

Curriculum Vitae

Tong Li

Personal Information

1. Position: Professor of Mathematics
2. Affiliation: Department of Mathematics, University of Iowa, Iowa City, IA 52242
3. Phone: 319-335-3342, Fax: 319-335-0627, E-mail: tong-li@uiowa.edu

Educational Background

1. Courant Institute, New York University, Mathematics, Ph. D., 1992.
2. Courant Institute, New York University, Mathematics, M. S. , 1990.
3. Peking University, Beijing, China, Mathematics, M. S. 1986.
4. Peking University, Beijing, China, Mathematics, B. A. 1983.

Academic Experience

1. 2008-current, Professor in Mathematics, University of Iowa.
2. 2000-current, A Faculty Member of Program in Applied Mathematical and Computational Sciences(AMCS), University of Iowa.
3. Fall, 2015, Long Term Visitor of the Mathematical Biosciences Institute(MBI), The Ohio State University.
4. Long Term Visitor of the Institute for Pure and Applied Mathematics (IPAM), UCLA, November 15-December 15, 2015.
5. 2008-2011, Summer Visiting Professor, Xi'An Jiaotong University, Xi'An, China.
6. 2009-2012, Summer Visiting Professor, Capital Normal University, Beijing, China.
7. 2010-2014, Summer Visiting Professor, Shanghai Jiaotong University, Shanghai, China.
8. Fall, 2008, Member of IMA, University of Minnesota.
9. Fall, 2008, Member of the Mathematical Biosciences Institute(MBI), OSU.
10. 2002, Spring, Visiting Member of the Institute for Advanced Study, Princeton, NJ.
11. 1999-2008, Associate Professor in Mathematics, University of Iowa.
12. 1993-1999, Assistant Professor in Mathematics, University of Iowa.
13. 1995-1997, Visiting Assistant Professor in Mathematics, UCLA.
14. 1992-1993, Visiting Member of the Institute for Advanced Study, Princeton, NJ.

Research Interests

Nonlinear Partial Differential Equations, Shock Wave Theory, Detonation Theory, Traffic Flows, Water Waves, Mathematical Biology, Numerical Analysis.

Selected Publications and Recent Works

1. Chao Deng and Tong Li, Global existence and large time behavior of a 2D Keller-Segel system in logarithmic Lebesgue spaces, *Discrete and Continuous Dynamical Systems-B*, **24**(2019), 183-195.
2. Lijun Pan, Xinli Han, Tong Li, and Lihui Guo, The generalized Riemann problem and instability of delta shock to the chromatography equations, *Comm. Math. Sci.*, **16**(2018), 705-734.
3. Yanbo Hu and Tong Li, An improved regularity result of semi-hyperbolic patch problems for the 2-D isentropic Euler equations, *J. Math. Anal. Appl.*, **467**(2018), 1174-1193.
4. Lihui Guo, Tong Li, Lijun Pan and Xinli Han, The Riemann Problem with Delta Initial Data for the One-Dimensional Chaplygin Gas Equations with a Source Term, *Nonlinear Analysis Series B: Real World Applications*, **41**(2018), 588-606.
5. Tong Li and Jeungeun Park, Stability of traveling wave solutions of models for image processing with non-convex nonlinearity, *Communications on Pure and Applied Analysis*, **17**(2018), 959-985.
6. Tong Li and Jeungeun Park, Stability of traveling wave solutions of nonlinear conservation laws for image processing, *Comm. Math. Sci.*, **15**(2017), 1073-1106.
7. Tong Li, Hailiang Liu and Lihe Wang, Oscillatory traveling wave solutions to an attractive chemotaxis system, *JDE*, **261**(2016), 7080-7098.
8. Tong Li and Kun Zhao, Analysis of non-isentropic compressible Euler equations with relaxation, *J. Diff. Eqns.*, **259**(2015), 6338-6367.

Synergistic Activities

1. Serving on a newly formed task force to develop policy and processes for advancing publicly engaged scholarship and teaching in CLAS, 2018.
2. Member of the Honorary Degree Selection Committee, University of Iowa, 2016-2018.
3. Member of Faculty Senate, UI, 2015-16.
4. Member of the Financial Aid Advisory Charter Committee, 2013-16.
5. Member of the Information Technology Advisory Committee, 2012-2015.
6. Member of Association for Women in Mathematics (AWM).
7. Member of the Council on Teaching, University of Iowa, 2006-2012.

8. Member of the Faculty Assembly, CLAS, UI, 2008-2011.
9. Co-organized a Pre-AMS meeting workshop on PDEs and a Special Session at The AMS 2011 Spring Central Section Meeting at Iowa City, IA, March 17-20, 2011.
10. Co-organized a Minisymposium at the SIAM conference, 2009.
11. Member of Minority Student Recruiting Committee, Department of Mathematics, University of Iowa, 1996-current.
12. Co-organized the Annual Sonia Kovalevsky High School Mathematics Days, University of Iowa, 2007-current.