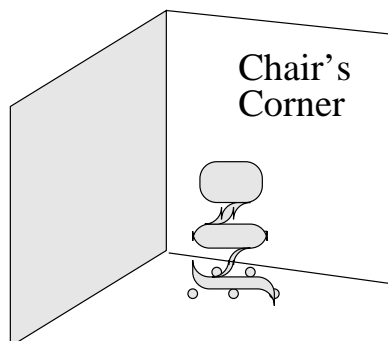


Greetings!

A warm hello to all alumni of the Department of Mathematical Sciences at Northern Illinois University! Once again it is our pleasure to send you news from the past year—including notes you submitted to us concerning your whereabouts and doings. We invite your comments on this issue along with notes on your activities. And we wish you well in all your endeavors.



by Professor William Blair

It is difficult to believe that another year has passed so quickly. After several years in which retirements led to administrative changes in the department, this past year was relatively calm. Professor Buck Stephen completed his term as director of undergraduate studies and looks forward to returning to full time teaching in the fall. Professor David Rusin became the new director on July 1. Professor Robert Wheeler, who had been serving as acting associate dean of the College of Liberal Arts and Sciences since last summer, has been appointed associate dean. Bob is doing an outstanding job in his new post overseeing curricular, space, and computer issues for the college.

During 1998 one member of our faculty received a truly unique honor. Presidential Research Professor Jindrich Nėcas was presented the State Order Medal for Merit by President Václav Havel of the Czech Republic in a ceremony at Prague Castle in October 1998. Professor Nėcas is a native of the Czech Republic. He received this award in recognition of his lifetime achievements in mathematics. Our university is exceedingly fortunate to have Professor Nėcas on our faculty.

Professor Daniel Grubb was named as a recipient of the Excellence in Undergraduate Teaching Award for 1999. Professor Grubb is the ninth member of our department to receive this prestigious award.

This was the second year in which the *Huskie Telefund* has solicited donations from our alumni on behalf of the department. We greatly appreciate your generous contributions to our scholarship funds. Your comments to the student callers about our department, its faculty, and its programs are passed along to us, and we find these to be encouraging and helpful. If you were not able to donate this year we hope you will consider helping in the future. We also appreciate your loyal support of our endowed scholarship funds and your direct contributions to the department.

I often take this opportunity to mention mathematical breakthroughs. This year the breakthrough that comes to mind involves the walls of Watson Hall. In order to make Watson Hall ADA compliant, the university is in the process of installing an elevator in Watson. This is part of a series of major renovations in our part of campus. DuSable Hall is receiving a major face lift and upgrade. New “smart” classrooms are being installed as well as a student lounge area. These improvements have been needed for some time, and we eagerly look forward to their completion.

This is our eighth annual alumni newsletter. Professor Linda Sons has been editor of the newsletter for all eight years, and I wish to thank her for producing another superb issue.

Let us hear from you. If you are in DeKalb, please stop by Watson Hall 320 and say hello.

William Blair

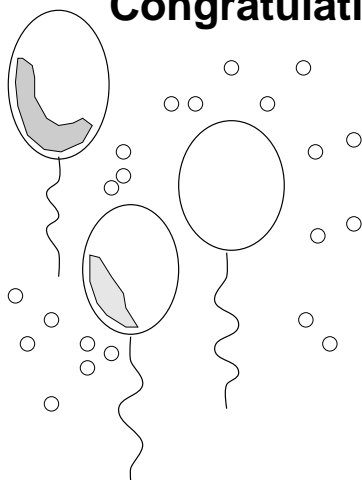
Good News

New Promotions/Tenure

Congratulations are in order to three members of the faculty who effective August 15, 1999, become tenured associate professors in the Department of Mathematical Sciences. The three are Sanjib Basu, Sien Deng, and George Seelinger. Professor Basu specializes in statistics, Professor Deng specializes in optimization theory and applied functional analysis, and Professor Seelinger is an algebraist with expertise in ring theory and geometric invariant theory.

Special congratulations also go to Professor Richard Blecksmith, who on August 15, 1999, becomes a full professor. Professor Blecksmith is a computational number theorist.

Congratulations!



Congratulations to the New Doctoral Recipients

The December 1998, May 1999, and August 1999 commencements list three new recipients of the Ph.D. in mathematical sciences. Congratulations to Andrew Woods, whose dissertation, “Mathematical Modelling and Analysis of Flash Evaporation,” was directed by Professor Frederick Bloom. Congratulations are also in order for Jean Cassidy and Abdel-Razzaq Mugdadi. Jean’s dissertation was “Solving the TLS Problem Via Rank Revealing LU Factorization” and was directed by Professor Ching-Tsuan Pan. Abdel-Razzaq’s dissertation, entitled “Nonparametric Curve Fitting of the Probability Density Functions of Random Variables with Applications,” was supervised by Professor Ibrahim Ahmad.

Departmental Awards

The 21st annual departmental commencement ceremony was held on May 8, 1999, in the Holmes Student Center. At the brunch Department Chair William Blair gave out the following awards:

The D. R. Ostberg Award given for academic achievement to a continuing student was shared by Daniil Sarkissian and Bangteng Xu.

The Stelford Prize given to the graduating senior with the highest GPA in mathematics courses went to Tim Huber and Adam Slagell.

The Gail Masters Gallagher Memorial Scholarship given to an outstanding student majoring in the mathematical sciences who will have junior class rank during the next academic year went to Jane Mucci and Jennifer Nelson.

The Dean’s Award given to a graduating senior for academic excellence and service was awarded to Adam Slagell and Susan Schmid.

The (departmental) Chair’s Award given on the basis of academic achievement and service to the department went to Tim Huber, while the Director’s Award went to Timothy Kater.

Certificates of Merit given on the basis of academic achievement went to Lisa Greenwood, Daniil Sarkissian, Naima Bahaji, and Mark Miller.

Honorable Mention Awards given on the basis of academic achievement went to Brian Adcock, Sonia Edghill, Michael Smith, Michael Timm, Jill DeBold, Chad Pals, Tracy Schield, Eric Bieche, Mandi Cottrell, and Kathryn Voigts-Miller.

The Merlyn Behr Research Award for excellence in research work in mathematics education was given to Jason Thrun.

The Margariete Montague Wheeler Awards recognizing the contributions of Professor Wheeler in mathematics education were given in two groupings. The M.M. Wheeler Scholarship recipients were Kelly Perry and Erin Rossi. The M.M. Wheeler Teaching Award recipients were Jaclyn Bingham, Michael Concialdi, Mark Rigby, Kathryn Voigts-Miller, and Jason Underwood. Honorable Mention for the teaching awards was given to Jill DeBold and Kathryn Merritt.

Certificates of Teaching Excellence among the graduate assistants went to Suzanne Riehl, Jill Shahverdian, and Gary Wang.

$\pi\mu\epsilon$ Members (by year of induction)

1998 Fall	1999 Spring
Sarah Forshier	Nicole Criswell
Sarah Haligas	Matthias R. Elmer
Sarah A. Logman	Daniel R. Ferry
Kelly Perry	Robb Watson
Jane E. Mucci	Sean P. Weldon
	Peter Lee

Math Club Activities 1998-1999

This was an exciting year for the NIU Math Club. Many students were involved in the club's activities. Two students, Adam Slagell and Tim Huber, gave talks at club meetings. Tim Huber also presented a talk at the annual ISMAA meeting at Augustana College in April 1999. Others who attended the ISMAA meeting, and participated in the annual math contest there, were Roman Ostrovskiy, Joseph Ervin, Jared Karney, and Stephanie McIntyre. Christine Leroux also attended the meeting. All the students enjoyed the ISMAA meeting and found it informative.

Math Club- $\pi\mu\epsilon$ meetings this year featured presentations by two guest speakers. The first was Professor Roger B. Eggleton of Illinois State University ("Prime Distance Graphs") in November, and the second was Professor Simcha Brudno of the University of Illinois at Chicago Medical Center ("On overlapping quantum mechanics and number theory") in April. Two other interesting lectures were given in club meetings by faculty members Professor Dan Grubb and Professor David Rusin. Four students who had just completed their student teaching, Mark Miller, Chad Pals, Mark Rigby, and Jason Underwood, served as panelists, giving a "Student teaching report from the real world" and participating in the discussion that followed. Students as well as several faculty members in attendance found this panel's presentation to be enlightening and insightful. Another Math Club meeting was a video night with the movie " π ," a story of a disturbed number theorist.

The Math Club took a tour of Lucent Technologies in February, where students learned how mathematicians work in high-tech industrial settings.

Last August, the Math Club participated for the fourth time in the Friday Fest showing of student organizations. Publicity and fun were also part of the “Problem of the Month” contests held throughout the academic year (these enjoyed great participation by students).

Once again the club had its Used Book Sale. Because of the support of faculty members, especially thanks to the generous donation of books by Professor Robert Wheeler, this book sale was an extremely successful one. The club also received a grant from the EXXON foundation this year. All funds received by the club were or will be used by the club for club activities.

Jamie Lipitze maintained the club web page this year (its address is <http://www.math.niu.edu/mclub>). Officers during the 1998-99 year were Christine Leroux (president), Jennifer Nelson (vice president), Adam Slagell (treasurer), and Jamie Lipitze (secretary). With this term of service, Christine completed two and one half years of service to the club and made great contributions to its operation. The current officers are Jennifer Nelson (president), Tim Huber (vice president), Kiran Lakkaraju (treasurer), and Sarah Haligas (secretary). The faculty advisers are Richard Blecksmith, Qingkai Kong, and Zhuan Ye.

Mathematical Modeling Contest

Sponsored by COMAP, the 15th annual modeling contest was held the weekend of February 5-8, 1999. New this year was the addition of an Interdisciplinary Modeling Problem Category, so contest teams had a choice of three problems instead of the usual two. The Northern team consisted of Timothy Huber, Kiran Lakkaraju, and Jennifer Nelson.

The 1998 Putnam Exam

Four NIU students participated in the 1998 Putnam exam. Kiran Lakkaraju took the 1997 exam and was the only experienced team member. Others on the team were Roman Ostrovskiy, Binh Quoc Dinh, and Timothy Huber.

Here are some of the problems on which they could work!

1. Let N be the positive integer with 1998 decimal digits, all of them one; that is, $N = 1111\dots11$. Find the thousandth digit after the decimal point of the square root of N .
2. A right circular cone has base of radius 1 and height 3. A cube is inscribed in the cone so that one face of the cube is contained in the base of the cone. What is the side-length of the cube?
3. Let f be a real function on the real line with continuous third derivative. Prove that there exists a point a such that

$$f(a)f'(a)f''(a)f'''(a) \geq 0.$$

Departmental Mathematics Contest Winners

The annual competitive mathematics exam held this spring was the 14th annual contest. As in previous years, it was open to all full-time undergraduate students at NIU. Each participant turned in solutions to a choice of seven out of 15 problems with the choices set up in such a way that lower-division students had fewer restrictions on their choices than did upper-division students. The first prize winner—a cash award recipient—was Mark Miller, while the second prize cash award went to Peter Kupfer.

ICTM Regional High School Mathematics Contest

Once again the department hosted one of the regional contests of the annual ICTM High School Contest. Many individuals worked hard to support the contest, including teachers and coaches from the participating schools. Locally, the contest committee was chaired by Professor Jeffrey Thunder, who served with the assistance of his committee: Ms. Cindy Stecher, Professor Victoria LaBerge, and Professor Y. Hong.

Alumni Gathering at ICTM

A number of alumni and faculty members joined for lunch last October at the Annual Meeting of the Illinois Council of Teachers of Mathematics meeting. We plan another informal gathering at that meeting this fall! Join us, if you come to the meeting, at the location and time that will appear in the program booklet. We will be happy to see you!

Course Offered at College of DuPage

A Hands-On Technology course for secondary teachers of mathematics was offered this summer as a special professional development course in mathematics education. The instructor for the course was our staff award-winning secondary mathematics teacher and past-president of the Illinois Council of Teachers of Mathematics Denny Filliman. Class response to the course, which ran from June 14 until July 8, was very positive!

Professional Development Plans

Recently Governor Ryan of Illinois signed legislation that changes the certification process. Among the tenets of the new law is one that requires teachers to have a professional development plan! Have YOU such a plan? If you are a teacher and are thinking about the development of such a plan, perhaps we can help you think through options you have. And don't forget about the courses we offer on the teaching of algebra, the teaching of geometry, assessment, etc. Consult our web page regarding plans for the offering of courses in mathematics education and mathematics, but let us know also of special needs you might have. We CAN offer special topics courses just as we offered the technology course this summer at the College of DuPage.

Web Page

Did you say Web page? Yes, the department has a web page at <http://www.math.niu.edu/>

Faculty Comings and Goings

Four members of the faculty had sabbatical leaves during the academic year 1998-1999. Professors Harald Ellers and Peter Waterman took the full year, while Professors Zhuan Ye and Helen Khoury were gone for the spring semester.

Leaving the statistics group this year is Professor Ibrahim Ahmad. He has been named chair of the statistics department at the University of Central Florida in Orlando.

Retirees, Where are they?

Often students ask where some of the retired faculty members of the department are. While most of them keep a residence in DeKalb, two are now Florida residents—namely Professors John Christiano and Robert Rodine—and Professor Robert Kuller makes his home in Wisconsin. Staying in DeKalb are Professors James Beach, Romae Cormier, John Ewell, Clarence Hardgrove, Dale Jungst, Henry Leonard, and Stanley Trail. Though Professor John Selfridge spends some time in DeKalb, he often chooses to be in Florida, Texas, Michigan, and California, besides other places a good train trip will take him!

Alumnus Bill Speer Offers Summer Colloquia

The Department of Mathematical Sciences was pleased this summer to offer one of its own to give colloquium talks in mathematics education. William R. Speer is a professor of Mathematics and Mathematics Education at the University of Nevada, Las Vegas. He is also emeritus professor of Mathematics and Computer Education at Bowling Green State University, Bowling Green, Ohio. His B.S. and M.S.Ed. degrees were achieved at Northern Illinois University while his Ph.D. was granted by Kent State University. Professor Speer is co-author with Professor James Heddens of the Prentice Hall text, *Today's Mathematics*, which is now in its ninth edition and focuses on content/teaching methods for the elementary and middle grades. He has also authored numerous articles and served as an editor for the *Arithmetic Teacher* and for *Teaching Children Mathematics*. He is currently president of the (national) Research Council on Mathematics Learning (formerly RCDPM) and the Nevada Association of Teacher Educators. He is also on the Board of Directors for the School Science and Mathematics Association. He was a member of the NCTM Commission that released the landmark publication entitled *Professional Standards for Teaching Mathematics*. Professor Speer has lectured extensively throughout the United States and internationally as well. Perhaps most importantly, he has had teaching experience at each grade level and enjoys sharing and learning about how research informs teachers and how the classroom lends itself to generative studies. His talks this summer were entitled "Without the Analysis, it's Just Data" and "Do you believe what I believe?"

Passing Mathematics On

Throughout the year the Department of Mathematical Sciences invites experts from elsewhere to share their research. It is one of many ways that faculty and students alike have the opportunity to be informed of recent advances in the field and to discuss them, too! Among the 1998-99 visitors were the following (along with their affiliations and talk titles): H. Chen, University of Montreal, Function Spaces on Riemann Surfaces; B. Berndt, University of Illinois, The Remaining 40% of Ramanujan's Lost Notebook; R. Eggleton, Illinois State University, Graphs almost saturated with m -cliques; R. Byers, University of Kansas, An Arithmetic for Matrix Pencils; T. Wooley, University of Michigan, Diophantine Equations, and Recent Progress on Waring's Problem; T. Roubicek, Charles University (Prague), Convex locally compact extensions of Lebesgue spaces and their applications; H. Russell, Harvard University, Hilbert Schemes of Points on Smooth Surfaces; C. Hurlburt, University of New Mexico, Arithmetic Analogs of Differential Modular Forms; M. Naylor, Florida State University, Children's Unitizing in a Computer Number Space; M. Reed, The Ohio State University, The Place Value Understanding of Montessori Students; J. Meakin, University of Nebraska-Lincoln, Groups and Inverse Monoids: Some Connections, and One Relator Groups and One Relator Inverse Monoids; D. Xu, Sichuan University (China), Invariant Sets, Attractors, and Functional Differential Equations; D. Khavinson, University of Arkansas-Fayetteville, The Isoperimetric Inequality Revisited.

The News According to You

Each year we invite you to share news and comments. Here are some received in writing this year!

James Ulrich ('43) lives in Arlington Heights, Illinois, and writes that he enjoys receiving the news even though he recognizes very few names.

Albert Peruzzo ('73) notes that he attained fellowship in the Society of Actuaries in 1998! Al works as an actuary and also holds a CPA Certificate with State (IL Silver) and National (AICPA Honorable Mention) Honors. He earned a second baccalaureate degree in accountancy from NIU and an M.B.A. from NIU in 1975. He lives in Chicago.

Kathleen Baker Lauden Preece ('77) is a senior faculty member in the Department of Mathematics at Phoenix College in Phoenix, Arizona. She expresses an interest in a reunion of 1975 graduates. (Are there others out there with such an interest?)

Hsiao-Chen Shuw ('90) sends greetings from his home in Taipei, Taiwan.

Diane Steidl Thornton ('92) reports a marriage in August 1996 and the expectation of their first child. She was employed as CADD draftsman in the Engineering Services Department of Revcor Companies in Carpentersville. Her husband is a chemical engineer working in Naperville, while they live in St. Charles. Among Diane's interests are active membership in the Sierra Club, Fox Valley Bicycle and Ski Club, and Toastmasters International.

Lance Mueller ('92 and '96) reports living in Hoffman Estates and working as a programmer analyst for a company in Lisle, Illinois. Wedding plans were being made for fall 1999.

Mark Battaglia ('97) lives in Chicago and is working toward completion of a J.D. degree at the John Marshall Law School. He feels his studies in mathematics have prepared him for the study of law.

Alumni of 25 Years

Congratulations on the 25th anniversary of the Class of 1974. Here is a listing of the Class of 1974 and their current home towns. If you can update some of the information, we would appreciate your help.

Mary K. Adzima, Pickerington, Ohio
Susanne H. K. Andresen, Deerfield, Illinois
Jeanne A. Arnold, Schaumburg, Illinois
Christine K. Aument, Itasca, Illinois
Kathleen Babb, Deer Park, Illinois

Stephen John Bacharz, Glendale Heights, Illinois
Robert Albin Barta, Carmichael, California
Douglas Arthur Belha, Morrison, Illinois

John Emil Bernard, Edinburg, Texas
Patricia J. Bittner, Alpharetta, Georgia

John V. Black, Wheaton, Illinois
David R. Blankenship, Machesney Park, Illinois
Charlene Ann Boehm, Elgin, Illinois
Peter Edward Botthof, Bartlett, Illinois
Robert Gary Braschel, Glen Ellyn, Illinois

Joseph Warner Brown, Bellevue, Washington
Gregory A. Bush, Moline, Illinois
Florence Helen Butler, Malta, Illinois
Larry Merle Clark, Mundelein, Illinois
Francis Paul Conerton, Egan, Illinois

Cecilia Connelly, Hickory Hills, Illinois
Gerald Allen Crabtree, Peoria, Illinois
Rebecca Alice Dalby, Taylors, South Carolina
James R. Deichstetter, Los Gatos, California
David John Demuth, Lebanon, Missouri

Susan M. Digianfilippo, Prospect Heights, Illinois
Edward Daniel Dostal, San Francisco, California
Del C. Dunham, Coppell, Texas
Jeanne Marie Etling, Palatine, Illinois
Douglas N. Feddersen, Crystal Lake, Illinois

Charles E. Force, Decatur, Illinois
Susan K. Fortmann, Mundelein, Illinois
Anne Gardner, Atherton, California
Janice Marie Gatons, Naperville, Illinois
Georgia Ann Gay, Palatine, Illinois

Judith Ann Grubb, Zion, Illinois
Gary Marc Gumbiner, Buffalo Grove, Illinois
Karl Heinz Hartfeil, Vernon Hills, Illinois
Wesley Joseph Horeni, Downers Grove, Illinois
Peter Richard Hughes, Chicago, Illinois

Frank Allen Kahanec, Spring Grove, Illinois
Scott Samuel Kelman, San Diego, California
Robert Wylie Keogh, Palos Heights, Illinois
Dirk Paul Klein
Arlene Kreuger, Bartlett, Illinois

Richard L. Landes, Akron, Pennsylvania
Mary Rita Lareau, Bloomingdale, Illinois
Patricia A. Larguier, Portland, Oregon

Gary Michael Larson, La Grange, Illinois
Gary Lee Lata, Lockport, Illinois

Cheryl Lee Laughridge, Mokena, Illinois
Deborah Ann Lax, Dundee, Illinois
Teresa L. Lehmann, Austin, Texas
Janet M. Liston, Tucson, Arizona
Richard D. Loffredo, Gansevoort, New York

Eugene Robert Maczek
Barbara L. Mandel, Aurora, Illinois
David George Manus, Redwood City, California
Ward D. Martin, Orlando, Florida
Sheryl Sue Matt, Frankfort, Illinois

Patricia A. Mazan, Schaumburg, Illinois
Colleen F. McClure, Ottawa, Illinois
Calvin Craig McDowell
Patrick D. McGowan, Aurora, Illinois
Wayne F. McKinstry, Chatham, Illinois

Robert Joseph Mislevy, Lawrenceville, New Jersey
Mark Mniszewski, Renton, Washington
Bernard A. Moore, Jr., LaSalle, Illinois
Carolyn Marie Moore, LaSalle, Illinois
Leonard Otto Moser, Austin, Texas

Richard Allen Mowers, Geneseo, Illinois
W. J. Murray, Orlando, Florida
Randall John Napolski, Buffalo Grove, Illinois
Victoria M. Napolski, Lake Zurich, Illinois
Michael Nolan, Saint Louis, Missouri

John Michael Ondek, Roselle, Illinois
Gary Earl Palmreuter, Glen Ellyn, Illinois
Patti Jo Patton, Washington, Illinois
Frank Victor Scaletta, Schaumburg, Illinois
Deborah R. Schwappach, Bridgeview, Illinois

David Elmer Secor, Grayslake, Illinois
Carol S. Simon, Madison, Wisconsin
Allan Gerald Sjogren, Seattle, Washington
Christine Sjogren
Stephen Bailey Sloan, New York, New York

Francis Allen Snow, Des Plaines, Illinois
Robert N. Solin, Jr., Gorham, Maine
Michael Edward Stack, DeKalb, Illinois

Gordon G. Steward, Byron, Minnesota
Janet Patricia Straka, Wheaton, Illinois

Keith Rollin Stuckey, Brownstown, Pennsylvania
Paul Arthur Swanson, Melrose Park, Illinois
Yvonne A. Webb, Hanover Park, Illinois
Lauren Eileen Weeda, Midlothian, Virginia
Judith Emily White, Lisle, Illinois

Timothy S. Whitman, Wonder Lake, Illinois
Randolph Lyle Witek, Arlington Heights, Illinois
Brian John Yattoni, Yorkville, Illinois