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EDUCATION

- ❖ B.Sc., Department of Mathematics, Nanjing University, China, 2000 – 2004.
- ❖ M.Sc., Department of Mathematics and Statistics, University of Victoria, Canada, 2004 – 2006.
- ❖ Ph.D., Department of Mathematics, University of Washington, 2006 – Dec 2010.

Advisor: Gunther Uhlmann

POSITION

- ❖ C.L.E. Moore instructor, Department of Mathematics, MIT, September 2011-present.
- ❖ Postdoctoral position, Department of Mathematics, UC Irvine, January-June 2011.
- ❖ Student associate, Mathematical Sciences Research Institute (MSRI), Program Inverse Problems and Applications, August-December 2010.

Awards

- ◇ NSF Grant DMS-1161129, July 2012-June 2015
- ◇ AMS Simons Travel Grant, 2011-2013
- ◇ AWM-NSF Travel Grant, 2011
- ◇ Tanzi-Egerton Fellowship Award, University of Washington, 2010-2011
- ◇ Top Scholar Awards, University of Washington, 2006
- ◇ Research assistant, University of Washington, 2008-2010

PUBLICATIONS AND PREPRINTS

1. T. Zhou, *Reconstructing Electromagnetic Obstacles by the Enclosure method*, *Inverse Probl. Imaging*, **4** (2010), 547–569.
2. H. Y. Liu and T. Zhou, *Two Dimensional Invisibility Cloaking via Transformation Optics*, *Discrete and Continuous Dynamical Systems Series A (DCDS-A)*, **31** no. 2 (2011).
3. H. Y. Liu and T. Zhou, *On Approximate Electromagnetic Cloaking by Transformation Media*, *SIAM J. Appl. Math.*, **71** (2011), 218–241.

4. G. Bal, K. Ren, G. Uhlmann and T. Zhou, *Quantitative Thermo-acoustics and Related Problems*, *Inverse Problems*, **27** (2011), 055007.
5. M. Lassas and T. Zhou, *Two Dimensional invisibility Cloaking for Helmholtz Equation and Non-local Boundary Conditions*, *Math. Res. Lett.*, **18** (2011), 10001–10015.
6. H. Y. Liu and T. Zhou, *Transformation Optics and Approximate Cloaking*, *Contemp Math.*, **559** (2011), 65–83.
7. J.-N. Wang and T. Zhou, *Enclosure methods for Helmholtz-type equations*, *Inside Out II*, MSRI Publications, Vol. **60** (2012), 249–270.
8. G. Uhlmann and T. Zhou, *Inverse Electromagnetic Problems*, to appear as a Chapter in *Encyclopedia of Applied Math.*, Springer Verlag.
9. P. Caro and T. Zhou, *On Global Uniqueness for an IBVP for the Time-harmonic Maxwell's Equations*, accepted by *Analysis & PDE*, arXiv:1210.7602 [math.AP].
10. M. Lassas and T. Zhou, *Singular Partial Differential Operators and Pseudo-differential Boundary Conditions in Invisibility Cloaking*, proceedings for ECM Satellite Conference "Fourier Analysis and Pseudo-Differential Operators", *Trends in Mathematics*, 239–260.
11. G. Bal and T. Zhou, *Hybrid Inverse Problems for a System of Maxwell's Equations*, submitted.
12. M. Lassas and T. Zhou, *On Transformation Optics Based Electromagnetic Cloaking*, preprint.

INVITED TALKS

- ◇ Inverse Problems and Analysis seminar, Department of Mathematical Science, University of Delaware, November 2013
- ◇ Geometry/Topology seminar, Department of Mathematics, Dartmouth, November 2013
- ◇ PDE/Analysis Seminar, Department of Mathematics, MIT, October 2013
- ◇ PDE Seminar, Division of Applied Mathematics, Brown University, September 2013
- ◇ Applied and Interdisciplinary Mathematics (AIM) Seminar, Northeastern, September 2013
- ◇ Minisymposium on Inverse Problems, The Second Pacific Rim Mathematical Association (PRIMA) Congress 2013, Shanghai, June 2013
- ◇ SIAM Minisymposium on Hybrid Inverse Problems in Medical Imaging, 2013 Joint Mathematics Meetings, San Diego, Jan 2013
- ◇ University of Minnesota School of Mathematics Colloquium, U. Minnesota, November 2012
- ◇ Thematic Program on Inverse Problems and Imaging, Summer Theme Period on the Mathematics of Medical Imaging, Fields Institute, Toronto, July 2012
- ◇ Conference on Inverse Problems in honor of Gunther Uhlmann, plenary talk, UC Irvine, June 2012
- ◇ Minitutorial: Harry Potter's Cloak via Transformation Optics, SIAM Conference on Imaging Science, Philadelphia, May 2012.
- ◇ MIT PDE/Analysis Seminar, MIT, April 2012

- ◇ Geo-Mathematical Imaging Seminar, Purdue University, February 2012
- ◇ PASI-CIPPDE 2012, Inverse Problems and PDE Control workshop lecture and planetary talk, Santiago, Chile, January 2012
- ◇ The workshop on Geometric Analysis on Euclidean and Homogeneous Spaces, Tufts University, Medford, January 2012
- ◇ Inverse Problems in Analysis and Geometry Workshop, plenary talk, INV programme, Isaac Newton Institute for Mathematical Sciences, Cambridge, UK, August 2011
- ◇ ICIAM 2011 Symposium on Inverse Problems, Vancouver, July 2011
- ◇ International Conference on Inverse Problems (ICIP), City University of Hong Kong (CUHK), Hong Kong, December 2010
- ◇ MSRI Inverse Problems: Theory and Applications, Berkeley, November 2010
- ◇ 5th Pacific Rim Conference on Mathematics (PRCM), Stanford University, June 2010
- ◇ AMS-SMM Joint Meeting, Special Session on Harmonic Analysis, Microlocal Analysis and Partial Differential equations, UC Berkeley, June 2010
- ◇ BIRS Workshop on Inverse Transport Theory and Tomography, plenary talk, Banff, May 2010
- ◇ International Conference on Inverse Problems, Wuhan University, Wuhan, April 2010
- ◇ Inverse Problems Seminar, National Taiwan University, Taipei, April 2010
- ◇ Inverse Problem Seminar, University of Washington, Seattle, April 2010
- ◇ Inverse Problem Seminar, Helsinki University (joint with Helsinki University of Technology), Helsinki, October 2009
- ◇ Research Experiences for Undergraduates (REU) program, University of Washington, Seattle, August 2009
- ◇ MRC 2009 Conference on Inverse Problems, Snowbird (Utah), June, 2009
- ◇ Summer School in Control Theory and Inverse Problems, Sichuan University, Chengdu, July 2008

SYNERGISTIC ACTIVITIES

- ◇ Mentor of *Summer Theme Period on the Mathematics of Medical Imaging*, Thematic Program on Inverse Problems and Imaging, Fields Institute, Toronto, July 2012.
- ◇ Organizer of *Minisymposium on Transformation Optics and Cloaking*, Conference on Inverse Problems in honor of Gunther Uhlmann, UC Irvine, June 2012.
- ◇ Organizer of *AMS Special Session on Control Theory and Inverse Problems for PDEs*, Joint Mathematics Meetings 2012, Boston, January 2012.
- ◇ Organizer of *Minisymposium on Invisibility and Cloaking*, Applied Inverse Problems Conference (AIP) 2011, Texas A&M, May 2011.
- ◇ Assistant to *MRC 2009 Conference on Inverse Problems*, Snowbird (Utah), June, 2009.

CONFERENCE PARTICIPATION

- ◇ Inverse Problems Program, Isaac Newton Institute, Cambridge, UK, July 23-August 23 2011
- ◇ MSRI Program of Inverse Problems and Applications, Berkeley, August-December 2010
- ◇ MSRI Introductory Workshop on Inverse Problems and Applications, Berkeley, August 2010
- ◇ MSRI Connections for Women: Inverse Problems and Applications, Berkeley, August 2010
- ◇ International Workshop on Inverse Problems, Hong Kong, China, April 2010
- ◇ 2010 Joint Mathematics Meeting (AMS-MAA), San Francisco, January 2010
- ◇ Summer School on Seismic Imaging, University of Washington, Seattle, August 2009
- ◇ MSRI Summer Grad Workshop: Inverse Problems, MSRI, Berkeley, July 2009
- ◇ International Conference on Mathematical Control Theory, CAS, Beijing, China, May 2009
- ◇ MSRI Introductory Workshop on Analysis on Singular Spaces, Berkeley, September 2008
- ◇ Workshop on Inverse Transport, UC Merced, June 2008

TEACHING

- 18.100C Lecturer, Real Analysis, Fall 2013, MIT.
- 18.03 Course Administrator & Recitations, Differential Equations, Spring 2013, MIT.
- 18.02 Recitations, Multivariable Calculus, Autumn 2011, MIT.
- 18.03 Recitations, Differential Equations, Spring 2012, MIT.
- 18.100C CI-recitations, Autumn 2012, MIT.
- MATH124, Single Variable Calculus, Winter 2007, Winter 2008, TA, UW.
- MATH125, Single Variable Calculus, Spring 2007, TA, UW.
- MATH126, Multivariable Calculus, Fall 2008, TA, UW.
- Math Study Center, Summer 2007, Fall 2007, Spring 2008, Winter 2009, Tutoring, UW.
- MATH307, Introduction to differential equations, Fall 2006, Grading, UW.
- MATH425, Fundamental concepts of Analysis, Winter 2010, Grading, UW.

REFeree FOR JOURNALS

- Contemporary Mathematics
- Communications On Pure & Applied Mathematics
- Inverse Problems
- Inverse Problems and Imaging
- Journal of Differential Equations
- Journal of Mathematical Analysis and Applications
- SIAM Journal on Mathematical Analysis

REFERENCES

- ❖ Prof. Gunther Uhlmann
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- ❖ Prof. Guillaume Bal
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