YANYAN LI

Education:

Ph.D., Courant Inst. of Mathematical Sciences, New York University, 1988

M.S., Institute of Systems Science, Academia Sinica, 1983

B.S., University of Science and Technology of China, 1982

Positions:

Distinguished Professor, Rutgers University, 7/2000– present

Director, The Center for Nonlinear Analysis, Rutgers University, 2010– present

Professor I, Rutgers University, 7/97– 7/2000

Associate Professor, Rutgers University, 7/93 – 6/97

Assistant Professor, Rutgers University, 9/90 – 6/93

Instructor, Princeton University, 9/88 – 6/90

Guest Positions:

Jingshi Scholar, Beijing Normal University, China, June 2004 – May 2005.

Visiting Positions:

Professeur Invité, University of Paris VI, France, June 2-July 1, 2009.

Professeur Invité, University of Paris VI, France, June 8-July 7, 2007.

Professeur Invité, University of Paris VI, France, May 20-June 19, 2005

Visiting Member, Institute for Advanced Study, 9/03 - 12/03

Professeur Invité, University of Paris VI, France, May 19-June 18, 2002

Professeur Invité, Institut Universitaire de France, France, May 2001

Professeur Invité, University of Paris VI, France, Nov. 16 – Dec. 15, 99

Professeur Invité, University of Paris VI, France, June 98

Visiting Professor, Scuola Normale Superiore, Pisa, Italy, May 97

Professeur Invité, University of Paris VI, France, May 96

Professeur Invité, University of Metz, France, June 93

Visiting Member, Institute for Advanced Study, 1/94-6/94

Visiting Member, Institute for Advanced Study, 9/89 - 6/90

Honors:

55th John H. Barrett Memorial Lectures, University of Tennessee, May 2027.

The 2026-2027 Avron Douglis Memorial Lecture, University of Maryland, February 2027.

Simons Fellow in Mathematics and Theoretical Physics, Simons Foundation, 2020.

Harold J. Gay Lectures, Worcester Polytechnic Institute, Nov. 3, 2017.

Ordway Distinguished Lecturer, University of Minnesota, March 2017.

Member of Inaugural Class of Fellows of the American Mathematical Society, 2012.

Laudation on the occasion of awarding Louis Nirenberg the Chern Medal Award, International Congress of Mathematicians, 2010, Hyderabad, India.

Rutgers Board of Trustees Award for Excellence in Research, 2008.

45-minute Invited Lecture, International Congress of Mathematicians, 2002, Beijing.

ISI Highly Cited Researcher.

Alfred P. Sloan Research Fellow, 93-95.

Rutgers Board of Trustees Research Fellowship for Scholarly Excellence, 93.

Henry Rutgers Research Fellowship, Rutgers University, $90 - 92$.

K.O. Friedrichs Prize for Outstanding Dissertation, Courant Institute, 89.

Alfred P. Sloan Doctoral Dissertation Fellowship, $87 - 88$.

Grants:

NSF garnt DMS-2554267 for academic year 2026-2028, $200,000.

NSF garnt DMS-2247410 for academic year 2023-2026, $392,681.

NSF garnt DMS-2000261 for academic year 2020-2023, $239,999.

NSF garnt DMS-1501004 for academic year 2015-2020, $590,375.

NSF grant DMS-1203961 for academic years 2012-2015, $273,000.

NSF grant (FRG) DMS-1065971 for academic years 2011-2014, $150,001.

NSF grant DMS-0701545 for academic years 2007-2012, $403,262.

NSF grant DMS-0401118 for academic years 2004-2007, $251,970.

NSF grant DMS-0100819 for academic years 2001-2004, $147,500.

NSF grant DMS-9706887 for academic years 1997–2001, $104,237.

NSF grant DMS-9401815 for academic years 1994-1997, $93,000.

NSF grant DMS-9104293 for academic years 1991-1994, $66,453.

NSF grant DMS-9096249 for academic year 1990-1991, $19,200.

NSF grant DMS-8907849 for academic year 1989-1990, $17,847.

Journal Editorial Committees:

Editor-in-Chief, Analysis in Theory and Applications, 2013—

Member of Editorial Board, Advance in Mathematics, 2018 –

Member of Editorial Board, Journal of Functional Analsis (JFA), 2026 –

Member of Editorial Board, Calculus of Variations and Partial Differential Equations, 2022 –

Member of Editorial Board, Communications in Contemporary Mathematics, 2016–

Member of Editorial Board, Discrete and Continuous Dynamical Systems – Series A, 2004 –

Member of Editorial Board, Nonlinear Differential Equations and Applications, 2001–

Member of Editorial Board, Acta Mathematica Scientia, 1996–

Member of Editorial Board, J. Partial Differential Equations, 2001–

Associate Editor, Communications in Mathematical Analysis, 2008–

Member of Editorial Board, Journal of the Tunisian Mathematical Society, 2017 - 2021

Editor, International Mathematics Research Notices (IMRN), 2008 2025 Member of Editorial Board, Differential and Integral Equations, 2001– 2021.

Member of Editorial Board, Advanced Nonlinear Studies, 2003– 2007, 2015-2018

Member of the Board of Editors, Communications on Pure and Applied Analysis, 2001– 2004

Service to the Mathematics Community:

Member of Eastern Section Program Committee of the American Mathematical Society, Feb. 1, 2022 – Jan. 31, 2025.

Co-organizer, Workshop "Applied and Computational Differential Geometry and Geometric PDEs", Banff International Research Station, July 30 - August 4, 2023.

Member of Scientific Committee, International Conference on Partial Differential Equations and Applications, In Honor of 75th Birthday of Professor Haim Brezis, Beijing Normal University, July 1-3, 2019.

Member of Scientific Committee, The 9th International conference on PDE and Their Numerical Analysis, Changsha, China, September 10-12, 2018.

Member of International Review Committee, Beijing Institute of Technology, Dec. 4-7, 2017.

Externel Review Committee, Graduate Program of Department of Mathematics, University of California at Riverside, Feb. 23-24, 2017.

Member, Scientific Committee, Center of Partial Differential Equations, Hua Zhong Normal University, China, 2017 —

Panelist, Dongren-Yau Science Award, Beijing, China, Dec. 15-19, 2016.

Member of International Review Committee (Chair), School of Mathematics, Beijing Institute of Technology, Nov. 17-20, 2016.

Member, Partial Partial Differential Equations panel, Division of Mathematical Sciences, National Science Foundation, 2016.

Member of Organizing Committee, SIAM Conference on Analysis of Partial Differential Equations, Arizona, December 7-10, 2015.

Member of Scientific Committee, Partial differential equations and nonlinearities, a conference in honor of Haim Brezis, Paris, France, June 30-July 4, 2014.

Member of Scientific Committee, Conference on Geometry and Analysis — in honor of Xiaochun Rong′s 60th birthday, Capital Normal University, Beijing, June 13-14, 2014.

Member of Scientific Committee, The International Conference on Partial Differential Equations and Variational Methods, Central China Normal University, Wuhan, China, May 22-25, 2014.

Member, Partial Partial Differential Equations panel, Division of Mathematical Sciences, National Science Foundation, 2014.

Co-Organizer, Mini-courses and Conference on Nonlinear Elliptic Equations, Rutgers during May 13-18, 2013, Courant Institute during May 20-22, 2013.

Member, Partial Partial Differential Equations panel, Division of Mathematical Sciences, National Science Foundation, 2013.

Co-organizer, Joint Princeton-Rutgers Seminar on Geometric PDEs, Fall 2011 —

Member of Scientific Committee, Workshop on Interactions between Dynamical systems and Parcial Differential Equations (JISD 2013), Barcelona, Spain, 2013.

Member of Oversea Review Panel, Samsung Science and Technology Foundation (SSTF), Fort Lee, New Jersey, March 21, 2014.

Member of Scientific Committee, Progress in Nonlinear Partial Differential Equations, June 4-8, 2012, Hangzhou, China.

Member of Scientific Committee, School and Workshop on Cocompact Imbeddings, Profile Decompositions, and their Applications to PDE, Jan. 3-12, 2012, International

Centre for Theoretical Sciences, Tata Institute of Fundamental Research, Bangalore, India.

Member of Scientific Committee, The International Conference on Nonlinear Partial Differential Equations and Applications, University of Science and Technology of China, Hefei, China, August 1-7, 2011.

Member of Scientific Committee, Workshop on Differential Equations of Mathematical Physics, Wuhan Institute of Physics and Mathematics, Academia Sinica, October 22-24, 2010.

Member of Scientific Committee, International Conference on Partial Differetial Equations, in honor of the birth of 100 years of Professor Xinmou Wu, Academia Sinica, Beijing, China, July 16-18, 2010.

Co-organizer, Workshop on "Some mathematical problems of material science: effects of multiple scales and extreme aspect ratios", Banff International Research Station, Canada, Feb. 21-26, 2010.

Panel Member in Mathematics, Norman Hackerman Advanced Research Program (NHARP), Texas Higher Education Coordinating Board, 2009-2010.

Member of Scientific Committee, International Workshop on PDE and related topics, Wuhan, China, October 26-30, 2008.

Member of Scientific Committee, International Conference on Partial Differential Equations and Their Numerical Analysis, In honor of Prof. Xiaqi Ding for his 80th birthday, Institute of Applied Mathematics, AMSS Chinese Academy of Sciences, Beijing, P.R. China, July 27-29, 2007.

Member of Scientific Committee, International Conference on Partial Differential Equations and Applications, Beijing Normal University, Beijing, China, May 28-31, 2007.

Co-organizer, Symposium on Nonlinear Elliptic Equations and Variational Methods, Beijing Normal University and Academia Sinica, Beijing, China, July 4-6, 2005.

Co-organizer, Mini-symposium on nonlinear elliptic equations, Beijing University, Beijing, China, July 2, 2004.

Co-organizer, Conference on Partial Differential Equations and Several Complex Variables, Wuhan University, Wuhan, China, June 9-13, 2004.

Co-organizer, Workshop on Singularities and Concentration Phenomena in Nonlinear Elliptic and Parabolic PDE's, Oberwolfach, Germany, Jan. 27-Feb. 2, 2002.

Member of Fan Fund Committee of AMS, May 24, 2000 to Jan. 31, 2004 (Chair, Jan. 03-Jan. 04).

Member of Committee on Committees of AMS, 1999-2000.

Member of Physics, Mathematics and Astronomy review panel, Texas Advanced Research Program and Advanced Technology Program (ARP/ATP), 1999.

Member of AMS-MAA Joint Program Committee for the 104th Annual meeting of the AMS and the 81st Annual meeting of the MAA at Baltimore, 1998

Member of Eastern Section Program Committee of AMS, 2/97-2/99 (Chair 98).

Service to Rutgers University:

Director, Visiting Student Program with Chinese Universities, Department of Mathematics, 2017 - present.

Member of D′Atri Lectures Committee, Mathematics Department, 2002 - present.

Member of Lewis Lectures Committee, 2014 - present.

Co-organizer of Joint Princeton-Rutgers Seminar on Analysis of Fluids, 2023 - present.

Co-organizer of Joint Princeton-Rutgers Seminar on Geometric PDEs, 2011 - present.

Co-organizer of Weekly Nonlinear Analysis Seminar, 2000 - present.

Co-organizer of Learning Seminar in Nonlinear Partial Differential Equations and Applications, 2010 - present (under the name Student Seminar in Nonlinear Partial Differential Equations and Applications during 2010-2018).

Analysis Representative (Alternative) of Personnel Planning Committee, 2021-2023.

Analysis Representative of Personnel Planning Committee, 2019-2021.

Advisory Committee for Appointments and Promotions for 2018-2020,

Analysis Representative of Personnel Planning Committee, 2017-2019.

At-Large Representative of Personnel Planning Committee (alternate), 2016-2018.

Graduate Admissions Director, 2014-2016.

Analysis Representative of Personnel Planning Committee (alternate), 2015-2017.

At-Large Member of Personnel Planning Committee (alternate), 2014-2016.

Member of Graduate Committee (alternate), 2014-2016.

Member of Personnel Planning Committee, 2012-2014.

Member of Graduate Committee, 2012-2014.

Member of Personnel Planning Committee, 2009-2012.

Member of Graduate Committee, 2006-2008.

Member of Personnel Planning Committee, 2005-2007.

Member of the Physical Sciences Area Committee of the Graduate School-New Brunswick, 2001-2003.

Member of Graduate Admissions Committee, Mathematics Department, 2001.

Member of Committee on Appointment and Promotion in the Mathematical and

Natural Sciences, 1998-2000.

Member of Personnel Planning Committee, Mathematics Department, 97-2000.

Graduate Committee Member, Mathematics Department, 98-99.

Graduate Committee Member, Mathematics Department, 94-95.

Invited talks:

Applied and Computational Differential Geometry and Geometric PDEs, Banff International Research Station centre, Canada, July 30 - August 4, 2023.

Plenary Talk, The first International Forum in Basic Science (IFBS), July 17-21, 2023, Beijing.

"Non-linear PDEs", July 10-14th, 2023, ICMAT in Madrid.

Workshop "Emerging Trends in Variational Models of Materials", Centre de Recherches Mathematiques in Montreal, Canada, June 26-30, 2023.

The 87th Midwest PDE Seminar, University of Notre Dame, May 5-7, 2023.

PDE Conference (online), Wuhan University, Dec. 23-26, 2022.

Distinguished Lecture (online), Shanghai Jiao Tong University, Dec. 16, 2022.

International Conference on Nonlinear Partial Differential Equations, November 21-25, 2022, Sydney, Australia.

Mini Workshop on PDE, November 14-15, 2022, University of Wollongong, Australia.

2022 Workshop on Geometrty and PDE, Nanjing University of Science and Technology, Nanjing, Nov. 12-14, 2022 (virtual participation).

Geometric Analysis at Granada, IMAG, Instituto de Matematicas, Universidad de Granada, Granada, Spain, September 5-9, 2022.

"International Workshop on Partial Nonlinear Differential Equations and Geometric Analysis", Xi'an, Shaanxi, China on June 23-26, 2022.

"International Conference on Variational Methods and Nonlinear Partial Differential Equations", (virtual participation), Organized by Academy of Mathematics and Systems Science, Chinese Academy of Sciences and School of Mathematical Sciences, and Jiangsu University, China on June 10-12, 2022.

Distinguished Scholar Lecture Series, Southeast University, China, Beijing time: 2pm, June 2, 2022 (Zurich time: 8am, June 2, 2022).

Workshop on "Partial differential equatuions and applications", (virtual participation), Hua Zhong Normal University, April 29-30, 2022.

2021 Workshop on PDEs and fluids, Beijing Normal University, December 18-19, 2021.

CAS AMSS-PolyU Joint Laboratory of Applied Mathematics Online Distinguished Lecture, December 15, 2021.

Workshop on Nonlinear PDEs and their Applications (Virtual participation), Nanjing Forestry University, December 4-6, 2021.

Workshop on Partial Differential Equations and Applications (Virtual participation), Hua Zhong Normal University, Wuhan, China, Sept. 25-26, 2021.

Colloquium talk (Virtual), National University of Singapore, Sept 9 (Thursday), 9pm (US Eastern Time), 2021.

The Twenty First Conference on Nonlinear Functional Analysis (virtual participation), Yunnan Normal University, July 23-26, 2021.

Distinguished Lecture Series in Mathematics (Virtual), Capital Normal University, June 15, 2021.

2021 International Workshop on Geometric Analysis (virtual participation), Lincang, Yunnan, May 23-29, 2021.

Zhongnan University Conference in Partial Differential Equations and Geometric Analysis(virtual participation), Zhongnan University, May 17-21, 2021.

Iternational Conference on Geometric Analysis and Partial Differential Equations(virtual participation), Sichuan University, April 30-May 4, 2021.

Special Session on Regularity Theory for Linear and Nonlinear PDEs (virtual participation), American Mathematical Society, San Francisco, CA Spring Western Sectional Meeting (virtually), May 1-2, 2021.

Geometric and functional inequalities and applications (virtual participation), April 19, 2021, 9-10am (EST). Hosted by University of Connecticut.

International Conference on Canonical Metrics and Nonlinear PDEs in Geometry(virtual participation), March 19-21, 2021.

2020 International Symposium on Nonlinear Analysis(virtual participation), Jilin University, Dec. 5-6, 2020.

2020 International Workshop on Geometric Analysis, Dalian Institute of Technology(virtual participation), Dalian, China, Septembber 14-18, 2020. (ZOOM online meeting)

2020 International Conference on PDEs and Geometric Analysis" at Shanghai Jiao Tong University from July 7 to 10, 2020. (ZOOM online meeting)

Workshop on Geometric Analysis 2020, Dalian University of Technology, Dalian, China, June 8-12, 2020.

Mostly maximum principle, at the Palazzone, Cortona, Italy, May 24-30, 2020.

Nonlinear Partial Differential Equations & Applications, Pernera Beach Hotel in Protaras, Cyprus , Greece, May 18-22, 2020.

International Conference on Nonlinear Analysis and twenty First National Conference on Nonlinear Functional Analysis, Kunming, Yunnan, May 14-17, 2020.

Calculus of Variations - a celebration of Professor Paul Rabinowitz's 80th birthday, Jeju, South Korea, Oct 31 - Nov 2, 2019.

Simons Collaboration on Special Holonomy in Geometry, Analysis, and Physics Annual Meeting (Group A participant, not a speaker), Simons Foundation, New York, September 12-13, 2019.

International Conference on Partial Differential Equations and Applications, In Honor of 75th Birthday of Professor Haim Brezis, School of Mathematical Sciences, Beijing Normal University, Beijing, China, July 1-3, 2019.

International Conference on Modeling, Computations, Theoretical Analysis on Fluid Dynamics and Related Problems, School of Mathematics, Northwest University (NWU), XiAn, China, June 28-30, 2019.

Workshop on Geometric Analysis, University of Toulouse 3, Toulouse, France, June 10-14, 2019.

New Perspectives in Nonlinear PDE, Center for Mathematical Sciences (CMS) at the Technion, Technion, Israel, June 2-6, 2019.

Nonlinear Geometric PDE's, Banff, Canada, May 5-10, 2019.

AMS Sectional Meeting, University of Connecticut Hartford, April 13-14, 2019.

Symposium on geometric PDEs, The Graduate Center of the City University of New York, April 2-3, 2019.

Workshop on "Geometric Functionals: Analysis and Applications", Institute for Advanced Study, Princeton, March 4-8, 2019.

Celebrating "Approximately 60": An international conference on Nonlinear PDEs, NYU Shanghai, June 18-22, 2018.

Nonlinear PDEs in Geometry and Physics, Palazzone di Cortona, Italy, June 11-15, 2018.

International workshop on nonlinear partial differential equations and applications in geometry and biology", Xi'an, China, June 1-4, 2018.

Workshop on Geometric Analysis, Nanning, Guangxi, China, May 20-25, 2018.

International Conference on Variational Methods (ICVAM-4), Chern Institute of Mathematics at Nankai University, Tianjin, China , May 14-18, 2018.

Physical, Geometrical and Analytical Aspects of Mean Field Systems of Liouville Type, Banff, Canada, April 1-6, 2018.

Workshop on some aspects of incompressible Navier-Stokes equations", Beijing Normal University, Beijing, China, March 21-22, 2018.

Batsheva de Rothschild Seminar on Hardy-type Inequality and Elliptic PDEs, Midreshet Sde Boker, Negev, Israel, Jan. 7-11, 2018.

Frontiers in the theory and applications of nonlinear partial differential equations, Hong Kong University of Science and Technology, Hong Kong, December 11-15, 2017.

Partial Differential Equations, Oberwolfach, July 30-August 5, 2017.

CRG Conference in Geometric Analysis, University of British Columbia, Vancouver, Canada, July 23-28, 2017.

Mini-Course Lecturer, School and Workshop on "Nonlinear PDEs and applications", ICTP, Trieste, Italy, May 22-June 2, 2017.

Workshop on "Mostly Maximum Principle", Banff International Research Station for Mathematical Innovation and Discovery (BIRS), Banff, Canada, April 2-7, 2017.

"PDE Day with Louis Nirenberg", Technion, Haifa, Israel, September 29, 2016.

14th Summer School on PDEs, Harbin, China, July 11-15, 2016.

Session on "Monge-Ampere type equations in geometry, optics and optimal transportation " of 7th Pacific Rim Conference on Mathematics, Seoul National University, Korea, June 26-July 1, 2016.

Plenary Speaker, Nonlinear PDE's @ IMPA, IMPA, Rio de Janeiro, Brazil, June 20-24, 2016.

The 2016 Xiamen International Conference on Partial Differential Equations and Applications, in honor of Joel Spruck on the occasion of his 70th birthday, Xiamen, China, June 15-17, 2016.

Workshop on Nonlinear PDE and Calculus of Variation, Chern Institute, Nankai University, May 30-June 3, 2016.

Conference on Calculus of Variations and PDEs, Columbia University, May 23-27, 2016.

Conference "Qualitative aspects of the theory of non- local equations", Fields Institute, Canada, May 16-20, 2016.

Mini-course Lecturer, Otto-von-Guericke-School in partial differential equations, Otto-von-Guericke-Universitat, Magdeburg March 14-16, 2016.

Workshop on Harmonic Analysis and PDE, Central China Normal University, Wuhan, China, Jan. 9-10, 2016.
Special Session on Partial Differential Equations in Geometric Analysis, AMS Fall Eastern Sectional Meeting, Rutgers University, NJ, November 14-15, 2015.

Workshop on deterministic and stochastic partial differential equations, Brown University, Nov. 6-8, 2015.

Special Session on Partial Differential Equations in Geometric Analysis, AMS Fall Eastern Sectional Meeting, Rutgers University, NJ, November 14-15, 2015.

Fifth Abel Conference: Celebrating the Mathematical Impact of John F. Nash Jr. and Louis Nirenberg, IMA, Minnesota, Nov. 2-4, 2015.

Oberwolfach Workshop "Partial Differential Equations", Oberwolfach, Germany, August 2-8, 2015.

International Conference on Conformal Geometry and Geometric PDE, Beijing International Center of Mathematical Research (BICMR), Beijing, China, June 29 - July 3, 2015.

International Conference on Local and Nonlocal Nonlinear Partial Differential Equations, NYU Shanghai, Conference at NYU Shanghai, China, April 24-26, 2015.

CIMPA Research School on " Nonlinear Partial Differential Equations arising from Geometry and Physics', Hammamet, Tunisia, March 20-29, 2015.

Conference on Partial Differential Equations, University of Sussex, September 15-17, 2014.

Imaging, Multi-scale and high contrast PDEs, Daejeon, Korea, August 7-9, 2014.

Variational Methods for Nonlinear Elliptic PDE's, KAIST, Korea, August 4-8, 2014.

Thematic Program on Nonlinear PDEs in Geometry and Physics Conference, June 16-20, 2014.

Conference on Geometry and Anaysis — in honor of Xiaochun Rong's 60th birthday, Capital Normal University, June 13-14, 2014

Geometric Aspects of Semilinear Elliptic and Parabolic Equations: Recent Advances and Future Perspectives, Banff, May 25-30, 2014.

73rd Midwest PDE Seminar, Northwestern University, May 10-11, 2014

Kinetics, non standard diffusions and stochastics: emerging challenges in the sciences, University of Texas, Austin, May 5-16, 2014

Partial Differential Equations, Oberwolfach, August 4-10, 2013.

Analysis and Partial Differential Equations, in honor of 60th birthday of Nassif Ghoussoub, University of British Columbia, July 8-12, 2013.

Workshop on geometric Analysis, Ningxia, China, June 3-7, 2013.

Recent Advances in Nonlinear Partial Differential Equations , May 20-22, 2013, Courant Institute.

International Conference "Quantization, Blow-up and Concentration in Mathematical Physics Point of Views" Osaka University, in honor of 60th birthday of Takashi Suzuki, Osaka University, Japan, March 26-29, 2013.

Mini-Workshop: Fully Nonlinear Equation in Valparaso, Valparaso, Chile, Jan. 7-10, 2013.

Workshop on Geometric PDEs, Institut Henri Poincare, Paris, France, November 5-9, 2012.

Workshop "Mostly maximum principle", La Sapienza Universita di Roma, Rome, Italy, Sept. 12-14, 2012.

17th Brazil School of Differential Geometry, Manaus, Amazonas, Brazil, July 11-20, 2012.

Geometric and Nonlinear Partial Differential Equations, Xi-An Jiaotong University, Xi-An, China, June 12-16, 2012.

International Conference on Nonlinear Partial Differential Equations and Applications, Zhejiang University, Hangzhou, China, June 3-9, 2012.

5th Symposium on Analysis and PDEs, Purdue University, May 20-23, 2012.

Minicourse, Concentration month on fully nonlinear elliptic PDEs, University of Chicago, Chicago, May 7-18, 2012.

Nineteenth Southeast Geometry Seminar, University of Alabama, Birmingham, December 12, 2011.

IV EBED - Brazilian School of Differential Equations Joao Pessoa, August 22-26, 2011.

International Meeting on Differential Geometry and Partial Differential Equations, celebrating Gervasio Colares′s 80th Birthday, Universidade Federal do Ceara, Fortaleza, August 15-19, 2011.

Mini-course, JISD 2011: Workshop on Dynamical Systems and EDP's, June 27-July 1, 2011, Universitat Politecnica de Catalunya, Barcelona, Spain.

Workshop "Nonlinear PDE in Valparaiso", Valparaso, Chile, Jan. 10-14, 2011.

45-minute invited lecture, Fifth International Congress of Chinese Mathematicians, Beijing, China, December 17-22, 2010.

Sino-Chilean Conference on Nonlinear PDEs and Nonlinear Analysis, Wuhan University, China, December 6-10, 2010.

45-minute invited talk, on the work of the winer of the Chern Medal Award, International Congress of Mathematicians, 2010, Hyderabad, India.

Workshop on Geometric Analysis, Lanzhou, China, July 31-August 7, 2010.

International Conference on Partial Differetial Equations, in honor of the birth of 100 years of Professor Xinmou Wu, Academia Sinica, Beijing, China, July 16-18, 2010.

Mini-course, RSME School LLuis Santalo "Geometic Analysis", Universidad de Granada, Granada, Spain, June 28 - July 2, 2010.

Scaling and Liouville theorems in studies of PDEs, special session, The 8th AIMS Conference on Dynamical Systems and Differential Equations, Dresden, Germany, May 25 - 28, 2010.

Advanced PDE and Application — in honor of the 80th birthday of Professor Qi Minyou (M.Y. CHI), Wuhan University, Wuhan, China, January 8-10, 2010.

Conference for Elliptic and Parabolic PDEs, Daejeon, Korea, Nov. 5-7, 2009.

Variational and Topological Methods in Nonlinear Phenomena, dedicated to the 60th birthday of V. Benci, San Antonio, Texas, September 24-26, 2009.

Workshop on Partial Differential Equations, Oberwolfach, Germany, August 2-8, 2009.

International Conference of Mathematics, Taida Institute of Mathematical Sciences, Taipei, Taiwan, July 6 - July 10, 2009.

International Conference on Variational Methods, Chern Institute of Mathematics and Nankai University, Tianjin, China, May 18-22, 2009.

International Conference on Geometrical aspects of PDE's, CIRM, Marseille, France, March 2-6, 2009.

Workshop on Geometric Partial Differential Equations, Institute for Advanced Study, Princeton, New Jersey, February 23-27, 2009.

Harvey Mudd College Mathematics Conference on Nonlinear Functional Analysis, Harvey Mudd College, Claremont, California, October 25, 2008.

Special session on isoperimetric problems and PDE, AMS meeting, Courant Institute, March 15-16, 2008.

Plenary talk, Workshop on Variational Methods for Nonlinear PDE and their Applications, Technion, Haifa, Israel, Macrh 5-10, 2008.

International Conference on Riemann-Finsler Geometry, Indianapolis, USA, February 14-16, 2008.

Workshop on Variational Methods and Related Topics, Beijing, China, December 28-29, 2007.

The Tenth International Congress of Chinese Mathematicians, December 17-22, 2007, Hangzhou, China.

Principal Speaker, Seventh Mississippi State - UAB Conference on Differential Equations & Computational Simulations, Birmingham, Alabama, November 1-3, 2007.

First Chile-Japan Workshop on Nonlinear Elliptic and Parabolic PDE, October 23-26, 2007, Santiago, Chile.

Workshop on loss of compactness in nonlinear PDE: Recent trends, Banff International Research Station, Canada, August 26-31, 2007.

Plenary talk, Equadiff 2007, Vienna University of Technology, Vienna, August 5-11, 2007.

12th National Summer School in Mathematics for Graduate Students, July 21 - August 19, 2007, Wuhan University, China.

International Conference on Partial Differential Equations and Their Numerical Analysis, In honor of Prof. Xiaqi Ding for his 80th birthday, Institute of Applied Mathematics, AMSS Chinese Academy of Sciences, Beijing, P.R. China, July 27-29, 2007.

International Conference on Partial Differential Equations and Applications, Beijing Normal University, Beijing, China, May 28-31, 2007.

International Conference on Variational Methods, Nankai University, Tianjin, China, May 20-26, 2007.

59th Midwest Partial Differential Equations Seminar, University of Kentucky in Lexington, Kentucky, March 24-25, 2007.

Tenth Southeast Geometry Seminar, Emory University, Atlanta, December 13, 2006.

Workshop on Nonlinear Differential Equations, Como, Italy, September 11-15, 2006.

Plenary talk, International Conference on Analysis and Its Applications, University of Science and Technology of China and City University of Hong Kong, June 28 - July 1, 2006.

Plenary talk, International Conference in Partial Differential Equations, Complex Analysis and Differential Geometry in honor of M. Salah Baouendi, University of Notre Dame, June 11-16, 2006.

Advances in Partial Differential Equations, in honor of the 80th birthdays of Peter D. Lax and Louis Nirenberg, Toledo, Spain, June 7-10, 2006.

International Conference on Calculus of Variations, PDEs and Nonlinear Analysis, in honor of the 70th birthday of K.C. Chang, Beijing University, China, May 22-26, 2006.

Workshop on Partial Differential Equations and Applications, University of Florida, Gainesville, Nov. 13-15, 2005.

A Conference in Honor of Peter Lax and Louis Nirenberg, on the occasion of their 80th birthday, Courant Institute, New York University, October 28-29, 2005.

Introductory Workshop in Nonlinear Elliptic Equations and Its Applications, MSRI, Berkeley, August 15-19, 2005.

Mathematics: Opportunity and Challenge, Wei-Hai, China, July 25-29, 2005.

Symposium on Nonlinear Elliptic Equations and Variational Methods, Beijing Normal University and Academia Sinica, Beijing, China, July 4-6, 2005.

Conference in honor of Jim Serrin on the occasion of the awarding of the title of Doctor Honoris Causa of Universite Francois Rabelais, Tours, France, June 6-8, 2005.

International Conference on Variational Methods in Nonlinear Analysis, dedicated to Louis Nirenberg and Giovanni Prodi on the occasion of their 80th birthday, Erice, Italy, April 14-22, 2005.

Plenary talk, Americas VI meeting on Non Linear Analysis and Differential Equations, Santiago, Chile, January 17-21, 2005.

International Symposium on Variational Methods and Nonlinear Differential Equations, to celebrate the Sixtieth Birthday of Antonio Ambrosetti, Rome, January 10-14, 2005.

The 7th Pacific Rim Geometry Conference, Shanghai, China, December 13-16, 2004.

A mini-course, Workshop on Fully Nonlinear Equations, Nankai Institute of Mathematics, Tianjin, China, Nov. 15-19, 2004.

Conference in Nonlinear Analysis, in Honor of Haim Brezis, on the Occasion of His 60th Birthday, Paris, June 21-25, 2004.

Talk and a Mini-course, Conference on Partial Differential Equations and Several Complex Variables, Wuhan University, Wuhan, China, June 9-13, 2004.

Workshop on New Developments on Variational Methods and their Applications, Banff International Research Station for Innovation and Discovery, Canada, May 15-20, 2004.

Peking University Symposium on Mathematics, Beijing, China, October 23-25, 2003.

Workshop on Recent Developments in Several Complex Variables and Partial Differential Equations, Serra Negra, Brazil, August 4-8, 2003.

Fully Nonlinear equations in geometry, Regional Conference Series in Mathematics, University of Notre Dame, June 23-27, 2003.

Symposium in Analysis and PDEs, Purdue University, May 23-26, 2003.

Workshop on Calculus of Variations, Mathematical Research Center, University of Warwick, England, UK, May 15-18, 2003.

Frontiers in Mathematics Lectures, Texas A&M University, March 2003.

A Mini-course, Pan American Advanced Studies Institute on Partial Differential Equations, Inverse Problems and Nonlinear Analysis, Santiago, Chile, January 6-17, 2003.

A Mini-course, Thematic Programme on Nonlinear Analysis and Differential Equations, Istituto Nazionale di Alta Matematica, Milan, Italy, Fall 2002.

45-minute invited lecture, International Congress of Mathematicians, Beijing, August 20-28, 2002.

Session on Elliptic Partial Differential Equations, First Joint International Meeting between the American Mathematical Society and the Unione Matematica Italiana, Pisa, Italy, June 12-16, 2002.

International Conference on Caccioppoli Mathematical Heritage, Accademia dei Lincei, Rome, Italy, June 3-4, 2002.

Workshop on Nonlinear Models and Analysis, Vienna, Austria, May 20-24, 2002.

Variational and Viscosity Methods in Partial Differential Equations, Austin, Texas, April 17-20, 2002.

45-minute invited lecture, Second International Congress of Chinese Mathematicians, Taipei, December 17-22, 2001.

Workshop on Geometric Evolution and Fully Nonlinear PDEs, Isaac Newton Institute for Mathematical Sciences, Cambridge, U.K., March 26-April 6, 2001.

Conference on Solutions of Partial Differential Equations in Periodic Media (in connection with Arkansas Spring Lecture Series), University of Arkansas, Fayetteville, Arkansas, April 26-28, 2001.

Conference on Partial Differential Equations in Honor of Louis Nirenberg, National Center of Theoretical Sciences, Hsinchu, Taiwan, Sept. 8-11, 2000.

International Workshop in Geometric Analysis, Academia Sinica, Beijing, China, August 2000.

Joint Chile-USA Workshop on Nonlinear Analysis, Vina del Mar, Chile, Jan. 10-14, 2000.

Talk at the Joint AMS-MAA-SIAM Meeting, Washington D.C., Jan. 19-22, 2000.

Talk at the AMS Meeting, Providence, October, 99.

A series of 6 hours talk at the Morningside Institute of Academia Sinica, June 99.

Invited talk at the Second International Conference on Nonlinear Analysis, Tianjin, China, June 14-19, 99.

Invited talk at the International Conference on Topological and Variational Methods in Nonlinear Analysis, Cuernavaca, Mexico, February 21-27, 99.

Invited talk at the National Academy of Sciences Colloquium on Nonlinear Partial Differential Equations and Applications, Irvine, January, 99.

45-minute invited lecture, First International Congress of Chinese Mathematicians, Beijing, China, December 12-16, 98.

Invited talk at the International Conference in Honor of Professor L. Nirenberg, Trieste, Italy, October, 98.

Invited talk at the International Conference on Partial Differential Equations and Related Topics, Mission Beach, Queensland, Australia, September, 98.

Invited address at the AMS meeting, Philadelphia, April, 98.

Two talks at the Workshop on Isometric Embeddings of Surfaces, Hong Kong, December, 97.

Talk at the AMS meeting, Milwaukee, Wisconsin, October, 97.

Talk at the International Workshop on Partial Differential Equations, Beijing, China, August, 97.

A series of 12 invited lectures at the Morningside Institute of Academic Sinica, Beijing, China, August, 97.

One hour invited lecture, First Tian Yuan Conference in Mathematical Sciences (in honor of S.S. Chern), Berkeley, June, 97.

Talk at the International Workshop on Positive Solutions of Elliptic and Parabolic Differential Equations, Technion, Haifa, Israel, May, 97.

Five talks as one of the principal lecturers at the Second School on Nonlinear Functional Analysis and Applications to Differential Equations, Trieste, Italy, April, 97.

Talk at the International Conference on Nonlinear Differential Equations and Applications, Tata Institute of Fundamental Research, August, 96.

Talk at the Second World Congress of Nonlinear Analysis, Athens, Greece, July, 96.

Two talks as one of the main invited speakers at the Conference on Partial Differential Equations, Cortona, Italy, May, 96.

Talk at the AMS meeting, Lawrenceville, New Jersey, October, 96.

Talk at the AMS meeting, Boston, October, 95.

Talk at the AMS meeting, Los Angeles, November, 95.

Talk at the Conference on Partial Differential Equations, Brazil, June, 95.

Talk at the Workshop on Geometric Analysis, Tsing-Hua University, Beijing, June 95.

Talk at the Mini-conference on Nonlinear Analysis, Australia, June 94.

Talk at the AMS meeting, Brooklyn, April 94.

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Book:

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Journals:

1. Degree theory for second order nonlinear elliptic operators and its applications, Comm. in PDE 14 (1989), 1541-1578.
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9. On uniformly rotating stars, Arch. Rat. Mech. Anal. 115 (1991), 367-393.

10. Nonexistence of axially symmetric, stationary solution of Einstein Vacuum Equation with disconnected symmetric event horizon (with G. Tian), Manuscripta Mathematica 73 (1991), 83-89.

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