

Kazem Mahdavi

Personal Data

US Citizen, one Son

Education

Ph.D, Mathematics, SUNY Binghamton, 1983
L. C. Kappe Ph.D. advisor
MA, Mathematics, SUNY Binghamton, 1980
MS, Mechanical Eng., Tehran University, 1975

Experience

Univ. of Texas at Tyler, Computer Sciences Professor, Sept. 2008-present
Univ. of Texas at Tyler, Mathematics Professor, Sept. 2005-Sept. 2008
Chair, math. dept. UT Tyler, Sept 2005- Sept 2006
Harvard Univ., Visiting Scholar, 2003-04
SUNY Potsdam, Mathematics Professor , 1991-2006
Clarkson Univ. Physics Dept. Lecturer, 2003
Clarkson Univ., Mathematics Department adjunct Professor, 1999
Cornell Univ., Visiting Professor, 1995-6
SUNY Potsdam, Associate Professor, 1986-91
SUNY Potsdam, Assistant Professor, 1983-6
SUNY Binghamton, Teaching Assistant, 1979-83
French-Iranian Design Eng. Co., Project Eng. 1977-8

Grants

- NSF (DMS0901385), Mathematical conference, April 200- April 2010 (PI)
- NSA REU Grant (H98230-006-1-01-41), May 2006-May 2008 (PI)
- NSF (NSF 0703900), Mathematical conference, April 2007- April 2008 (PI)
- Stem Grant from State of Texas to create a center for Science, Technology, Engineering, and Mathematics (1,500,000.00) (Co PI)
- NSA (H98230-05-1-02-87), Mathematical Biology and Dynamical System conference (co-PI)
- NSA MSPF-05IC-057, Clarkson Potsdam REU Program 2004-2005 (PI)
- NSF 0353050 Potsdam REU program 2004-2005 (PI)
- NSA MDA 904-03-1-0046, Potsdam REU Program 2003-2004 (PI)
- NSF 0244224, a Conference on the Interactions between Representation Theory, Knot Theory, Hopf Algebra, Category Theory, Topology, and Mathematical Physics, Summer 2003 (PI)
- NSA MSPR03IC-031, a Conference on the Interactions between Representation Theory, Knot Theory, Hopf Algebra, Category Theory, Topology, and Mathematical Physics, Summer 2003 (PI)

Grants continue

- NSF 9619820, Clarkson/Potsdam REU Program 1997-1998 (PI)
- Many SUNY Internal Grants, 1993-present.
- Max Planck Institute Grant, to travel to Germany to collaborate K. Denecke, December 1993
- Max Planck Institute Grant, to travel to Germany to collaborate with K. Denecke, December 1995, June 1996, and August 1998

Publications

- Virtually Abelian Subgroups of Biautomatic Groups (JCM), accepted, (senior author)
- Poceeding of Conference on Quantum Computation, AMS, accepted, Chief editor,
- Proceeding of Conference on Mathematical Biology, World Scientific, Chief editor, 2007.
- Finite C-Groups (senior author), Global Journal of Pure and applied Mathematics, Vol 3, No 1, 2007.
- Clarkson/Potsdam REU Program, Math. Horizon, Feb. 2005.

Publications
continue

- Research Experience for Undergraduates, Proceeding of American Mathematical Society Conference on Undergraduate Research, 1999.
- The Order of Normal form Hypersubstitutions of Type (2), *Discussiones Mathematicae General Algebra and Application* 20(2000) 183-192. (Joint with K. Denecke).
- Lattice Isomorphic Mixed Abelian Groups, *Arch. Math*, Vol. 60, 327-329 (1993). (Joint with J. Poland).
- On Attracting Mathematics Majors, *Humanistic Mathematics Network*, Journal 8, July 1993.
- Lattice Isomorphic Abelian Groups, *Arch. Math.*, Vol. 58, 220-230 (1992). (Joint with J.Poland).
- A Classification of 2-Generator 2-Groups with many Subgroups 2-Subnormal, *Communications in Algebra*, 15 (4), 713-750 (1987).
- On Groups with every Subgroup 2-Subnormal, *Arch. Math.*, Vol. 47, (1986), 289-292 (1986).
- A Classification of 2-Generator, p-groups, p33, with many Subgroup 2-Subnormal, *Arch. Math.* 43, (1984) pp. 97-107.

Publications continue

- A Special Class of Three-Engel Groups, Arch. Math. 40, (1983), pp. 193-199
- A New Bridge between Mathematics and Physics, book (Joint with I. Schensted, and E. Rayn), work in progress.
- Classifications of C-Groups, work in progress
- A Quantum Algorithm for finitely generated Abelian Group, (joint with 2004 REU Students), work in progress
- Finding the Center of a given group, using Quantum Algorithm (joint with 2003 REU students), work in progress
- Is the center of an Automatic Group finitely or infinitely generated, work in progress

Awards/Honors

- President Award for Excellence in Research, UT Tyler, nominated Spring 2008
- Invited NSF panel member to judge Graduate fellowship applications, Feb 2005
- Texas Space Grant Proposal reviewer, 2007-present
- President's Award for Excellence in Research Creative Endeavor, Spring 1996, SUNY Potsdam

Awards/Honors
Continue

- Member of Editorial Board, International Journal of Pure Applied Mathematical Sciences (IJPAMS), 2004-present
- Member of Editorial Board, Global Journal of Mathematics and Mathematical Sciences (GJMMS), 2004-present
- Colloquium Speaker at Lamar University, Clarkson University, Albany University, Carleton University (Ottawa), Queens University, Pomona College, Potsdam University (Germany)
- Referring for Archiv Der Mathematik, twice.
- Visiting Lecturer of American Mathematical Society, 1995-1998
- Reviewing Books for publishing companies
- Have been acknowledged for contributions to the newly published book, Cambridge University Press, Conceptual Mathematics, by W. Lawvere, and S. Schanuel. (Lawvere is an eminent logician, philosopher, and mathematician).
- Have been acknowledged for contribution to the important paper Central Quotients of Bi-automatic Groups, by Lee Mosher, Comm.Math. Helv.
- Many many times recipient of merit awards from SUNY Potsdam.
- Refereeing undergraduate poster Session AMS/MAA Annual meeting, 2000-present

**Awards/Honors
continue**

- Have been acknowledged for contributions to Abstract Algebra Book, by Pinte
- Editor's Choice award in poetry. National Library of Poetry, Summer 1994.
- Presented more than 17 talks at national mathematical/mathematics education conferences.
- Received a certificate in recognition of outstanding work on the Fall 1991 SUNY Potsdam Phonathon.)
- SUNY Potsdam Honors Professor, received Certificated, 2000
- Acknowledged by the authors of published papers for useful comments as a referee

**Administrative Ex-
perience**

- Chair, Department of Mathematics, UT Tyler, Sept. 2005-Sept. 2006
- Director and Principal Investigator of Clarkson University/SUNY Potsdam REU program, 1997-present

Administrative Experience continue

- Director of K-12 Teachers Summer Program(NSF funded), Summer 2000
- Member of Institutional Review Board, SUNY Potsdam, 1986-Present
- Arranged and managed NSF/NSA funded conference on interaction between Representation Theory, Knot Theory, Mathematical Physics, etc., Summer 2003
- Arranged and managed NSF/NSA funded conference on interaction between Representation Theory, Knot Theory, Mathematical Physics, etc., Summer 2002
- Helped SUNY Potsdam with fund raising efforts, 1991
- Arranged and Managed trips of many speakers to SUNY Potsdam, 1984-present
- Arranged and Managed many students trips to conferences, 19984-present
- President Phi Kappa Phi, Potsdam Chapter, 2000-2002
- Elected of member of Council on Undergraduate Research, 2000-present
- Member of Mathematics Education Delegate to China, Fall 2000

Administrative Experience continue

- Chair Graduate Committee, SUNY Potsdam, Several times, 1984-present
- Chair Personnel Committee, SUNY Potsdam, 2000-2001
- Member of Honors Council, SUNY Potsdam,
- Chair Master Comprehensive Exam, SUNY Potsdam, more than seventeen times
- Composed Ph.D Qualification Examination in Algebra for Clarkson University
- Pi Mu Epsilon Co-sponsor, SUNY Potsdam, 1987-1990
- Chair hiring Committee, SUNY Potsdam, 1986
- Hiring Committee, SUNY Potsdam, several times

Miscellaneous

- Completed a short courses on Representation Theory
- Completed a short course on Scientific application of Knot Theory
- Completed a short course on Lie Theory

**Miscellaneous Con-
tinue**

- Completed a short course and Quantum Computations
- Complete a short course on Symbolic Dynamics
- Completed a short course on Artificial Intelligence
- complete a short course on Elliptic Curves
- Completed a Short course on Symplectic Geometry
- Completed several mini-courses on the use of technology in the classroom.
- Guided more than seventeen (17) independent study courses at the graduate level for BA/MA students at SUNY Potsdam and graduate students at Clarkson University. The areas of the independent studies include Lie Algebra, Coding Theory, P-adic Number Theory, General Relativity Theory, Singularity Theorem, Universal Algebra, Representation Theory, Godel Incompleteness Theorem, Category Theory, Differential Geometry, Chaotic Dynamical Systems, Number Theory, Graph Theory, Knot Theory, Geometry, Operator Theory, Hyperbolic Geometry, Computational Biology, Solitons, Godel's Incompleteness Theorem Banach-Tarski Paradox.
- Attended more than forty conferences at national and international levels

Membership AMS, MAA , Phi Kappa Phi, Council on Undergraduate Research, Pi Mu Epsilon.

Hobbies Yoga, Tai Chi, Running, Mountain Climbing, swimming, Gardening, Reading Philosophical Texts, Reading Poetry, Writing Fiction, Writing Poetry
Donating Blood regularly.

References

- Professor L.C. Kappe
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- Professor David Powers
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**References
continue**

- Donald Straight
School of Education, Satterlee Hall
SUNY Potsdam, Potsdam, NY 13676
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Email: straigdc@potsdam.edu

- Professor Irene Schensted
Box 32, Peaks Island (until Dec. 20, 2002)
Main 04108
Tel: 207 766 5561

- Professor Irene Schensted
C/O Verona, 1020 Meridian Ave., (from Dec.
20 on)
Apt 502 Miami Beach, FL 33139
Tel: 305 538 3965,

- Professor Louis Kauffman,
Dept. of Math.,
University of Illinois at Chicago,
851 South Morgan Street,
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Tel: 312 996 3066
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- Professor John Poland
Dept. of Math. Carleton Univ.
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