

MAX D. GUNZBURGER Robert O. Lawton Distinguished Professor
Francis Eppes Eminent Professor



Department of Scientific Computing
Florida State University
Tallahassee FL 32306-4120
850-644-7060
850-644-0098 (fax)
gunzburg@fsu.edu
<http://www.sc.fsu.edu/~gunzburg>

Positions

Full-time positions

Florida State University - Robert O. Lawton Distinguished Professor, 2015-present; Frances Eppes Eminent Professor of Scientific Computing, 2008-present; Founding Chair, Department of Scientific Computing, 2008-2015; Director, School of Computational Science, 2005-2008; Frances Eppes Eminent Professor of Mathematics, 2002-2008
Iowa State University - Distinguished Professor of Mathematics, 2001-2003;
Professor and Chair of Mathematics, 1996-2001
Virginia Polytechnic Institute and State University - Professor of Mathematics, 1987-1997
Los Alamos National Laboratory - Visiting Scientist, 1988-1989
Carnegie Mellon University - Professor of Mathematics, 1981-1989
University of Tennessee - Associate Professor and Professor of Mathematics, 1976-1982
Institute for Computer Applications in Science and Engineering, NASA Langley Research Center - Staff Scientist, 1973-1976
Naval Ordnance Laboratory - National Research Council Postdoctorate Associate, 1971-1973
New York University - Research Scientist and Assistant Professor of Mathematics, 1969-1971

External, adjunct, courtesy, and part-time positions

Basque Center for Applied Mathematics - Spain - External Scientific Member, 2012-present
Hong Kong Polytechnic University - Honorary Professor, 2015-present
Yonsei University, Korea - Distinguished Professor of Computational Science and Engineering, 2010-present
Peking University - Guest Professor of Computational Mathematics, 2000-present
Florida State University - Professor of Mathematics, 2008-present; Professor of Mechanical Engineering, 2006-present; Member, Geophysical Fluid Dynamics Institute, 2015-present
Virginia Polytechnic Institute and State University - Professor of Computer Science, 1992-1997;
Professor of Aerospace and Ocean Engineering, 1994-1997
Hampton University - Adjunct Professor of Mathematics, 1990-1993
The College of William and Mary - Adjunct Associate Professor of Mathematics, 1973-1976
George Washington University - Adjunct Associate Professor of Mathematics, 1973-1976

Consulting positions

Oak Ridge National Laboratory, 1978-1986, 2012-present
Advanced Cooling Technologies, Inc., 2013-present
Tricircle Corp. 2015-present,
Sandia National Laboratories, 2000-2014
Clear Science Corp., 2004-2005
Institute for Computer Applications in Science and Engineering, NASA Langley Research Center, 1976-1989, 1993-1997
Los Alamos National Laboratory, 1984-1995
Institute for Computational Mechanics in Propulsion, NASA Lewis Research Center, 1985-1986, 1991-1994

Education

New York University - B.S. 1966, M.S. 1967, Ph.D. 1969

Awards, honors, and distinguished lectures

Awards and honors

Society for Industrial and Applied Mathematics – Charter Fellow, 2009
Society for Industrial and Applied Mathematics – W.T. and Idalia Reid Prize in Mathematics, 2008
Cambridge University, United Kingdom – Rothschild Visiting Fellow, 2012
Oxford University, United Kingdom – OCCAM Visiting Fellow, 2011
Society for Industrial and Applied Mathematics SIGEST Paper – Paper [236] in publications list selected for republication in SIAM Review
Peking University – Guest Professor of Computational Mathematics, 2000-present
Hong Kong Polytechnic University - Honorary Professor, 2015-present
Asociación Argentina de Matemática Aplicada, Computacional e Industrial (Argentine Society of Applied, Computational, and Industrial Mathematics) – Honorary Member, 2013-present
Oak Ridge National Laboratory – CCSD Distinguished Scientist, 2012-present
Sandia National Laboratories – CSRI Senior Research Fellow, 2006-present
Yonsei University, Korea - Distinguished Professor of Computational Science and Engineering, 2010-present
Florida State University – Robert O. Lawton Distinguished Professor, 2015-present; Frances Eppes Eminent Professor of Scientific Computing, 2008-present; Frances Eppes Eminent Professor of Mathematics, 2002-2008
Iowa State University – Distinguished Professor, 2001-2003; Award for Excellence in Outreach, College of Liberal Arts and Sciences, 2000; Visionary Award, Vision 2020 Project, 2000; Miller Faculty Fellow, 1996-1997
National Aeronautics and Space Administration – Innovator's Prize for Inventions and Contributions, 1985; Traineeship Fellowship for Graduate Studies, 1966-1969
National Research Council – Postdoctoral Associate, 1971-1973
New York University – Tau Beta Pi Honor Society, 1965; Founders' Day Awards for Academic Excellence, 1966 and 1969; Bryan Medal for Excellence in Mechanics, 1966; Alexander Klemin Prize, 1966

Distinguished lectures

Sandia National Laboratories – Computer Science Research Institute Distinguished Lecture, 2015
University of Washington – Boeing Distinguished Lecture, 2013
Beijing Computational Science Research Center – Scientific Frontiers Lecture Series, 2013
Missouri University of Science and Technology – Division of Sponsored Programs Distinguished Research Seminar Series, 2011
Louisiana State University – Frontiers of Scientific Computing Lecture Series, 2010
International Congress of Mathematicians – Invited Section Lecturer, 2006
University of Manitoba – Distinguished Lecture on Computational Science, Inaugural Lecturer, 2006
University of Alberta – PIMS Distinguished Lecture in Scientific Computing, Inaugural Lecturer, 2006
University of Alabama, Huntsville – University Distinguished Lecture Series, Inaugural Lecturer, 2004

Professional activities

Editor in Chief, Senior Editor, Founding Editor

Co-Founding Editor and Senior Editor – SIAM/ASA Journal on Uncertainty Quantification (2012-2016)
Editor in Chief – SIAM Journal on Numerical Analysis (2000-2007)

Editorial boards

SIAM Journal on Numerical Analysis (1996-present)
Computational Science and Engineering (SIAM book series) (2009-present)
Advances in Design and Control (SIAM book series) (1998-present)
Journal of Stochastics (2014-present)
International Journal of Computer Mathematics (2009-present)

Numerical Mathematics: Theory, Methods and Applications (2007-present)
International Journal of Numerical Analysis and Modeling (2003-present)
International Journal for Computational Fluid Dynamics (1994-present)
Electronic Journal of Mathematical and Physical Sciences (2002-present)
ESAIM: M2NA (Mathematical Modeling and Numerical Analysis) Associate Editor (2005-2013)
Theoretical and Computational Fluid Mechanics (2005-2011)
Journal of Mathematical Analysis and its Applications (2003-2010)
ESAIM: COCV (Calculus of Variations and Optimal Control) (2003-2006)
SIAM Journal on Control and Optimization (1997-2002)

National and international panels, advisory boards, and review committees

NSF Statistical and Applied Mathematical Sciences Institute, National Advisory Council, 2010-present
RWTH Aachen University, Scientific Advisory Board for the Aachen Institute for Advanced Study in Computational Engineering Science, Germany, 2007-present
Oak Ridge National Laboratory, Computing and Computational Sciences Directorate Advisory Committee, 2013-present
University of Illinois at Urbana-Champaign, PSAAP Center Advisory Committee, 2013-present
Austrian Science Foundation and German Research Foundation, International Research Training Group, Review Panel, 2015
Middle Tennessee State University, Computational Science Graduate Degree, Review Committee, 2015
University of Texas at Dallas, Department of Mathematics, Review Committee, 2015
National Institute for Mathematical Sciences, Science Advisory Committee, Korea, 2010-present
University of Pittsburgh, Department of Mathematics, Review Committee, 2011
Fundacao para a Ciencia e a Tecnologia (Foundation for Science and Technology) Evaluation Panel, Portugal, 2003, 2008; Chair of Panel 2009-2011
Tennessee Board of Regents, Advisory Committee for new programs in computational science, 2009
Deutsche Forschungsgemeinschaft (German Research Foundation) Priority Programme Review Panel, Germany, 2006, 2007, 2008, 2009
Carnegie Mellon University, Department of Mathematical Sciences, Advisory Board, 2003, 2008 (Chair of Board)
National Science Foundation (NSF) Proposal Evaluation Panels, 1998, 1999, 2001, 2002, 2004 (2), 2005, 2006, 2007, 2010, 2015
NSF CAREER Program Evaluation Panel, 2010, 2011
DOE CAREER Program Evaluation Panel, 2011
NSF/MPS Advisory Panel on Cyberscience, 2004
Carnegie Mellon University, Mellon College of Sciences, External review committee, 2003
NSF Graduate Fellowship Application Evaluation Panel, 1993-1997
CBMS Regional Conferences Application Evaluation Panel, 1995-1997; chair of panel, 1997

Professional societies

Society for Industrial and Applied Mathematics (SIAM)
Chairman of the Board of Trustees (2003)
Member of the Committee on Science Policy (2003-2007)
Member of the Board of Trustees (2001-2003)
President (2013-2014) and vice president (2010-2012) of the SIAM Activity Group on Uncertainty Quantification
Member of the Financial Management Committee (2002-2004)
Member of the SIAM Fellows selection committee (2013-2015)
Member of the W. T. and Idalia Reid Prize Committee (2000-2006)
Member of the Ralph E. Kleinman Prize Committee (2004-2007)
Member of the SIAM Activity Group on Control and Systems Theory Prize Committee (2004-2005)
Chairman, Outstanding Paper Prize Selection Committee (2005-2006)
Member of the Student Paper Prize Selection Committee (2000)

Conferences, workshops, extended programs - chair or co-chair of organizing committee

- Programme in Uncertainty Quantification for Complex Systems: Theory and Methodologies*, Isaac Newton Institute for Mathematical Sciences, Cambridge, United Kingdom, 2018
- Trimester Program on Multiscale Problems: Algorithms, Numerical Analysis, and Computation*, Hausdorff Research Institute for Mathematics, Bonn, Germany, 2017
- Workshop on Uncertainty Quantification*, Mittag-Leffler Institute, Stockholm, Sweden, 2016
- SIAM Conference on Uncertainty Quantification*, Savannah, 2014
- Adjoint Methods in Computational Science, Engineering, and Finance*, Dagstuhl, Germany, 2014
- Nonlocal Models and Peridynamics*, Berlin, Germany, 2012
- SAMSI Workshop on Nonlocal Continuum Models for Mechanics, Diffusion, and Other Applications*, Raleigh, 2012
- Nonlocal Models for Mechanics and Diffusion*, Bielefeld, Germany, 2011
- Workshop on Uncertainty Quantification for Systems Governed by Partial Differential Equations*, Edinburgh, Scotland, 2010
- Fourth International Conference on Multiscale Materials Modeling*, Tallahassee, 2008
- Workshop on Methods for Verification and Validation*, Albuquerque, 2007
- SIAM Conference on Computational Science and Engineering*, Costa Mesa, 2007
- SIAM Conference on Control and its Applications*, New Orleans, 2005
- Workshop on Emerging Methodologies and Applications in Numerical PDEs*, Tallahassee, 2004 (chair of the organizing committee)
- Eight Navier-Stokes Conference*, St. Petersburg, Russia, 2002
- Workshop on Least Squares Finite Element Methods and Applications*, Oberwolfach, Germany, 2002
- Conference on Superconductivity*, Purdue University, 1998
- SIAM Annual Meeting*, Toronto, 1998
- Conference on Recent Trends and Advances in PDEs and Numerical PDEs*, Ames, 1998 (chair of the organizing committee)
- Workshop on Optimal Design and Control*, Blacksburg, 1994
- AMS-SIAM-IMS Summer Research Conference on the Mathematics of Superconductivity*, University of Washington, Seattle, 1993 (one of two organizers)
- Workshop on Flow Control*, Institute for Mathematics and its Applications, Minneapolis, 1992 (sole organizer)

Conferences and workshops - member of the organizing, program, or scientific committee

- IFAC Workshop on Control of Systems Governed by Partial Differential Equations*, 2016, Bertinoro, Italy.
- 9th International Conference on Computational Physics*, Singapore, 2015
- Workshop on Least Squares and DPG Methods*, Austin, 2013
- First IFAC Workshop on Control of Systems Governed by Partial Differential Equations*, Paris, France, 2013
- Conference on Current Trends and Progresses in Scientific Computation*, Shanghai, China, 2012
- SIAM Conference on Uncertainty Quantification*, Raleigh, 2012
- 4th Workshop on High-Dimensional Approximation*, Bonn, Germany, 2011
- Advances in Partial Differential Equations and their Applications*, Shanghai, China, 2010
- Department of Energy Applied Mathematics Principal Investigators Meeting*, Argonne, 2008
- International Conference on Applied Mathematics and Interdisciplinary Research*, Nankai, China, 2006
- Numerical PDEs in the 21st Century*, Albuquerque, 2006
- Conference on Robust Optimization-Directed Design*, Shalimar, 2004
- Com2MaC Conference on Computational Mathematics*, Pohang, Korea, 2003
- Third AIAA Theoretical Fluids Dynamics Conference*, St. Louis, 2002
- International Congress of Mathematicians Satellite Conference on Scientific Computing*, Xi'an, China, 2002
- Second Annual Conference on Computer Science and Information Technologies*, Yerevan, Armenia, 1999
- SIAM Conference on Emerging Issues in Mathematics and Computation from the Material Sciences*, Pittsburgh, 1994

Symposia and special sessions organized by invitation

- Numerical Methods for High Dimensional Stochastic Systems*, 12th International Conference of Numerical Analysis and Applied Mathematics, Rhodes, Greece, 2014 (with C. Webster)
- Computational Methods for SPDES*, The Mathematics of Finite Elements and its Applications, Uxbridge, United Kingdom, 2013
- Graduate Education in CSE: Perspectives, Developments, Challenges, and Results*, SIAM Conference on Computational Science and Engineering, Reno, 2011
- Computational Science and Engineering*, Joint Meeting of the Korean and American Mathematical Societies, 2009.
- Numerical simulations of flows in porous media*, SIAM Conference on Computational Science and Engineering, Miami, 2009 (with Y. Cao and X. Wang)
- Advances in Optimization, Control, and Reduced-Order Modeling*, Sixth International Conference on Large-Scale Scientific Computations, Sozopol, Bulgaria, 2007 (with Pavel Bochev)
- Finite Element Methods for Flow Control and Optimization*, Fourteenth International Conference on Finite Elements in Flow Problems, Santa Fe, 2007 (with Pavel Bochev)
- Emerging Methodologies for PDE Constrained Optimization and Control Problems*, SIAM Conference on Control and its Applications, New Orleans, 2005
- Reduced-Order Modeling*, SIAM Conference on Computational Science and Engineering, Orlando, 2005 (with K. Willcox)
- Flow Control*, SIAM Conference on Control and Optimization, San Diego, 2000 (with R. Smith)
- Flow Control and Optimization*, GAMM Annual Meeting, Göttingen, Germany, 2000
- Numerical Solution of Partial Differential Equations*, Canadian Applied and Industrial Mathematics Society Annual Meeting, Quebec, Canada, 1999
- Modeling, Analysis, and Computation in Superconductivity*, International Conference on Industrial and Applied Mathematics, Hamburg, Germany, 1995

Outreach

- Department of Commerce Training Courses for Y2K Preparedness and Response* (1999-2000), Ames and Des Moines, Iowa; organizer and manager
- Virginia Tech Summer Program for Minority Undergraduate Students of Mathematics* (1990-1993), a program that successfully attracted minority students to graduate programs in mathematics; organizer and manager

Other professional service

- External examiner for doctoral and habilitation dissertations* – University of Oxford (2), University of Paris-Sud, Simon Fraser University, York University, University of Magdeburg, Indian Institute of Technology Kaipur, Darmstadt University of Technology
- Evaluator of hiring, tenure, and promotion cases* – Over 300 letters written in response to requests to evaluate personnel being considered for hiring or tenure and/or promotion by other institutions in the US and abroad
- Reviewer for federal, state, and foreign funding agencies* – Reviewed over 350 research proposals for eleven Federal and State funding agencies and for funding agencies in Canada, Czech Republic, Chile, Germany, Greece, Hong Kong, Israel, NATO, Portugal, Qatar, Saudi Arabia, and Singapore
- Reviewer for journals and book publishers* – Reviewer of over 450 papers for over sixty mathematics, engineering, and physics journals and reviewer of book proposals for over ten publishers

Invited presentations

Short courses

- Basque Center for Applied Mathematics: *Summer school on uncertainty quantification*, Bilbao, Spain, 2016
- Basque Center for Applied Mathematics: *Numerical methods for partial differential equations with random inputs*, Bilbao, Spain, 2013
- SAMSI Workshop on Nonlocal Continuum Models for Diffusion, Mechanics, and Other Applications: *Analyses and finite element methods for the peridynamic nonlocal continuum theory and related diffusion models*, Raleigh, 2012.
- Basque Center for Applied Mathematics: *Nonlocal diffusion, nonlocal mechanics, and a nonlocal vector calculus*, Bilbao, Spain, 2012
- International Centre for Mathematical Sciences Workshop on Uncertainty Quantification: *Numerical methods for PDEs with random inputs*, Edinburgh, Scotland, 2010
- Department of Computational Science and Engineering, Yonsei University: *Reduced-order modeling for complex systems*, Seoul, Korea, 2010
- Department of Computational Science and Engineering, Yonsei University: *Centroidal Voronoi tessellations – theory, algorithms, and applications*, Seoul, Korea, 2010
- EU-Regional School 2009: *A numerical analyst's view of numerical methods for stochastic PDEs*, Aachen, Germany, 2009
- London Mathematical Society Durham Symposium: *Numerical methods for stochastic PDEs*, Durham, England, 2008
- First Argentinean Congress on Applied, Computational, and Industrial Mathematics: *Numerical Methods for Stochastic Partial Differential Equations*, Cordova, Argentina, 2007
- Winter School of the Collaborative Research Center SFB 611, Universität Bonn: *PDE Constrained Control and Optimization*, Bonn, Germany, 2006
- University of North Carolina, Applied Mathematics Program: *Control and Optimization*, Chapel Hill, 2006
- SIAM Conference on Control and its Applications: *Flow Control and Optimization*, San Diego, 2001
- Canadian CFD Conference: *Flow Control and Optimization*, Montreal, Canada, 2000
- Centre de Recherche en Calcul Applique: *Optimal Control and MDO*, Montreal, Canada, 1998
- Seoul National University: *Modeling, Analysis, and Computations for Superconductivity*, Seoul, Korea, 1997
- von Karman Institute for Fluid Dynamics: *Lecture Series in Inverse Design and Optimization Methods*, Brussels, Belgium, 1997

Plenary or keynote talks – (since 1994)

- SIAM Conference on Uncertainty Quantification*, Lausanne, Switzerland, 2016
- Recent Developments in Numerical Methods for Model Reduction*, Institut Henri Poincaré, Paris, France, 2016
- International Conference on Applied Mathematics*, Hong Kong, 2016
- Uncertainty Quantification in Materials Science*, National Institute of Standards and Technology, Gaithersburg, 2016
- Computational Methods for Control of Infinite-dimensional Systems*, Institute for Mathematics and its Applications, Minneapolis, 2016
- Multiscale Modeling and its Applications: From Weather and Climate Models to Models of Materials Defects*, Fields Institute, Toronto, Canada, 2016
- Challenges in High-Dimensional Analysis and Computation*, San Servolo, Italy, 2016
- Workshop on Uncertainty Quantification*, Mittag-Leffler Institute, Stockholm, Sweden, 2016
- International Conference on Numerical Mathematics and Scientific Computing*, Nanjing, China, 2015
- Algorithms and Complexity in Mathematics, Epistemology and Science*, London, Canada, 2015
- Midwest Mathematics and Climate Conference*, Lawrence, Kansas, 2015
- Uncertainty Quantification in Kinetic and Hyperbolic Problems*, Madison, Wisconsin, 2015
- 12th International Conference of Numerical Analysis and Applied Mathematics*, Rhodes, Greece, 2014
- Workshop on Sparse Grids and Applications*, Stuttgart, Germany, 2014

International Workshop on Computational and Applied Mathematics, Huangshan, China, 2013
The Mathematics of Finite Elements and its Applications, Uxbridge, United Kingdom, 2013
Graduate Student Workshop, Clemson, 2013
Workshop on Weather and Climate Prediction on Next Generation Supercomputers: Numerical and Computational Aspects, Exeter, United Kingdom, 2012
8th International Conference on Scientific Computing and Applications, Las Vegas, 2012
Southeast-Atlantic Section of the Society for Industrial and Applied Mathematics Conference, Hunstville, 2012
Reduced Basis, POD and PGD Model Reduction Techniques: a Breakthrough in Computational Engineering?, Cachan, France, 2011
Aachen Conference on Computational Engineering Science, Aachen, Germany, 2011
Macroscopic Modeling of Materials with Fine Structure, Pittsburgh, 2011
Workshop on Future Directions in Applied Mathematics, Raleigh, 2011
NIMS 5th Anniversary and Conference, Daejeon, Korea, 2010
International Workshop on CFD and Computational Mathematics, Seoul, Korea, 2010
Scientific Computing Around Louisiana, Baton Rouge, 2010
Second Argentinean Congress on Applied, Computational, and Industrial Mathematics, Rosario, Argentina, 2009
Red Raider Mini Symposium, Texas Tech University, 2009
Challenges and Advances in Computational Materials Simulations and Design, Singapore, 2009
Energy, Wind and Water: Algorithms for Simulation, Optimization and Control, Auckland, New Zealand, 2009
33rd SIAM Southeast-Atlantic Section Annual Meeting, Columbia, South Carolina, 2009
SIAM Annual Conference, San Diego, 2008 (Reid Prize Lecture)
6th International Conference on Scientific Computing and Applications, Busan, Korea, 2008
First Argentinean Congress on Applied, Computational, and Industrial Mathematics, Cordova, Argentina, 2007
Sixth International Conference on Large-Scale Scientific Computations, Sozopol, Bulgaria, 2007
The Salishan Conference on High-Speed Computation: Confidence in HPC Simulations, Glenneden Beach, 2007
International Congress of Mathematicians - Section Talk, Madrid, Spain, 2006
International Conference on Recent Advances in Scientific Computation, Beijing, China, 2006
International Conference on Applied Mathematics and Interdisciplinary Research, Nankai, China, 2006
Conference on Adaptive Model Reduction Methods for PDE Constrained Optimization, Houston, 2006
Workshop on Computational Methods and Applied Partial Differential Equations, Ames, 2005
Workshop on Mathematics as an Enabling Science, Blacksburg, 2005
Workshop on PDE-Constrained Optimization, Tomar, Portugal, 2005
International Conference on Approximation Methods for Design and Control, Buenos Aires, Argentina, 2005
Workshop on Multiscale Mathematics, Albuquerque, 2004
Conference on PDEs in Mathematical Physics, Trento, Italy, 2004
DOE Workshop on Multiscale Problems, Denver, 2004
International Workshop on Flow Control by Tailored Magnetic Fields, Dresden, Germany, 2004
Com2MaC Conference on Computational Mathematics, Pohang, Korea, 2003
Perspectives on incompressible flows. Comparison of different computational strategies, College Park, 2003
Eight Navier-Stokes Conference, St. Petersburg, Russia, 2002
ICAM Workshop on Control and Identification, Blacksburg, Virginia, 2002
Flow Instabilities and Control Forum, Montreal, Canada, 2002
ICASE 30th Anniversary Symposium, Newport News, 2002
SIAM Annual Conference, San Diego, 2001
Fourth SIG 33 Workshop: Flow Control, Abisko, Sweden, 2001
International Conference on Scientific & Engineering Computing, Beijing, China, 2001
Sixth Korean Applied Mathematics Forum, Sangnisan, Korea, 2000

Conference on the Occasion of the 60th Birthday of Professor Dr. Karl-Heinz Hoffmann, Munich, Germany, 1999
ERCOTAC Workshop on Adjoint Systems, Toulouse, France, 1999
Annual Conference of the Canadian Applied and Industrial Mathematics Society, Quebec, Canada, 1999
NSF Conference on Flow Control, San Diego, 1999
Finite Element in Fluids, Tucson, 1998
Workshop on Control of Fluids and Structures, Institut Henri Poincare, Paris, France, 1998
Annual Conference of the Hong Kong Mathematical Society, Hong Kong, 1998
17th Daewoo Conference on Pure Mathematics, Suwon, Korea, 1997
Korean Advanced Institute for Science and Technology Workshop on Finite Elements, Taejon, Korea (4 talks), 1997
Workshop on Optimal Design and Control, Arlington, VA, 1997
Royal Society of London Conference on Vortices, Dislocations and Line Singularities in Partial Differential Equations, London, United Kingdom, 1996
Conference on Optimal Design and Control, Blacksburg, 1994
SIAM Conference on Emerging Issues in Mathematics and Computation from the Material Sciences, Pittsburgh, 1994
Conference on Least-Squares Methods for Partial Differential Equations, Los Alamos, 1994
NASA-Lewis Conference on Least-Squares Methods for Partial Differential Equations, Cleveland, 1994

Invited conference, workshop, symposium, and special session talks – (since 1994)

SIAM Annual Conference, Boston, 2016
SIAM Conference on Uncertainty Quantification, Savannah, 2014
Workshop on Nonlocal Damage and Failure, San Antonio, 2013
SIAM Conference on Computational Science and Engineering, Reno, 2011
US National Congress on Computational Mechanics, Minneapolis, 2011
Workshop on Peridynamics, Oberwolfach, Germany, 2011
SIAM Conference on Computational Science and Engineering, Miami, 2009
AMS Joint Mathematics Meeting, Washington, 2009
World Congress on Computational Mechanics, Venice, Italy, 2008
SIAM Conference on Computational Science and Engineering, Costa Mesa, 2007
SIAM Annual Conference, New Orleans, 2005
International Conference on Large-Scale Computations, Sozopol, Bulgaria, 2005
Workshop on Numerical Methods for Nonstationary, Nonlinear Control Problems, Oberwolfach, Germany, 2004
Computational Methods in Multiscale Analysis and Applications, Gainesville, 2004
International Workshop on Materials Analysis and Processing in Magnetic Fields, Tallahassee, 2004
Fourth World Congress of Nonlinear Analysts, Orlando, 2004
AFSOR Workshop on Agile, Autonomous Vehicles, Shalimar, Florida, 2003
SIAM Annual Conference, Montreal, Canada, 2003
Computation, Control, and Biological Systems VIII, Bozeman, 2003
AMS Joint Mathematics Meeting, San Diego, 2002
Mathematical Challenges in Scientific Data Mining, Los Angeles, 2002
Workshop on Least-Square Finite Element Methods and Applications, Oberwolfach, 2002
Ninth International Conference on Hyperbolic Problems, Pasadena, 2002
AFRL/AFOSR Control Workshop, Dayton, 2002
Foundations of Computational Mathematics Conference, Minneapolis, 2002
8th Conference on Control of Distributed Parameter Systems, Graz, Austria
Workshop on Meshfree Methods, Iowa City
8th Annual Conference of the CFD Society of Canada, Montreal, Canada
Workshop on Optimal Control of Complex Dynamical Systems, Oberwolfach, Germany
SIAM Conference on the Material Sciences, Philadelphia
AMS Meeting, Lafayette
13th US National Congress of Applied Mechanics, Gainesville

Canadian Applied Mathematics Society, Vancouver, Canada
AMS Meeting, Memphis
SIAM 1996 Annual Conference, Kansas City
U. S. Air Force Workshop on Superconductivity, Washington
Forum on CFD for Design and Optimization, San Francisco
ICIAM95, Hamburg, Germany
Third SIAM Conference on Control and its Applications, St. Louis
33rd IEEE Conference on Decision and Control, Orlando
IMACS World Congress, Atlanta
Canadian Applied Mathematics Society Annual Meeting, Montreal, Canada

Invited colloquium talks – (since 1994)

<i>Brown University</i>	<i>Oxford University, England</i>
<i>University of Manchester Institute for Science and Technology</i>	<i>North Carolina State University</i>
<i>Korean Advanced Institute for Science and Technology</i>	<i>Pohang University, Korea</i>
<i>University of North Carolina at Charlotte</i>	<i>Purdue University</i>
<i>Iowa State University</i>	<i>Centre de Recherche en Calcul Appliqué, Montreal</i>
<i>University of Montreal</i>	<i>Rome Air Force Laboratory, Boston</i>
<i>State University of New York at Stony Brook</i>	<i>Wright Air Force Laboratory, Dayton</i>
<i>University of Maryland</i>	<i>Carnegie Mellon University</i>
<i>Oxford University, England</i>	<i>Wright State University</i>
<i>University of Iowa</i>	<i>Rensselaer Polytechnic Institute</i>
<i>University of Colorado, Boulder</i>	<i>Penn State University</i>
<i>University of Science and Technology of Hong Kong</i>	<i>University of New Orleans</i>
<i>Ajou University, Korea</i>	<i>Hong Kong Baptist University</i>
<i>Purdue University</i>	<i>Korea Institute of Advanced Studies</i>
<i>University of Pittsburgh</i>	<i>University of Kansas</i>
<i>Carnegie Mellon University</i>	<i>Kansas State University</i>
<i>Arizona State University</i>	<i>Clemson University</i>
<i>North Carolina State University</i>	<i>University of Augsburg, Germany</i>
<i>Wright State University</i>	<i>Los Alamos National Laboratory</i>
<i>University of Virginia</i>	<i>Virginia Tech</i>
<i>Rice University</i>	<i>University of Houston</i>
<i>Hong Kong Baptist University</i>	<i>University of Science and Technology of Hong Kong</i>
<i>Ajou University, Korea</i>	<i>University of Pittsburgh</i>
<i>Michigan State University</i>	<i>Clemson University</i>
<i>Sandia National Laboratories, Albuquerque</i>	<i>Peking University, China</i>
<i>Academy of Sciences of China</i>	<i>Georgia Tech</i>
<i>Florida State University</i>	<i>Carnegie Mellon University</i>
<i>Institute of Mathematics and its Applications</i>	<i>Sandia National Laboratories, Albuquerque</i>
<i>University of California at Los Angeles</i>	<i>University of Houston</i>
<i>Statistics and Applied Mathematics Institute</i>	<i>Los Alamos National Laboratory</i>
<i>University of Colorado, Boulder</i>	<i>Colorado State University</i>
<i>University of Houston</i>	<i>University of Alabama, Huntsville</i>
<i>University of South Carolina</i>	<i>Auburn University</i>
<i>University of Coimbra, Portugal</i>	<i>University of Bonn, Germany</i>
<i>University of North Carolina, Chapel Hill</i>	<i>University of Alberta</i>
<i>University of Manitoba</i>	<i>Penn State University</i>
<i>Peking University, China</i>	<i>Academy of Sciences of China</i>
<i>Xi'an Jiaotong University, China</i>	<i>Fudan University, China</i>
<i>University of Bonn, Germany</i>	<i>University of Texas at Arlington</i>
<i>Colorado State University</i>	<i>Indiana University</i>
<i>University of California, San Diego</i>	<i>Sandia National Laboratories, Albuquerque</i>
<i>Purdue University</i>	<i>National Technical University of Athens, Greece</i>

Florida International University
University of North Carolina, Charlotte
Oxford University, England
Massachusetts Institute of Technology
Yonsei University, Korea
Missouri University of Science and Technology
Oxford University, England
Ajou University, Korea
University of Bath, United Kingdom
Cambridge University, England
University of Colorado, Boulder
University of Pittsburgh
RWTH-Aachen, Germany
Brigham Young University

George Mason University
Tulane University
Nanyang Technical University, Singapore
Emory University
University of Wisconsin
Los Alamos National Laboratory
Yonsei University, Korea
University of Manchester, England
Oxford University, England
University of Florida
University of Washington, Seattle
University of Houston
University of California, Irvine