

CURRICULUM VITAE

Xiaosheng Li

Department of Mathematics and Statistics
Florida International University
11200 SW 8th Street
Miami, FL 33199

Phone: (305) 348-1883
Fax: (305) 348-6158
Email: xli@fiu.edu
Web: <http://faculty.fiu.edu/~xli>

Education

- Ph.D. in Mathematics, University of California at Los Angeles, USA, 09/2000 – 06/2005.
Thesis: Inverse Scattering Problems for System of Differential Operators
Advisors: Prof. Gregory Eskin and Prof. James Ralston
- M.S. in Mathematics, Peking University, P. R. China, 09/1997 – 07/2000.
Thesis: A Priori Estimate, Existence and Asymptotics of Positive Solutions of Semi-Linear Elliptic System
Advisor: Prof. Kung-Ching Chang
- B.S. in Mathematics, Peking University, P. R. China, 09/1993 – 07/1997.

Professional Experience

- Associate Professor, Florida International University, Miami, FL, 2013 – Present.
- Assistant Professor, Florida International University, Miami, FL, 2008 – 2013.
- Acting Assistant Professor, University of Washington, Seattle, WA, 2005 – 2008.
Mentors: Prof. Gunther Uhlmann and Prof. Hart Smith
- Research Fellow, Institute for Pure and Applied Mathematics, Los Angeles, CA, Fall 2003.

Research Interests

- Inverse Problems, Partial Differential Equations
- Financial Mathematics, Stochastic Partial Differential Equations
- Non-Linear Functional Analysis, Variational Methods

Research Grants

- PI, NSF Applied Mathematics Program, DMS-1109561, \$116,461, August 2011 – July 2015.
- PI, DOD NSWC Crane, N00164-14-1-1009, \$76,965, September 2014 – September 2015.

Awards and Honors

- Top Scholars Award, Florida International University, 2015.
- Summer Faculty Development Award, Florida International University, 2009.
- PIMS Postdoctoral Fellow, Pacific Institute for the Mathematical Sciences, Canada, 2006 – 2007.
- Dissertation Year Fellowship, UCLA, 2004 – 2005.
- IPAM/NSF Research Fellow Award, Institute for Pure and Applied Mathematics, USA, Fall 2003.
- Regent's Registration Fee Grant, UCLA, 2000 – 2005.
- California Nonresident Tuition Fellowship, UCLA, 2000 – 2005.

Publications

1. Xiaosheng Li, "Inverse scattering problem for the Schrödinger operator with external Yang-Mills potentials in two dimensions at fixed energy", *Communications in Partial Differential Equations*, 2005, Vol 30, 451–482.
2. Horst Heck, Xiaosheng Li and Jenn-Nan Wang, "Identification of viscosity in an incompressible fluid", *Indiana University Mathematics Journal*, 2007, Vol 56, 2489–2510.
3. Xiaosheng Li, "On the inverse problem for the Dirac operator", *Inverse Problems*, 2007, Vol 23, 919–932.
4. Xiaosheng Li and Jenn-Nan Wang, "Determination of viscosity in the stationary Navier-Stokes equations", *Journal of Differential Equations*, 2007, Vol 242, 24–39.
5. Xiaosheng Li and Gunther Uhlmann, "Inverse problems with partial data in a slab", *Inverse Problems and Imaging*, 2010, Vol 4, 449–462.
6. Xiaosheng Li, "Inverse problem for Schrödinger equations with Yang-Mills potentials in a slab", *Journal of Differential Equations*, 2012, Vol 253, 694–726.
7. Xiaosheng Li, "Inverse boundary value problems with partial data in unbounded domains", *Inverse Problems*, 2012, Vol 28, 085003, 23pp.
8. Laura De Carli, Steve Hudson and Xiaosheng Li, "Minimal potential results for the Schrödinger equation in a slab", *Forum Mathematicum*, 2016, Vol 28, 689–711.

Presentations

- International Conference on Computational Mathematics and Inverse Problems, Michigan Technological University, Houghton, MI, 2016.

- Florida Day on Inverse Problems and Imaging, University of Central Florida, Orlando, FL, 2016.
- Applied Math Seminar, University of Miami, Miami, FL, 2014.
- AMS Sectional Meeting, University of Louisville, Louisville, KY, 2013.
- Applied Inverse Problem Conference, Korea Advanced Institute for Sciences and Technology, Daejeon, Korea, 2013.
- Math Colloquium, Xi'an Jiaotong University, Xi'an, China, 2013.
- The Second International Conference on Interdisciplinary Applied and Computational Mathematics, Zhejiang University, Hangzhou, China, 2013.
- The 9th AIMS Conference on Dynamical Systems, Differential Equations and Applications, Orlando, FL, 2012.
- AMS Sectional Meeting, University of South Florida, Tampa, FL, 2012.
- 2011 Applied Mathematics and Image Processing Summer Workshop, University of Texas at Pan American, Edinburg, TX, 2011.
- Applied Inverse Problems Conference, Texas A&M University, College Station, TX, 2011.
- Math Colloquium, Florida International University, Miami, FL, 2011.
- AMS Sectional Meeting, Georgia Southern University, Statesboro, GA, 2011.
- Inverse Problems: Theory and Applications, Mathematical Sciences Research Institute, Berkeley, CA, 2010.
- Math Colloquium, University of Nebraska, Omaha, NE, 2008.
- Math Colloquium, Florida International University, Miami, FL, 2008.
- Conference on Applied Inverse Problems 2007: Theoretical and Computational Aspects, University of British Columbia, Vancouver, Canada, 2007.
- Symposium on Inverse Problems Honoring Alberto Calderón, IMPA, Rio de Janeiro, Brazil, 2007.
- Inverse Problems Seminar, University of Washington, Seattle, WA, 2006.
- Inverse Problems in Applied Sciences, Hokkaido University, Sapporo, Japan, 2006.
- IPAM Inverse Problems Reunion Conference II, Lake Arrowhead, CA, 2006.
- IPAM Inverse Problems Reunion Conference I, Lake Arrowhead, CA, 2005.
- Analysis Seminar, UCLA, Los Angeles, CA, 2004.
- IPAM Inverse Problems Culminating Workshop at Lake Arrowhead, CA, 2003.

Summer Schools

- Summer School on Seismic Imaging, University of Washington, August 2009.
- Summer School on Inverse Problems in Radiative Transfer, University of Washington, June 2007.
- Seismic Imaging Summer School, University of Calgary, Calgary, Canada, August 2006.
- PIMS-MITACS-VIGRE Summer Graduate School on Inverse Problems, University of Washington, August 2005.

Teaching Experience

- Florida International University, 2008 – Present

PreCalculus Algebra, Calculus for Business, Calculus I, Calculus II, Calculus III, Linear Algebra, Differential Equations, Mathematical Modeling and Applications, Lab for Mathematical Modeling, Graph Theory, Numerical Analysis, Stochastic Calculus (Graduate)

- University of Washington, 2005 – 2008

Introduction to Differential Equations

Meeting Organization

Inverse Problems in Partial Differential Equations, special session in the AMS Spring Southeastern Section Meeting, University of South Florida, Tampa, FL, 2012 (with Alexandru Tamasan).

Outreach

“Introduction to Inverse Problems”, Math Club, FIU, 2014.

Referee

Applicable Analysis
Bulletin of the Malaysian Mathematical Sciences Society
Electronic Journal of Differential Equations
European Journal of Physics
Inverse Problems
Inverse Problems and Imaging
Inverse Problems in Science and Engineering
Journal of Computational Physics
Journal of the Institute of Mathematics of Jussieu

Journal of Physics A: Mathematical and Theoretical
Journal of Spectral Theory
Physica Scripta
Proceedings of the American Mathematical Society
Proceedings of Applied Inverse Problems 2007
Recent Advances in Harmonic Analysis and Applications
SIAM Journal on Mathematical Analysis
Spectral Theory and Partial Differential Equations