

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

Work

Univ. of Texas at Tyler, Professor, Sept. 2005-present
Harvard Univ., Visiting Scholar, 2003-04
SUNY Potsdam, Professor, 1991-2006
REU, Director, NSF/NSA funded, 1997-present
Conference, co-organizer, NSF/NSA funded, 2003
Clarkson Univ. Physics Dept. Lecturer, 2003
Conference, co-organizer, NSF/NSA funded, 2002
Teachers Program, Director, NSF funded, 2000
Clarkson Univ., adjunct Professor, 1999
Cornell Univ., Visiting Professor, 1995-6
Employee Assistant, Coordinator, SUNY, 1993-95
SUNY Potsdam, Associate Professor, 1986-91
SUNY Potsdam, Assistant Professor, 1983-6
SUNY Binghamton, Teaching Assistant, 1979-83
SUNY Binghamton, lecturer, Summers 81,2,3
Iranian Army, draftee, 1975-7
French Iranian Design Eng. Co., Project Eng. 1977-8

Grants

- NSA REU Grant (H98230-006-1-01-41), May 2006-May 2008 (PI)
- NSF (NSF 0703900), Mathematical conference, Sept. 2007 (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)
- NSF 0202356, A Conference on the Interactions between Representation Theory, Knot Theory, and Mathematical Physics, Summer 2002 (PI)
- NSA MSPR 02IC-202 , A Conference on the Interactions between Representation Theory, Knot Theory, and Mathematical Physics, Summer 2002 (PI)

Grants continue

- NSF 0097113, Potsdam REU Program 2001-2003 (PI)
- NSA MSPF-02IC-022, Potsdam REU Program 2002 (PI)
- NSA MSPF-01IC-180, Potsdam REU Program 2001(PI)
- NSF 9820117, High School teachers Program, 2000 (PI)
- NSA MBPF-01IC-180, Summer 2000 (PI)
- NSF 9820117, Clarkson/Potsdam REU Program 1999-2000 (PI)
- Office of Educational Partnership grants for teachers program, 2000 (PI)
- 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

- 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.
- Research Experience for Undergraduates, Proceeding of American Mathematical Society Conference on Undergraduate Research, 1999.
- Virtually Abelian Subgroups of Biautomatic Groups (Joint paper), submitted.
- 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).

**Publications
continue**

- 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.
- 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

- Invited NSF panel member to judge Graduate fellowship applications, Feb 2005
- President's Award for Excellence in Research Creative Endeavor, Spring 1996.
- 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 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).

**Awards/Honors
continue**

- Have been acknowledged for contribution to the important paper Central Quotients of Biautomatic 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
- Have been acknowledged for contributions to Abstract Algebra Book, by Pinter
- 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 Experience

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

Administrative Experience continue

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 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

Miscellenous

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

Miscellaneous

- 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, etc.
- 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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Binghamton University
Binghamton, NY 13902
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- Professor David Powers
Dept. of Math.
Clarkson University,
Potsdam, NY 13699
Tel: 315 268 2395
Email: dpowers@Clarkson.edu
- Donald Straight
School of Education, Satterlee Hall
SUNY Potsdam, Potsdam, NY 13676
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Email: straigdc@potsteam.edu

**References
continue**

- 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,
Chicago, Illinois 60607-7045
Tel: 312 996 3066
Email: kauffman@uic.edu

- Professor John Poland
Dept. of Math. Carleton Univ.
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Email: jpoland@math.carleton.ca

