

CURRICULUM VITAE

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Last update: Aug 25, 2014



PROFESSIONAL APPOINTMENTS AND EDUCATION

Texas A&M University Associate Professor of Physics	2011-present
Texas A&M University Assistant Professor of Physics	2005-2011
Los Alamos National Laboratory , Los Alamos, NM Oppenheimer Distinguished Postdoctoral Fellow	2003-2006
Los Alamos National Laboratory , Los Alamos, NM Postdoctoral fellow, Theoretical Condensed Matter Physics.	2001-2002
University of Wisconsin-Madison , Madison, WI Postdoctoral fellow, Theoretical Condensed Matter Physics.	1998-2001
Texas A&M University , College Station, TX. Ph.D. in Theoretical Physics Adviser: V.L. Pokrovsky Thesis: "Dynamic effects in ultrathin ferromagnetic films"	1994-1998
Moscow Institute of Physics and Technology and Landau Institute of Theoretical Physics. Passed Landau Theoretical Minimum on Classical Mechanics, Classical Field Theory, Statistical Mechanics, Electrodynamics of Continuous Media, and Kinetics. M.S. cum laude in Physics Adviser: V.L. Pokrovsky Thesis: "Phase diagram of ultrathin ferromagnetic films with perpendicular anisotropy"	1991-1994
Moscow Institute of Physics and Technology B.S. in Physics	1986-1991

CURRENT RESEARCH TOPICS

- High T_c Superconductivity, strongly correlated electrons, and Cold Atoms.
- Current driven magnetic textures.

- Unstable growth of interfaces: Laplacian Growth, DLA etc
- Current driven magnetization dynamics in strongly spin-orbit coupled systems.

RESEARCH HIGHLIGHTS

- Over 47 publications in top peer-reviewed journals such as Physical Review Letters (10), Advances in Physics, Physica D, and Physical Review B.
- Research was featured in Nature Materials and PRL Editor's Suggestions.
- Over 850 citations with an h-factor of 17
- Organizer of multiple national and international conference and workshops.

HONORS, AWARDS, AND RECOGNITIONS:

2008: Joint Theory Institute visitor, The University of Chicago and Argonne National Laboratory.

2003: Oppenheimer Fellowship, Los Alamos National Laboratory.

MEMBERSHIPS

- American Physical Society

CURRICULUM VITAE ADDENDUM

RESEARCH FUNDING

Funding summary: \$270,000 in external funding as a single PI (funded from 2008-2011).

Title: "Laplacian Growth, stochasticity, and selection"

Agency: National Science Foundation, Single PI

Amount and period: \$120,000, October 2008 – September 2011.

Title: "Quantum coherent synthesis and decomposition"

Agency: Welch Foundation, Single PI

Amount and period: \$150,000, June 2008-May 2011.

COMMITTEES AND OTHER PROFESSIONAL ACTIVITIES

Other professional activities:

- Organizer of the workshop: "Laplacian Growth and Related Topics", Montreal, Canada. August 2008.
- Organizer of the workshop: "Mathematical Aspects of Laplacian Growth", Chicago, IL. January, 2008.
- Organizer of the International Conference: "Statistical Physics and Quantum Field Theory.", College Station, TX. January, 2007.
- Organizer of the International Conference on Physics and Mathematics of the Growing Surfaces. Santa Fe, NM. January 2006.
- Organizer of the Finkel'stein series seminar. (2008-present)
- Organizer of the Condensed Matter Seminar Series at Texas A&M University (2006-Present)
- Local organizer and co-editor of the proceedings of the Conference for Strongly Correlated Systems in May of 2007 in Houston
- Proposal Reviewer for NSF since 2007
- Physical Review, Journal of Magnetism and Magnetic Materials, and Nuclear B referee
- Redesigned the Condensed Matter Seminars web page

Committees:

- Qualifying examination Committee 2008-present
- Condensed Matter Theory Search Committee 2008

TEACHING AND MENTORING

Texas A&M University physics department serves a large engineering department and as such faculty are expected to teach a large fraction of undergraduate physics courses. Our teaching load is two courses per academic year, which is the usual case in other research universities in the United States. When teaching larger courses we are given the choice of teaching one per semester or teaching two large lectures one semester in order to dedicate the other semester to graduate student advising and research.

Teaching experience:

- Undergraduate *Electricity and Magnetism*. Texas A&M. Multiple times (up to 230 students)
- Undergraduate-freshman-level: *Introductory to Electricity, Magnetism, and Waves*. Texas A&M. Multiple times (up to 200 students)
- Undergraduate-freshman-level: *Introductory to Mechanics*. Texas A&M. (up to 120 students)
- Lecturer substitute in various condensed matter courses. University of Wisconsin (1998-2001)
- *Undergraduate-level: Introductory level laboratory courses (1993-1998)*

Supervision of students and postdoctoral researchers:

- Postdoctoral researchers:
 - Kirill Rivkin Texas A&M University, 2006-2007
 - Yuri Adamov, Texas A&M University, 2006-2009.
 - Oleg Tretiakov, Texas A&M University, July 2009-2012
- Graduate students:
 - Jianping Liu, Texas A&M University, 2011-present
 - Hao Chen, Texas A&M University, 2011-present
 - Bin Yang, Texas A&M University, 2011-present
 - Yang Liu, Texas A&M University, 2010-2011
 - Deqiang Sun, Texas A&M University, 2007-2009
- Undergraduates:
 - Eric Kylberg, Texas A&M University, Spring 2009
 - Camden Breeding, Texas A&M University, Fall 2009