QIN LI

The Annenberg Center (building 16), 1200 E. California Blvd. ⋄ Pasadena, CA 91125
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ACADEMIC EXPERIENCES

California Institute of Technology
von Karmann instructor
University of Wisconsin, Madison *May 2013*
Ph.D. in mathematics
Tsinghua University, China *July 2009*
B.S. in mathematics and physics

VISITING POSITIONS

Shanghai Jiao Tong University	Visiting Scholar	Jul - Aug 2013
Maryland University, CSCAMM	Visiting Student	Feb - May 2013
Shanghai Jiao Tong University	Visiting Student	Feb - May 2012
University of Ferrara	Visiting Student	June-Jul 2012

TEACHING EXPERIENCES

Introductory Methods for Computational Methematics II	grad class, lecture, 14W
Calculus and Analytic Geometry (**evaluation:superior**)	discussion section,11S,10F,09F
Linear Algebra and Ordinary Differential Equation	discussion section, 11F

PROFESSIONAL ACTIVITIES

Fall 2011,2012	Graduate Participate Seminar in applied math	organizer
Fall 2011-2013	WIMAW (Women In Math At Wisconsin association)	organizer

PRESENTATIONS

Invited Seminar

- Simon Fraser University — Feb 24, 2014
- Fudan University — Jul 12, 2013
- Beijing Computational Science Research Center — Jun 17, 2013
- UC Santa Barbara — Feb 1, 2013
- University of Illinois at Chicago — Oct 17, 2012
- Tsinghua University, China — Feb 4, 2012
- University of Wisconsin-Madison — Sept 19, 2011
- University of Wisconsin-Madusib, Engineering Physics — Oct 13, 2010

Invited Conference Talk

- MultiScale Kinetic and Fluid problems: asymptotic analysis, modeling and numerical simulation
  Imperial College London and Université Paul Sabatier, Sep 29, 2014
- Young researchers workshop: Kinetic and macroscopic models for complex systems
  University of Maryland-CSCAMM, Oct 18, 2013
- Summer School on Mathematical and Computational Methods in Quantum Dynamics
  University of Wisconsin-Madison, Aug 17, 2013
- The Second Pacific Rim Mathematical Association (PRIMA) Congress
  Shanghai, Jun 24, 2013

· Quantum Systems: A Mathematical Journey from Few to Many Particles
University of Maryland, May 16, 2013
· The 8th International Conference on Computational Physics
Hong Kong Baptist, Jan 7, 2013
· 2012 Young Researchers Workshop: Kinetic Description of Multiscale Phenomena
University of Wisconsin-Madison, Oct 12, 2012
· Annual Conference of China SIAM
USTC, China, Aug 21, 2012
· Journée Scientifique sur les Equations Cinétiques
Ècole Normale Supérieure-Cachan, France, Jun 21, 2012

PUBLICATION

All available at `http://www.cms.caltech.edu/~qinli`

- On the boundary layer of linearized Boltzmann equation in fluid regime
  Q. Li, J. Lu and W. Sun — in preparation
- Semi-classical limit for the surface hopping problem, multi-band Wigner approach and domain decomposition method
  L. Chai, S. Jin, Q. Li and O. Morandi — in preparation
- On Fokker-Planck-Landau equation, a review
  G. Dimarco, Q. Li, L. Pareschi and B. Yan — in preparation
- Asymptotic-preserving exponential methods for the quantum Boltzmann equation with high-order accuracy
  J. Hu, Q. Li and L. Pareschi, — in review, J. Sci. Comput.
- Exponential Runge-Kutta based Asymptotic Preserving scheme for the multi-species Boltzmann equation
  Q. Li and X. Yang, — Commun. Comput. Phys. 2013
- Semi-classical limit of the Schrödinger equation with periodic potential, and band-crossing
  L. Chai, S. Jin and Q. Li, — Kinet. Relat. Models, 2013
- Exponential Runge-Kutta schemes for inhomogeneous Boltzmann equations with high order of accuracy
  Q. Li and L. Pareschi, — J. Comput. Phys. 2014
- BGK penalization-based Asymptotic Preserving scheme for the multi-species Boltzmann equation
  S. Jin and Q. Li, — Numer. Methods Partial Differential Equations. 2012

COLLABORATORS

Collaborators: Lihui Chai, Giacomo Dimarco, Tom Y. Hou, Jingwei Hu, Shi Jin, Jianfeng Lu, Omar Morandi, Lorenzo Pareschi, Hayden Schaeffer, Weiran Sun, Bokai Yan, Xu Yang
Ph.D. and thesis advisor: Shi Jin, University of Wisconsin-Madison
Post-doc Mentor: Tom Y. Hou, California Institute of Technology