, April, 2016.
- CMO-BIRS Workshop on Dirichlet to Neumann Maps: Spectral Geometry, Inverse Problems and Applications, Oaxaca, Mexico, June 2016.
- Opening Symposium of Center for Applied and Interdisciplinary Mathematics, University of Michigan, Ann Arbor, October, 2016.
- Control and Inverse Problems in PDE, Zhejiang University, Hangzhou, October 2016.
- Young Scholars IPIA East Asia Symposium, Taipei, November, 2016.
- Math+X Symposium on Mathematics on Seismology and Inverse Problems, Rice University, Houston, January, 2017.
- Optical Imaging and Inverse Problems, IMA, University of Minnesota, February, 2017.
- Bay Area Microlocal Analysis seminar, Stanford, March, 2017.
- 100 Years of the Radon Transform, RICAM, Linz, Austria, March, 2017.
- Houston SIAM Imaging Sciences Symposium, Houston, October, 2017.
- Workshop on General Relativity and AdS/CFT, Fields Institute, Toronto, October 2007.
- Microlocal Analysis and Symplectic Geometry in honor of V. Guillemin 80th birthday, MIT, Cambridge, Massachusetts, November, 2017.
- International Conference on Inverse Problems (ICIP, 2018), Singapore, August, 2018.
- Inverse Problems, PDE and Geometry, University of Jyväskylä, Finland, August, 2018.
- Recent Results in Mathematical Physics in honor of Rafael Benguria, Pontificia Universidad Católica de Chile, Santiago, Chile, December 2018.
- Computational challenges in Gravitational Wave Astronomy, IPAM, UCLA, January 2019.
- Microlocal Methods in Analysis and Geometry, CRMS, Luminy, France, April, 2019.
- The 5th East Asia Symposium of IPIA Young Scholars Symposium, Beijing, China, June 2019.
- Modern Methods in Imaging, In the Footsteps of Allan MacLeod Cormack on the Fortieth Anniversary of his Nobel Prize, Tufts University, Medford, Massachusetts, August, 2019.
- Introductory Workshop on Microlocal Analysis, MSRI, Berkeley, September, 2019.
- International Zoom Conference on Pseudodifferential Operators, July 2020.
- Online Pre-Conference, "Inverse Problems and Nonlinearity", Helsinki, Finland, August, 2020.
- Inverse and Ill-Posed Problems: Theory and Numerics, Novosibirsk, Russia, October, 2020 (online),
- IAS Conference on Industrial and Applied Mathematics, HKUST, Hong Kong, January, 2021 (online).

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, Brandeis-Harvard-MIT-Northeastern at MIT, April 2002.
- Colloquium, University of North Carolina, Chapel Hill, 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.
- Colloquium, Universidad Autónoma de Madrid, Spain, May 2011.
- Seminar, Hong Kong University of Science and Technology, Hong Kong, August, 2011.
- Seminar, Centro de Modelamiento Matemático (CMM), Universidad de Chile, September 2011.
- Colloquium, University of Helsinki, October 2011.
- Seminar, University of Helsinki, October 2011.
- Colloquium, Columbia University, November 2011.
- Seminar, Department of Electrical and Computer Engineering, NSU, Singapore, December 2011.
- Colloquium, NUS, Singapore, December 2011.
- Seminar, Department of Physics NTU, Singapore, December 2011.
- Colloquium, Fujian Normal University, Fuzhou, China, December 2011.
- Colloquium, Fullerton College, January 2012.
- Undergraduate Colloquium, University of California, Irvine, March 2012.
- Seminar, University of Minnesota, Minneapolis, March, 2012.
- Colloquium, University of Texas, Austin, April 2012.
- Colloquium, University of North Carolina, Chapel Hill, April 2012.
- Applied Math Seminar, University of North Carolina, Charlotte, April 2012.
- Colloquium, Sony Brook, April, 2012.
- Mathematics Physics Seminar, Caltech, May, 2012.
- Applied Math Colloquium, University of Arizona, October 2012.
- Colloquium, Chinese University of Hong Kong, Hong Kong, November, 2012.

- Calderón-Zygmund Seminar, University of Chicago, November 2012.
- Bay Area Microlocal Analysis Seminar, Berkeley, December 2012.
- Colloquium, Texas A&M, December, 2012.
- Seminar, Centro de Modelamiento Matemático, Santiago, Chile, January, 2013.
- Colloquium, Université de Toulouse, France, January, 2013.
- Seminar, Laboratoire Jacques-Louis Lions, Paris 6, Jussieu, France, February, 2013.
- Colloquium, Université de Grenoble, France, February, 2013.
- Laurent Schwartz Seminar, IHES, France, February, 2013.
- Colloquium, Stockholm University and KTH, April, 2013.
- Two seminar talks, Institut Mittag Leffler, April, 2013.
- Seminar, MIT, May, 2013.
- Seminar, University of Cambridge, UK, May, 2013.
- Graduate Student Colloquium, University of Helsinki, November 2013.
- Seminar, Stanford University, February, 2014.
- Calderón-Zygmund Seminar, University of Chicago, February 2014.
- Seminar, Stanford University, March 2014.
- Seminar, Laboratoire Jacques-Louis Lions, Paris 6, Jussieu, France, June, 2014.
- Colloquium, Brandeis-Harvard-MIT-Northeastern at Northeastern, September, 2014.
- Colloquium, Baylor University, October, 2014.
- Colloquium, University of Pittsburgh, February, 2015.
- Undergraduate Seminar, UW, April, 2015.
- Colloquium, Tsinghua University, Beijing, November, 2015.
- Undergraduate Colloquium, Tsinghua University, November, 2015.
- Seminar, Beijing Institute of Technology, November, 2015.
- Colloquium, University of California, Irvine, January 2016.
- Analysis and PDE seminar, MIT, March 2016.
- Colloquium, Peking University, September, 2017.
- Joint Colloquium Institute of Mathematical Sciences and Department of Mathematics CUHK, November, 2017.
- Colloquium, National University of Singapore, November, 2017.
- Seminar, University of Sydney, Australia, March 2018.
- Colloquium, CAAM, Rice University, April, 2018.
- Colloquium PACM, Princeton University, April, 2018.

- Seminar, Centro de Modelamiento Matemático (CMM), Santiago, Chile, December, 2018.
- Colloquium, University of Illinois Urbana Champaign, January, 2019.
- Colloquium, San José State University, November, 2019.
- Colloquium, Emory University, March 2020.
- International Webinar on Inverse Problems, UCI, April, 2020.
- Webinar Monza, MIT June 2020.
- Latinamerican Cyber-colloquium of Mathematics, June, 2020.
- Colloquium, Rutgers U., September 2020 (online).
- Colloquium, RPI, September, 2020 (online).
- Colloquium, TIFR, Bangalore, India, October, 2020 (online).

Prize and Awards Committees

- Awards Committee for the Mathematical Congress of the Americas 2021.
- Chair Control and Optimization Panel, ICM 2018.
- Chair Selection Committee, 2016 Media V Award.
- Early Award Committee, International Congress of Mathematical Physics, 2015.
- Chair of 2015 Kleinman Prize Committee.
- Chair of 2014 Bocher Prize Committee.
- Member Awards Committee, Mathematical Congress of the Americas, 2012-2013.
- Member of 2012 Kleinman Prize Committee.
- Selection Committee for the 2013 SIAG/Imaging Science Prize.
- Member Selection Committee of SIAM's John Von Neumann Lecture, 2010-2012.
- Member Selection Committee CMR-Fields-PIMS Prize, 2009-2010, chair 2010.
- Chair AMS-SIAM committee to select winner of 2006. Birkhoff Prize.

Other Professional Experience:

- Member of Scientific Committee of 5th East Asia Symposium of IPIA Young Scholars Symposium.
- Member of Scientific Committee, 'Microlocal Methods in Analysis and Geometry, Luminy, France, May, 2019.
- Member of Scientific Committee, Inverse Problems, PDE and Geometry, Jyvaskyla, Finland, August, 2018.
- Member of Scientific Committee, ICIP 2018, Singapore, August, 2018.

- Member of Scientific Committee, AIP 2017-present.
- Scientific Committee, Sociedad Matemática de Chile, 2017-present.
- Scientific Committee, 75 Years of Mathematics in Mexico, an International Conference, Dec 4-8, 2017.
- Scientific Committee, AIP 2017, Hangzhou, China, May 29-June 2, 2017.
- Scientific Committee, Trimester on Inverse Problems, Institut Henri Poincaré, Paris, April 13-July 10, 2015.
- Scientific Committee, AIP, May 2015, Helsinki, Finland.
- Scientific Committee, Conference "Spectral and Analytic Methods in Inverse Problems", Institut Henri Poincaré, Paris, France, May, 2015.
- Member International Association of Mathematical Physics Early Award Committee, 2014-2015.
- Member Scientific Committee of workshop "Recent Progress in the Mathematical and Numerical Analysis of Inverse Problems", CIRM, Luminy, May 2014.
- Consultant to Mathematics of Planet Earth (MPE) 2013 initiative.
- Program Committee, SAMSI 2013 Summer Program on Neuroimaging Data Analysis, 2012-2013.
- Simons Foundation Review Advisory Panel, 2011-present.
- Nominating Committee American Mathematical Society, 2011-2013.
- Member of the Organizing Committee of Inverse Problems program at Mittag-Leffler Institute, Spring 2013.
- Member of Organizing Committee on Fields Institute Program on "Inverse Problems and Imaging", January-August, 2012.
- 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.
- Member Scientific Committee MCPIT2013, Institut Henri Poincaré, Paris, France, November 2013.
- Member of Scientific Committee, Applied Inverse Problems (AIP), Conference, July, 2013.
- 10 year review of "Centro Modelamiento Matemático (CMM)", Chile for CONICYT, Chile, 2011.
- Advisory Board Member of ICIP2010 held in Hong Kong, December 2010.
- Member of Scientific Committee, Applied Inverse Problems (AIP) Conference, College Station, Texas, May 2011.
- PIMS site director at University of Washington, 2003-2010.
- Member of Scientific Advisory Board Banff International Research Station (BIRS), 2008-2011.
- 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 Non-linear Analysis Cartagena, Colombia, July 23, 2007 - July 27, 2007.
- Chair committee to select speakers of AMS Western regional Meetings, 2006-2007.
- 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 2001-2007.
- 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 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. Lamoureux and G. Margrave).
- Co-organizer IMA summer workshop on “Geometric Methods in Inverse Problems and PDE Control”, July 16-27, 2001 (jointly with C. Croke, I. Lasieka 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 Calderón IMPA, Río 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 (RTG) 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.
- Co-organizer of workshop at Isaac Newton Institute on “Inverse Problems in Analysis and Geometry”, Cambridge, England, August 2011.
- Co-Chair organizing committee of Pan American Advanced Studies Institute on Inverse Problems and PDE Control, Santiago, Chile, Jan. 2012.
- Organizer of minitutorial on “Harry Potter’s Cloak Via Transformation Optics”, SIAM Conference on Imaging Science, Philadelphia, May, 2012.

- Organizer of Forward Looking Panel Discussion, SIAM Conference on Imaging Science, Philadelphia, May, 2012.
- Co-Chair Organizing Committee of International Conference on Inverse Problems and PDE Control, Sichuan University, Chengdu, China, July-August, 2012.
- Co-Chair Organizing Committee of workshop on “Coupled-physics Inverse problems”, CMM, Universidad de Chile, Santiago, Chile, January, 2013.
- Co-Chair Organizing Committee of Session on Inverse Problems, 2nd PRIMA Congress, Shanghai, China, June, 2013.
- Co-Chair Organizing Committee of Research Training Grant (RTG) Summer School on “Microlocal Analysis and Inverse Problems”, University of Washington, Seattle, July, 2013.
- Organizer, Summer Graduate Workshop on “Introduction to the Mathematics of Seismic Imaging”, July-August, 2013 (two weeks). This was part of the MSRI activities on the 2013 Mathematics of Planet Earth Year.
- Chair Organizing Committee of the workshop “Inverse Problems and Imaging” held at the Institut Henri Poincaré, Paris, June 7-11, 2014.
- Co-Chair Organizing Committee of the Workshop “Inverse Problems in the Physical Sciences”, CMM, Santiago, Chile, August 2015.
- Co-Chair of workshop “Inverse Problems, Imaging and PDE’s”, IAS HKUST, Hong Kong, September 28-October 2, 2015.
- Co-chair of workshop, “Inverse Problems and Related Topics”, Zhejiang University, Hangzhou, China, December 2015.
- Organizer of SIAM Special Session on “Inverse Problems and Applications” at JMM, Seattle, January 2016.Ch
- Co-Organizer, First East Asia Symposium of IPIA, Shen Zhen, China, December, 2015.
- Co-organizer Young Scholar Symposium, Second East Asia Symposium of IPIA, Taipei, November 2016.
- Chair Organizing Committee of workshop “Inverse Problems, Imaging and Partial Differential Equations”, IAS, HKUST, Hong Kong, December, 2016.
- Chair of IAS Program on “Inverse Problems, Imaging and Partial Differential Equations”, HKUST, Hong Kong, September 2016-February, 2017.
- Co-Organizer, Math+X Symposium on Seismology and Inverse Problems, Rice University, Houston, January, 2017.
- Co-organizer of Minisymposium on “Linear and non-linear tomography in non Euclidean geometries”, 100 Years of the Radon Transform, TiCAAM, Linz, Austria, March, 2017.
- Co-chair, Symposium for the Mathematics of Cryo-Electron Microscopy, IAS, HKUST, Hong Kong, September, 2017.
- Co-organizer, Microlocal Analysis and Symplectic Geometry in honor of V. Guillemin’s 80th birthday conference, MIT, Cambridge, Massachusetts, November, 2017.
- Co-organizer, Frontiers of Non-Linear PDE, IAS, HKUST, Hong Kong, December, 2017.
- Co-organizer Math+X Symposium on Data Science and Inverse Problems in Geophysics, Rice University, Houston, January, 2018.

- Chair Organizing Committee, Inverse Problem Imaging and PDE's, IAS, HKUST, Hong Kong, March, 2018.
- Co-organizer, The third East Asia section of IPIA Young Scholars symposium, Hong Kong Baptist University, Hoing Kong, March 2018.
- Co-organizer, Theories and Numerics of Inverse Problems, National University of Singapore, August and September, 2018.
- Co-organizer, Math+X Symposium, Inverse Problems and Deep Learning in Space Exploration, Rice University, January, 2018.
- Co-chair, MMAA, Inverse Problems and Resonances in honor of Plamen Stefanov, Purdue University, March, 2019.
- Co-chair, Probing the Earth and Universe with Microlocal Analysis, BIRS, Banff, April, 2019.
- Co-chair, Mathematics of Optical Imaging, IMA, Minnesota, April, 2019.
- Chair, Inverse Problems, Imaging and PDEs, IAS, HKUST, Hong Kong May, 2019.
- Co-organizer, Math+X Symposium on Inverse Problems and Deep Learning, Mitigating Natural Hazards, Las Catalinas, Guanacaste, Costa Rica, Jan. 2020.
- Co-Chair, Special Semester on “Tomography Across the Scales”, The Johann Radon Institute for Computational and Applied Mathematics (RICAM) program on inverse problems, Fall, 2020.
- Co-organizer, ”Mathematical and Computational Challenges in the Era of Gravitational Wave Astronomy”, IPAM, Fall 2021.

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.
- Mark Hubenthal, PhD 2012.
- Jie Chen, PhD, 2013.
- Ilker Kocyigit, PhD 2013.
- Lee Patroliia, PhD 2013.
- Justin Tittlefitz, PhD 2013 (coadvisor with H. Smith).
- Yang Yang, PhD 2014.
- Kaloyan Marinov, PhD 2015.
- Ru-Yu Lai, PhD 2015.
- Peter Caday, PhD 2015 (coadvisor with P. Stefanov).
- Hanming Zhou, PhD 2015.
- Yernat Assylbekov, PhD 2016.
- Benjamin Palacios, PhD 2018.
- Yfan Chang, Phd, 2018.
- Nikolaos Eptaminitakis, PhD, 2020 (coadvisor with C.R. Graham).
- Ashwin Takirere, PhD 2020.
- Kevin Chien, current PhD student.
- Haim Grebnev, current PhD student.
- Kelvin Lam, current PhD student.
- Li Li, current PhD student.
- Reed Meyerson, current PhD student.
- Ravi Shankar, current PhD student (coadvisor with Y. Yuan).

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 2009-2012 (joint with Tatiana Toro).
- Tu Nyugen, August 2009-2012 (joint with Tatiana Toro).
- Frederic de Gournay, Feb. 2010-June 2010.
- Francois Monard, Sept 2012-August 2015.
- Lauri Oksanen, Sept 2012-July 2013.
- Mario Micheli, Dec 2012-June 2014.
- Eemeli Blasten, Sept. 2013-Dec 2014.
- Carlos Montalto, Sept. 2014-2017.
- Eemeli Blasten, Sept. 2015-2018.
- Yiran Wang, Sept. 2015-2018.
- Yi-Hsuan Lin, 2016-2018.
- Tuhin Ghosh, 2016-2019.
- Catalin Carstea, 2017-2018.
- Sombuddha Bhattacharyya, 2017-2020.
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