

Curriculum Vitae – Zdeňka Guadarrama

Previous name: Zdeňka Kali

E-mail: guadarrama@rockhurst.edu

Website: <http://rumathphysics.org/guadarrama/>

Research interests: Complex function theory, extremal problems, evolutionary game theory, economics.

Education

2006

Ph.D. in Mathematics, Department of Mathematics, University of Arkansas, USA.

Dissertation: Two extremal problems in complex function theory.

Dissertation advisor: Dmitry Khavinson

2003

M.S. in Mathematics, University of Arkansas, USA.

1998

B.S. in Economics, Instituto Tecnológico Autónomo de México, Mexico.

Magna Cum Laude

Dissertation: Applications in environmental policy: An emission market of NO_x for the Mexico City Metropolitan Area.

Employment

Fall 2006- current

Assistant Professor

Department of Mathematics and Physics

Rockhurst University

Kansas City, MO, USA.

Summer 2007

Trigonometry instructor in the program for the Academy of Math and Sciences,

REAL and Upward Bound. University of Arkansas. Fayetteville, AR, USA.

Spring 2007

Visiting Assistant Professor

Department of Mathematics

University of Arkansas Fort Smith

Fort Smith, AR, USA.

2000-2006

Graduate Assistant

Department of Mathematical Sciences

University of Arkansas

Fayetteville, AR, USA.

Summer 2006

Geometry instructor in the program for the Academy of Math and Sciences,

REAL and Upward Bound.

Publications

(PDF files are available at <http://rumathphysics.org/guadarrama/research.html>)

- Bohr's Radius for polynomials in one complex variable, Computational Methods and Function Theory. 5 (2005),143-151.
- Approximating \bar{z} in Bergman and Hardy norms, (with Dmitry Khavinson), 2006, 21pp. Accepted Proceedings of the AMS Special Session on spaces of Analytic Functions in New Hampshire, March 2006, AMS, Contemporary Mathematics Series.

Seminar talks given

- "Evolutionary game theory", Mathematics Colloquium Series, University of Arkansas Fort Smith, Fort Smith, Arkansas, USA. May 2007.
- "Why is evolutionary game theory so popular in biology", MAA Oklahoma-Arkansas Section, Northeastern State University, Tahlequah, Oklahoma, USA. March 2007.
- "Approximating \bar{z} in Bergman and Hardy norms", Analysis Seminar, University of Arkansas, Fayetteville, USA. October 2006.
- "Game Theory", Academy of Math and Sciences Symposium, University of Arkansas, Fayetteville, USA. July 2006.
- "Analytic approximation in the annulus and the disk", Harmonic Analysis Seminar, University of Arkansas, Fayetteville, USA. November 2005.
- "Analytic approximation in the annulus and the disk", Analysis Seminar, University of Arkansas, Fayetteville, USA. November 2005.
- "On a Theorem of Harald Bohr", Analysis Seminar, University of Arkansas, Fayetteville, USA. February 2003.
- "On a Theorem of Harald Bohr", University of Tulsa, Oklahoma, USA. April 2003.

Awards and scholarships

2007-2008 Project NExT Fellow.

2001-2002 Teaching award: John W. Keese Award for the Outstanding Graduate Teaching Assistant.

2000-2006 Academic Excellence Award: Alberto y Dolores Andrade Foundation.

1994-1998 Academic Excellence Award: Alberto y Dolores Andrade Foundation.

2003-2005 Summer support.

2005 NSF travel grant for conference Computational Methods and Function Theory in Joensuu, Finland.

2004 Massie Scholarship for Outstanding Academic Achievements.

2003 Massie Scholarship for Outstanding Academic Achievements.

1994-2006 Scholarship Alberto y Dolores Andrade for outstanding academic achievements.

1993-1998 ITAM fellowship.

Mathematics conferences attended

- Mathfest 2007, San Jose, CA, USA. August 2007.
- MAA Oklahoma-Arkansas Section, Northeastern State University, Tahlequah, Oklahoma, USA. March 2007.
- Computational Methods and Function Theory, University of Joensuu, Finland. June 2005.
- Southeastern Analysis Meetings, University of Washington and Lee, Lexington Virginia, USA. April 2005.
- Mid-West Geometry Conference, University of Arkansas, Fayetteville, USA. March 2004.
- Spring Lecture Series, The Andrews-Curtis and the Poincare Conjectures, University of Arkansas, Fayetteville, USA. April 2003.
- Workshop on Analysis and Geometry in Carnot-Caratheodory spaces, University of Arkansas, Fayetteville, USA. March 2003.
- Spring Lecture Series, Harmonic analysis, multilinear operators, and Schrödinger operators, University of Arkansas, Fayetteville, USA. April 2002.
- Spring Lecture Series, Solutions of Partial Differential Equations in Periodic Media, University of Arkansas, Fayetteville, USA. April 2001.

Outreach

- Summer 2006 and 2007 mentoring and math tutoring in Spanish for Hispanic girls through REAL (Reaching Educational Aspirations of Latinos).
- Organizer of the exhibition “Arthematics” (Jan 30-Feb 10, 2006), a collective art exhibit of works by mathematicians and non-mathematicians as part of the AWSM - Arkansas Women in Statistics and Mathematics activities for 2006. See <http://comp.uark.edu/~zkali/Arthematics.htm>.

- AWSM - Arkansas Women in Statistics and Mathematics first secretary 2002-2005.

Work experience outside of Academia

1997/1999

Ministry of Commerce and Industrial Development, Economic Deregulation Unit. Mexico.

Consultant in the regulatory improvement of the State Water Laws, water and atmospheric regulation.

Researched the problems with negative incentives within the water regulations and participated in the negotiation of agreements among partnering groups.

1996/1997

Ministry of the Environment, Natural Resources and Fisheries, Economic Analysis Coordinating Unit, Department of Finance. Mexico.

Director of research on credits for small scale environmental projects.

Developed a resource manual to assist potential borrowers in making informed credit decisions.