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University of Chicago
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Curriculum Vitae

Employment

2006 – present	Assistant Professor, University of Chicago
2003 – 2006	Van Vleck Visiting Assistant Professor, University of Wisconsin, Madison

Visiting Positions

2008	Université Paul Sabatier, Toulouse (May)
2007	Massachusetts Institute of Technology (June–September)
2005	University of Chicago (February–April)
2002	Institut Mittag–Leffler, Stockholm (August–September)

Higher Education

1999 – 2003	California Institute of Technology, Pasadena PhD. in Mathematics (Advisor: Barry Simon)
1994 – 1999	Comenius University, Bratislava, Slovakia MSc. in Mathematics (Diploma with Honors)

Teaching Experience

2006 – present	Instructor: Math 200, 203, 204, 211, 220, 270, 273, 275, 365 (Math. Methods in Physical Scienes, Analysis in $\mathbb{R}^n$ I and II, Numerical Analysis, Math. Methods in Physics, Complex Analysis, ODEs, PDEs, SDEs), University of Chicago
2003 – 2006	Instructor: Math 210, 213, 319, 320 (Finite Mathematics, Multivariable Calculus, ODEs, Linear Algebra), University of Wisconsin
2002	Instructor: Math 17 (How to solve it), Caltech
1999 – 2003	TA: Math 1abc, 2ab (Freshman and Sophomore Mathematics), Caltech
1997 – 1998	TA: Analysis I, II (Analysis in $\mathbb{R}$), Comenius University

Honors and Awards

- Alfred P. Sloan Research Fellowship, 2008–2012
- NSF Research Grants DMS-0632442 and DMS-0901363, 2006–2009 and 2009–2012
- Research Grant, Department of Mathematics, University of Wisconsin, 2003–2006
- Scott Russell Johnson Prize for Excellence in Dissertation in Mathematics, Caltech, 2003
- Scott Russell Johnson Prize for Excellence in Graduate Research and Teaching, Caltech, 2002
- Grand Prix: Top graduate of Comenius University, 1999
- Academic Prize of the Rector of Comenius University, 1996 and 1998
- Gold and Silver Medals, International Mathematical Olympiad, 1993 and 1994

Service Activities

- Editor of a special volume of the Journal of Approximation Theory
- Panelist and proposal reviewer for US National Science Foundation
- Referee for Annales IHP, ARMA, CMP, CMS, CPDE, Comptes Rendus Mathématique, DCDS, DMJ, GAFA, JAT, JEMS, JMAA, JMP, MAA, MMNP, Nonlinearity, TAMS
- Organizer of Applied Mathematics and PDEs seminar, University of Chicago
- Instructor of Summer Enhancement Program: Analysis, University of Wisconsin, 2005
- Instructor of Summer REU Program, University of Chicago, 2009

Publications and Preprints

24. G. Iyer, A. Novikov, L. Ryzhik, and A. Zlatoš, *Exit times of diffusions with incompressible drifts*, SIAM J. Math. Anal, to appear.

23. A. Zlatoš, *Reaction-diffusion front speed enhancement by flows*, preprint.

22. A. Zlatoš, *Generalized traveling waves in disordered media: Existence, uniqueness, and stability*, preprint.

21. P. Constantin and A. Zlatoš, *On the high intensity limit of interacting corpora*, Comm. Math. Sci. **8** (2010), 173–186.

20. A. Zlatoš, *Diffusion in fluid flow: Dissipation enhancement by flows in 2D*, Comm. Partial Differential Equations **35** (2010), 496–534.

19. A. Zlatoš, *Sharp asymptotics for KPP pulsating front speed-up and diffusion enhancement by flows*, Arch. Ration. Mech. Anal. **195** (2010), 441–453.

18. A. Kiselev, R. Shterenberg, and A. Zlatoš, *Relaxation enhancement by time-periodic flows*, Indiana Univ. Math. J. **57** (2008), 2137–2152.

17. P. Constantin, A. Kiselev, L. Ryzhik, and A. Zlatoš, *Diffusion and mixing in fluid flow*, Annals of Math. **168** (2008), 643–674.

16. A. Zlatoš, *Pulsating front speed-up and quenching of reaction by fast advection*, Nonlinearity **20** (2007), 2907–2921.

15. L. Ryzhik and A. Zlatoš, *KPP pulsating front speed-up by flows*, Comm. Math. Sci. **5** (2007), 575–593.

14. L. Golinskii and A. Zlatoš, *Coefficients of orthogonal polynomials on the unit circle and higher order Szegő theorems*, Constr. Approx. **26** (2007), 361–382.

13. A. Zlatoš, *Sharp transition between extinction and propagation of reaction*, J. Amer. Math. Soc. **19** (2006), 251–263.

12. A. Kiselev and A. Zlatoš, *Quenching of combustion by shear flows*, Duke Math. J. **132** (2006), 49–72.

11. A. Kiselev and A. Zlatoš, *On discrete models of the Euler equation*, Int. Math. Res. Notices **2005**, 2315–2339.

10. A. Zlatoš, *Quenching and propagation of combustion without ignition temperature cutoff*, Nonlinearity **18** (2005), 1463–1475.

9. A. Zlatoš, *Sum rules for Jacobi matrices and divergent Lieb-Thirring sums*, J. Funct. Anal. **225** (2005), 371–382.

8. B. Simon and A. Zlatoš, *Higher order Szegő theorems with two singular points*, J. Approx. Theory. **134** (2005), 114–129.

7. A. Zlatoš, *Sparse potentials with fractional Hausdorff dimension*, J. Funct. Anal. **207** (2004), 216–252.

6. B. Simon and A. Zlatoš, *Sum rules and the Szegő condition for orthogonal polynomials on the real line*, Comm. Math. Phys. **242** (2003), 393–423.

5. A. Zlatoš, *The Szegő condition for Coulomb Jacobi matrices*, J. Approx. Theory **121** (2003), 119–142.

4. R. Nedela, M. Škoviera, and A. Zlatoš, *Note on regular embeddings of complete bipartite graphs*, Discrete Math. **258** (2002), 379–381.

3. R. Nedela, M. Škoviera, and A. Zlatoš, *Bipartite maps, Petrie duality and exponent groups*, Atti Sem. Mat. Fis. Univ. Modena **49** (2001), 109–133.

2. A. Zlatoš, *The diameter of lifted digraphs*, Australas. J. Combin. **19** (1999), 73–82.

1. A. Zlatoš, *Construction of regular maps with multiple edges*, International Scientific Conference on Mathematics. Proceedings (Žilina, 1998), 155–160, Univ. Žilina, Žilina, 1998.

Invited Talks

- Colloquium, Univ. Alabama, Birmingham, August 2010
- PDE seminar, Univ. Aix-Marseille III, June 2010
- PDE seminar, Univ. Paris VI & VII, June 2010
- PDE seminar, Ohio State Univ., Columbus, May 2010
- Riviére-Fabes Symposium, Univ. Minnesota, Minneapolis, April 2010
- Deterministic and Stochastic Front Propagation, Banff, March 2010
- Colloquium, Univ. Wisconsin, Madison, February 2010
- Colloquium and PDE seminar, Univ. British Columbia, Vancouver, January 2010 (2 talks)
- SIAM Conference on Analysis of PDEs, Miami, December 2009
- PDE seminar, Univ. Maryland, College Park, November 2009
- Applied Mathematics and PDE seminar, Univ. Wisconsin, Madison, November 2009
- Analysis and PDE seminar, Michigan State Univ., East Lansing, MI, November 2009
- PDE seminar, Chinese Univ., Hong Kong, September 2009
- Energy Driven Systems, Carnegie Mellon Univ., Pittsburgh, August 2009
- Analysis of Nonlinear PDEs and Free Boundary Problems, PIMS, Vancouver, July 2009
- Colloquium, Helmholtz Center, Munich, April 2009
- Probability seminar and PDE seminar, Univ. Maryland, College Park, April 2009 (2 talks)
- AMS Central Section Meeting, Univ. Illinois Urbana-Champaign, March 2009
- Geometry-Analysis Seminar, Rice Univ., Houston, March 2009
- Fourth Chicago Area PDE Workshop, Univ. Illinois Chicago, March 2009
- PDE seminar, Georgia Institute of Technology, February 2009
- Calderón-Zygmund seminar, University of Chicago, November 2008

- Applied Mathematics seminar, Stanford Univ., Palo Alto, July 2008
- PDE seminar, Univ. Aix-Marseille III, Marseille, May 2008
- PDE seminar, Univ. Paul Sabatier, Toulouse, May 2008
- Analysis seminar, Univ. Edinburgh, May 2008
- PDE seminar, MIT, Cambridge, MA, April 2008
- Applied Mathematics and PDE seminar, Univ. Wisconsin, Madison, March 2008
- Analysis and Mathematical Physics seminar, Harvard Univ., Cambridge, MA, December 2007
- Applied Mathematics seminar, Brown Univ., Providence, November 2007
- Recent Progress on Nonlinear Elliptic and Parabolic Problems, Banff, October 2007
- AMS Central Section Meeting, DePaul Univ., Chicago, October 2007
- International Congress on Industrial and Applied Mathematics, Zürich, July 2007
- Applied Mathematics and PDE seminar, Univ. Wisconsin, Madison, December 2006
- PDE seminar, Univ. Minnesota, Minneapolis, November 2006
- SIAM Conference on Analysis of PDEs, Boston, July 2006
- Frontiers in Applied and Computational Mathematics, NJIT, Newark, May 2006
- Reaction-Diffusion and Free Boundary Problems, Banff, March 2006
- Colloquium, Ohio State Univ., Columbus, January 2006
- Colloquium, UC Irvine, January 2006
- Colloquium and PDE seminar, Univ. British Columbia, Vancouver, January 2006 (2 talks)
- Colloquium, Univ. Alabama, Birmingham, December 2005
- Analysis seminar, Johns Hopkins Univ., Baltimore, October 2005
- Applied Mathematics and PDE seminar, Univ. Wisconsin, Madison, October 2005
- Mathematical Physics seminar, UNAM, Mexico City, August 2005
- International Conference on Stochastic Analysis and PDEs, Northwestern Univ., June 2005
- Special PDE seminar, Univ. Chicago, February 2005 (2 talks)
- Front Propagation and Nonlinear Stochastic PDEs, CRM Montréal, January 2005
- Applied Mathematics and PDE seminar, Univ. Wisconsin, Madison, November 2004
- AMS Central Section Meeting, Northwestern Univ., Chicago, October 2004
- Spectral Theory of Schrödinger Operators, CRM Montréal, July 2004
- OTAMP 2004, Banach Center, Bedlevo, July 2004
- Applied Mathematics seminar, Comenius Univ., Bratislava, June 2004
- Special PDE seminar, Univ. Chicago, April 2004
- AMS Western Section Meeting, USC, Los Angeles, April 2004 (2 talks)
- Analysis seminar, Univ. Wisconsin, Madison, February 2004
- Mathematical Physics seminar, UC Irvine, May 2003
- Real Analysis seminar, Univ. Minnesota, Minneapolis, April 2003
- Western States Mathematical Physics Meeting, Caltech, Pasadena, February 2003
- Quantum Circle seminar, Czech Technical Univ., Prague, December 2002
- Spectral Theory of Schrödinger Operators workshop, KTH, Stockholm, September 2002
- Mathematical Physics seminar, Caltech, Pasadena, June 2002
- Mathematical Physics seminar, UC Irvine, June 2002
- AMS Western Section Meeting, UC Irvine, November 2001
- Mathematical Physics seminar, Caltech, Pasadena, August 2001
- Combinatorics seminar, Caltech, Pasadena, January 2000
- Graph Theory seminar, Comenius Univ., Bratislava, March 1999
- International Scientific Conference on Mathematics, Univ. Žilina, Žilina, June 1998
- Graph Theory seminar, Comenius Univ., Bratislava, April 1998