

MATHEMATICS

Millersville University, Department of Mathematics ♦ www.millersville.edu/math

Department Retirements

Congratulations to **Drs. Rethinasamy "Kit" Kittappa** and **Bernie Schroeder** on their retirements effective summer 2009. Dr. Kittappa was a member of the Mathematics Department at MU for 28 years, and Dr. Schroeder for 20 years.

Department Welcomes New Faculty Members

In the fall 2009, the Millersville mathematics department was pleased to welcome 5 new faculty members to Wickersham Hall. Two tenure-track faculty, **Dr. Zhigang Han** and **Dr. Erin Moss**, as well as three one-year full-time temporary faculty members: **Dr. Andrey Glubokov**, **Dr. Louis Levy**, and **Dr. John Rosson**, who were hired to help fill vacancies from recent retirements, promotions and sabbaticals.

Dr. Zhigang Han received his PhD in 2006 from Stony Brook University. His area of research is geometry and topology. Prior to joining Millersville's faculty, Dr. Han had a 3 year post doc at the University of Massachusetts Amherst. He says that he is enjoying his time at MU, and likes to play tennis during his free time, mostly with his wife Yujen Shu, who is also a mathematician.

Dr. Erin Moss received her PhD in Mathematics Education from Purdue University in 2009. She double-majored in Drama and Math at UNC–Asheville, and then received her Master's in Mathematics from the UCONN, planning to be an actuary. Dr. Moss' current research interests include the learning and identity development of preservice teachers, and equity issues in education. In her spare time she enjoys theatre, playing ultimate frisbee, and spending time with her husband (Richard) and daughter (Gillian).

Dr. Andrey Glubokov received his PhD in Mathematics from the University of New Mexico, specializing in Noncommutative Geometry. He is currently single and enjoys volunteering. So far he has participated in helping to organize some Millersville events such as the Student Career in Math Conference and the MU Swing Dance Club.

Dr. Louis Levy holds a Ph.D. (2009) and M.S. (2006) in mathematics from the N.C. State University; as well as a B.S. in computer engineering, University of Maryland at College Park (2003). His area of research is algebra. Dr. Levy is currently single, and he enjoys going running in his free time.

Dr. John Rosson returns to the Millersville University's Mathematics Department after spending two years teaching mathematics at Lock Haven University. Mathematically, Dr. Rosson has spent the last few months thinking, writing and researching questions that have interested him regarding topological 2-complexes, quantum topology, the continuum hypothesis and the Lindemann theorem.

Changes in School and Department Leadership

- On July 1, 2009, **Dr. Edward C. Shane**, Dean of the School of Science and Mathematics, retired after serving 10 years at Millersville University. The department extends appreciation and best wishes for a long and fun-filled retirement.
- Simultaneously, **Dr. Robert T. Smith**, who served as the Mathematics Department Chair for the better part of 10 years, was appointed the new Dean of the School of Science and Mathematics. It is noteworthy to mention that Dr. Smith remains a tenured Professor of Mathematics; the first (and only) tenured administrator at MU at this time. The department congratulates Dr. Smith on his new position and looks forward to his ongoing leadership and continued support of the mathematics program.
- As a result of Dr. Smith's appointment, **Dr. Delray J. Schultz** was elected as the new Department Chair and **Dr. Janet A. White** as the new Assistant Department Chair. Dr. Schultz is one of the department's statisticians who has been at Millersville since 1992, and served the department as the Assistant Chair for 5 years. Dr. White is in her eighth year at Millersville, specializing in Mathematics Education, after spending 11 years as a public high school mathematics teacher and department chair in MD. During her time at MU, she has supervised almost one hundred secondary mathematics student teachers, taught a variety of general education and graduate mathematics courses, and has recently enjoyed teaching the Secondary Mathematics Methods course.

Drs. Z. Shao and R. Umble Awarded Sabbatical Leaves

Congratulations to **Dr. Ron Umble** and **Dr. Zhoude Shao** who were each awarded full-year sabbatical leaves for 2009-2010.

- **Dr. Umble** spent much of the fall semester in Seville, Spain, consulting with researchers in the Department of Applied Mathematics. He helped initiate three new projects applying techniques of algebraic topology to 4D image recognition. While overseas, Dr. Umble gave presentations at two conferences: at the University of Seville, Spain, and at the University of Leicester, Leicester, England. During the spring semester, Dr. Umble is spending a couple of weeks at Stanford University, and he will then travel back to Europe, researching and giving presentations at the Charles University in Prague, University of Stockholm, and the University of the Basque Country in Leioa, Spain.
- **Dr. Shao** completed a paper for publication (perhaps for the Journal of Differential Equations or Nonlinear Analysis): "Existence and continuity of strong solutions of partly dissipative reaction diffusion systems." He is continuing his research on another paper, "Global attractor and determining modes for partly dissipative reaction diffusion systems," and is also working on refining his course notes for partial differential equations. During the spring semester, Dr. Shao is anticipating travel to Europe to present his work.

H i g h l i g h t s

MATHEMATICS

Faculty News

- Congratulations to **Dr. Noel Heitmann** who was promoted to Associate Professor this year.
- **Dr. Elizabeth Sell** was one of two faculty members from Millersville selected to attend the PASSHE Summer Academy for the Advancement of College Teaching at California U. of PA (July 2009). In addition, Dr. Sell had 3 papers accepted for publication: "Algebraic properties of a family of Jacobi polynomials," (with John Cullinan and Farshid Hajir), to appear in Journal de theorie des nombres de Bordeaux; "On the topology of surface singularities $\{z^n=f(x,y)\}$, for f irreducible," to appear in Michigan Mathematical Journal and "On splice quotients of the form $\{z^n=f(x,y)\}$," to appear in Mathematische Nachrichten. Dr. Sell also made two presentations at national meetings: a poster presentation entitled "Universal Abelian Covers for Surface Singularities $\{z^n=f(x,y)\}$ " at Connections for Women: Algebraic Geometry and Related Fields, MSRI; and a talk entitled "On splice quotients of the form $\{z^n=f(x,y)\}$ " at Joint AMS/MAA Meetings, Contributed papers in Algebraic Geometry and K-Theory, Washington, DC, January 2009.
- **Dr. Ronald Umble** submitted two papers for publication: "Polygons that generate and edge tessellation of the plane" (reporting results from research work in geometry with three of our undergraduate majors (noted below) during the spring 2009 semester), and "A-infinity bialgebras of type (m,n) " (reporting results of joint work with Sean Evans (noted below) and Dr. Ainhoa Berciano during her visit to MU in July).
- **Drs. Ximena Catepillan**, Natalia Dushkina and Nazli Hardy had a paper "Un curso interdisciplinario en matemáticas, ciencias, y los estudios de las mujeres en la Universidad de Millersville", accepted for publication in the Spanish journal of mathematics, Matematicalia.
- In the fall, the regional EPADEL Careers in Mathematics Conference was hosted at Millersville University. The day-long event was attended by approximately 112 students, faculty and presenters. The event was organized by **Drs. J. Robert Buchanan**, **Ximena Catepillan**, and **Janet A. White**.
- **Dr. Kevin S. Robinson** presented the paper "Determining the Sample Size for Estimating the Standard Deviation" at the 2009 Joint Statistical meetings held in Washington, D.C., in August.
- **Drs. Antonia E. Cardwell**, **Travis K. Miller** and **Janet A. White** presented their individual research at the 2009 and 2010 National Joint Mathematics Meetings in Washington DC, and San Francisco, CA (respectively).
- **Drs. Miller** and **White** presented at the International Conference on Technology in Collegiate Mathematics in New Orleans, LA (March 2009). Dr. Miller's presentation was entitled: "Online discussion in a mathematics content course for preservice elementary teachers," while Dr. White's presentation was on "Using personal response systems (clickers) for pre-service teacher candidates in elementary content and secondary methods courses."

Student & Alumni News

- The following MU alumni began graduate studies in statistics this past fall: **Catherine Albright**: Ohio State University, with a fellowship; **Rebecca Dickinson**: Virginia Tech, with an assistantship; **Jared Martin**: Ohio State University, with an assistantship; and **Alex Ward**: West Chester University.
- The following MU Mathematics Department alumni began careers teaching mathematics this past fall: **Pamela Brubaker** Lampeter Strasburg High School; **Ryan Butt** Donegal High School; **Leigh Clark** Hatboro-Horsham High School; **Erica Davenport** Kennett Middle School; **Kyle Foster** Muhlenberg High School; **Amanda Husser** Cedar Crest Middle School; **Ryan Martin** Hempfield High School; **Tiffany McLaughlin** Chambersburg Area School District; **Karry Nusbaum** Havre de Grace High School; **Brian Peltz** Interboro High School; **Todd Risser** Johnson-Williams Middle School; **Barbara Simonton** Elizabethtown High School; and **Paul Warner** Garnet Valley Middle School.
- A paper based on **Jared Martin's** Honors Thesis, under the direction of **Dr. Lewis Shoemaker**, was accepted for publication: Martin, J.L. and Shoemaker, L.H. (2009) "Preliminary Variance Tests for Deciding to Use Pooled vs. Non-pooled t-tests;" Proceedings of the 2009 Joint Statistical Meetings. The paper is based on the presentation given at the 2009 Joint Statistical Meetings, Washington, D.C.
- Congratulations to **Mrs. Deborah Bullock Hansell** for successfully completing and defending her Master's Thesis: "The Effect of Homework on Mathematics Achievement" in the fall of 2009, under the direction of Dr. Janet White. Mrs. Hansell is one of our first graduate students to complete the Thesis option in quite some time.
- Congratulations to **Nick Brubaker**, attending graduate school at the University of Delaware, who has passed both of his preliminary exams.
- Congratulations to **Justin Neustadter** (2003) for passing his 9th and final actuarial examination. After the completion of one seminar, he will receive his Fellowship in the Society of Actuaries.
- **Andrew Hall**, **Matthew Kirby**, and **Joshua York**, under the direction of Dr. Ronald Umble, submitted a paper entitled, "Polygons that Generate an Edge Tessellation of the Plane" for publication.
- **Sean Evans**, in collaboration with Drs. Ainhoa Berciano and **Ronald Umble** submitted a paper: "A ∞ -Bialgebras of Type (m,n) " which includes results of his honors thesis for publication.

Did we miss you? Let us know any updates that we can share!

How can YOU help?

Like what you read about Mathematics alumni, faculty, students, and programs? Be sure to look at our new department website: <http://www.millersville.edu/math/>, and help to keep our programs strong by supporting our mathematics majors. Give on-line @ www.millersville.edu. Click on the 'Giving to Millersville' tab OR send your gift to Millersville University, Development Office, PO Box 1002, Millersville, PA 17551-0302. Gifts may be designated to the Mathematics Department Scholarship funds, and can be restricted or unrestricted.

Special Note from Dr. Bernie Schroeder: Cynthia Schroeder Brochman, 44, the daughter of Professor Emeritus Bernie and Mary Anne Schroeder, was called home to heaven by her Lord on December 27, 2009 after a year-long courageous battle against a rare form of cancer. Cindy was a systems analyst for Accenture at Best Buy headquarters in Minneapolis and was a nationally and internationally recognized runner and snowshoe racer.

Bernie and Mary Anne (who now reside at 4 Cheswell Court, Bluffton, SC 29909) promised Cindy that they would never let her legacy die, and are attempting to fulfill that promise by establishing a Cynthia Schroeder Brochman Memorial Endowment Fund at Cindy's alma mater: St. Olaf College in Minnesota. Contributions to this fund can be sent to The Cynthia Schroeder Brochman Memorial Endowment Fund (care of Rebecca Otten) at St. Olaf College, 1520 St. Olaf Avenue, Northfield, MN 55057.