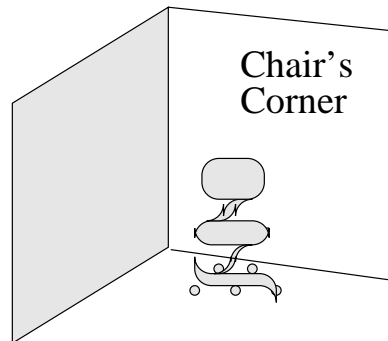


## GREETINGS!

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

This past year did not bring as many changes as its predecessor, but nonetheless it was quite eventful. The department faculty were pleased to be able to have 39 students acquire the baccalaureate degree in the mathematical sciences, 27 earn a master's degree, and four complete the Ph.D. Each degree awarded represents a lot of effort and a lot of learning on the part of the student, as well as a lot of guidance and instruction by the faculty. We are proud of our graduates and their many successes.

This year a generous scholarship, the Gail Masters Gallagher Memorial Scholarship, was endowed by Frank Gallagher in honor of his late wife. Gail Masters was a 1934 graduate of Northern Illinois State Teachers College who received her M.A. from the University of Wisconsin and did further graduate work at the University of London. She had a distinguished career teaching mathematics in Montana, Wisconsin, and Washington. The Gail Masters Gallagher Memorial Scholarship is awarded each fall to a mathematics major who has reached junior status with an excellent record in mathematics. The scholarship is renewable for the student's senior year provided the student maintains an excellent record. The first recipient of the Gail Masters Gallagher Memorial Scholarship is Christine M. Leroux of Oswego.

Romae Cormier retired at the end of May after serving Northern Illinois University for 40 years. At the time of his retirement, Cormier had the longest term of service of any faculty member at NIU. Among Romae's post-retirement projects is a history of the early years of our department. Romae's unique perspective will be missed.

Our department has had several retirements in the last few years and this, among other things, has led to a number of personnel changes. We are, however, very fortunate in our recent appointments. Our current group of assistant professors is truly outstanding. Their record of accomplishments in teaching and research is remarkable. At a time when outside funding is very tight it is unusual for junior faculty to receive a research grant. This past year three of our assistant professors were awarded grants from the National Science Foundation and from the National Security Agency. The future is bright indeed!

Are you a member of a professional organization? I won't repeat the reasons for joining here, but I would like to call your attention to one such group, the Mathematical Association of America. The MAA has something to offer no matter where your mathematical interests lie. Their primary journal, the American Mathematical Monthly, has always been good, but in recent years I have been struck by the number of excellent expository papers that have appeared there. The MAA's other journals, the College Mathematics Journal and Mathematics Magazine, are quite good, and the association's monograph and lecture note series have been very active recently. Whether your interests are in mathematics, mathematics education, or statistics I recommend that you take a look at what the MAA has to offer. In particular, I want to mention that the Illinois Section of the MAA is very active. The section's annual meeting is well attended, and I very much enjoy seeing many of you at these meetings.

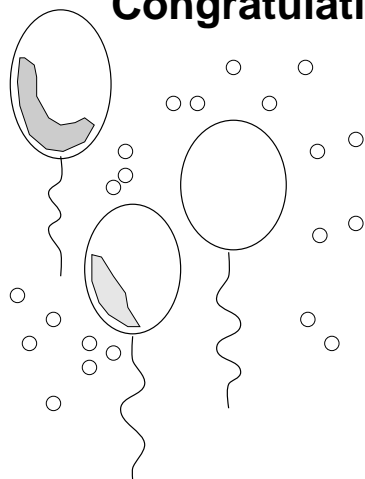
Our department has entered cyberspace with its own home page. Check it out at <http://www.mat.niu.edu/>. This site offers a wealth of information about our department, its faculty and students, and its programs. The site is constantly being improved, and offers links to other mathematics-related and campus sites.

As usual, I wish to thank Professor Linda Sons for her outstanding job of editing this newsletter.

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

William Blair

# Congratulations!



## The May 1996 Departmental Awards

The D. R. Ostberg Award is given for academic achievement to a continuing student. Steven J. Kifowit was the winner.

The Stelford Prize is awarded to the graduating senior with the highest GPA in mathematics courses. This year's award went to Robert Gammelgaard.

The Dean's Award is given for academic excellence and service to a graduating senior. The winners were Jacob Heidenreich graduating with a general mathematics emphasis and Keith Aichele graduating with an emphasis in probability and statistics.

The (Departmental) Chair's Award based on academic achievement and service to the department went to Laura Jenkins, while the Director's Award for students with academic achievement and service to the Division of Statistics went to Keith Aichele.

Certificates of Merit are based on academic achievement and went to:

Esther Billings	Timothy Butcher
Elizabeth Cohen	Ann Colgan
Thomas Daugherty	John Hauenstein
Katharine Nicholls	Sean Ory
Rhonda Vantholen	Gary Wang

Honorable Mention Awards are based on academic achievement and the winners were

Kenneth Dentino	Lisa Detlof
Bruce Havel	Yuxin Jin
Jason King	Christopher Patula
Ning Qian	Carolyn Schlosser
William Seebauer	Anna Shatskina

The second recipient of the Merlyn Behr Research Award was John Hauenstein. This award honors the contributions Professor Behr made to the department and recognizes excellence in research in mathematics education by a graduate student.

The Margariete Montague Wheeler Awards, honoring the contributions of Professor Wheeler in mathematics education, consist of Teaching Awards and a scholarship.

Recipient of the M. M. Wheeler Scholarship was Tara Considine.

Recipients of the M. M. Wheeler Teaching Awards were

Thomas Daugherty	Lisa Detlof
Robert Gammelgaard	Laura Jenkins
Stacey Milroy	Brian Murphy

Those securing Honorable Mention for the M. M. Wheeler Teaching Award were Marcia Babiak, Kelly Kissinger, and Kenneth Suslek.

Among the advanced graduate students, Certificates of Teaching Excellence went to teaching assistants John Diamantopoulos and Steven Kifowit.

MAA (Math. Association of America) Membership Awards went to Elizabeth Cohen, Jacob Heidenreich, and Christine Leroux.

Among the faculty, Professor Dan Grubb was students' nominee for the University Excellence in Undergraduate Teaching Award.

**Good  
News**

## Congratulations to Special Faculty

Two of the faculty members in the department have just been promoted to the rank of associate professor and been tenured. They are Hui Hu and Tom O'Gorman. Also on the promotion list was Hamid Bellout, who became a full professor this fall.

## New on the Faculty

New to the faculty for the 1996-97 academic year are Neil Dummigan, Diana Steele, and S. Basu. Diana Steele comes to us from the University of Nebraska at Lincoln and has a doctorate from the University of Florida. Her specialty is mathematics education. S. Basu has a doctorate from

Purdue University in statistics and comes to us from the University of Arkansas at Fayetteville. Neil Dummigan is in pure mathematics and comes to us from the University of Michigan. The department also has a visiting assistant professor in computational mathematics, Anne Morlet.

## On Leave of Absence

Four faculty members in the department spent at least part of the academic year 1995-96 on sabbatical leave. They are Professor Richard Blecksmith, Professor Nader Ebrahimi, Professor Y.C. Kwong, and Professor Anton Zettl. In addition, Professor Carol Feltz had a personal leave for the fall of 1995.

## The Division of Statistics Turns Ten

The Division of Statistics became an official unit of the department in May of 1986. To mark the successes of the past 10 years, the division hosted a conference at NIU on September 27-29, 1996. There were about 120 attendees with some 90 giving talks on their research.

## Statistics Career Development and Internship Workshop

The second development and internship workshop was held by the Division of Statistics in February 1996. The workshop seeks to expose and inform students to various job opportunities for statisticians in industry, government, and academia, and to encourage students to take advantage of various summer internship opportunities. Dean Kitterle from the College of Liberal Arts and Sciences was among the guests at the workshop. Participants seemed to all agree that their participation in the day was time well spent.

## Manipulatives Workshop

### Make-it Take-it Workshop

### Calculator Workshop Two

For the second year these three workshops were presented for the enrichment of the programs of those in mathematics education. Attendance was high, and the mood enthusiastic, as students added to their learning in these special out-of-class experiences. Thanks go to ALL the mathematics education faculty for making these workshops possible.

## Professional Day

For the first time ever a special program was organized in the summer of 1996 for those alumni of the department who had just completed one year of teaching mathematics at the secondary level in the nation's schools. The one-day affair gave former students the opportunity to renew friendships and to share experiences with peers. It also gave them an opportunity to reflect on the year's work and make realistic plans for the year ahead. This may become an annual event.

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

1995	1996 Spring
Kristie Fackler	Woo Bang
Greg Freadhoff	Lisa Detlof
Paulette Green	William Kraemer
Jason Gussman	Thomas Lager
Holly Harker	Margaret Lakin
Shad Hickman	Christine Leroux
Grady Irely	John Marotto
Mark Jaros	Aimee Naatz
David Johnston	Tom Novinski
Kathrin Karkowska	Sally Pittenger
Nghia Nguyen	Jerome Shippy
Joshua Norten	Adam Slagell
Darcy Patrick	Dawn Traub
Amy Seccombe	Chris Ufer
Anna Shatskina	
William Stein	
Brock Trautvetter	
Linda Velazquez	
Julie Weishaar	
Ron Wencel	
Nicola Wethall	

### Math Club Activities 1995-1996

The Math Club had a busy schedule of events during the year. Program meetings featured talks by guest lecturers Professor John Wetzel of the University of Illinois at Urbana-Champaign ("Worm Problems") and Professor Joseph Gallian of the University of Minnesota at Duluth ("Breaking Driver's License Codes"). Other speakers at meetings were NIU professors Don McAlister, Harvey Blau, Dan Grubb, and Dave Rusin, and students Scott Craver and Jacob Heidenreich. A Student Teaching Panel was very successful, thanks to participants Michelle Hanna, Tommie Sue Hilton, Laura Jenkins, and Doug Remrey. There was one video program, "Compound Soap Bubbles," followed by a soap bubbles contest.

Last August, the Math Club participated for the first time in the Friday Fest of student organizations, and plans to repeat the experience this year. The annual Used Book Sale, held last February, again broke a record for profits. These were aided by the sale of Math Club T-shirts. (If you are interested in our black lettering on red XL shirts, which display the catchy slogan

$$\log(\cos nu + i \sin nu) = niu,$$

and which cost \$10 each, contact H. Blau at the Department of Mathematical Sciences) The Undergraduate Math Seminar continued through, 95-96, under the leadership of Scott Craver and Jacob Heidenreich.

A record number nine of NIU students attended the ISMAA meeting at Illinois Wesleyan University last March. Scott Craver and Jacob Heidenreich presented talks there, and we had two three-person teams enter the Math Contest. The team of Tara Considine, Christine Leroux, and Wendy Parker finished in first place, while the team of Kathee Berbaum, Jacob Heidenreich and Keith Roller tied for second.

Our officers during fall 1995 were Jacob Heidenreich, president; Liz Cohen, vice president; Wendy Parker, secretary; and Andy Geary, treasurer. Our current (1996) officers are Scott Craver, president; Wendy Parker, vice president; Christine Leroux, secretary; and Andrew Harris, treasurer. Faculty advisers are Professors Harvey Blau and Harald Ellers.

## The Mathematical Modeling Contest

How would you like to spend a weekend solving a problem with a team of other students? This year there were two student teams consisting of three students each who participated in the national modeling contest. Early on Friday morning they received two problems from which they were to choose one and present a solution to it in report style by 5 p.m. on the following Monday. Our teams rated as “successful participants” and “honorable mention”. The problem chosen by Jacob Heidenreich, Debra Turski, and Christofer Ufer was to consider how ambient noise might be used to detect large moving objects, such as submarines, located below the ocean surface. The problem chosen by the team of Tara Considine, Holly Deal, and Douglas Sale was to determine a selection scheme using rank-ordering, numerical scoring, and other methods whereby a pool of papers graded by a group of judges who each read and rank only a subset of the papers will have among the final W papers only papers that were among the “best” 2W papers (“best” meaning there is an absolute rank-ordering to which all judges would agree). The latter group received the “honorable mention” for their solution. Challenging problems to tackle indeed!

Our warmest congratulations to the participants!

## The 1995 Putnam Exam

Two undergraduates participated in the 1995 William Lowell Putnam Mathematics competition. This nationwide exam, held every December, lasts for six hours, and emphasizes problem-solving ability. Representing NIU were Keith Roller and Jacob Heidenreich.

## Departmental Mathematics Contest Winners

Ryan Conter, a sophomore mathematical sciences major, took first place and an award of \$75 in the 11th annual Competitive Mathematics Exam held in April 9. Roy Dykzinski, a senior physics and philosophy double major, won second place and a \$50 prize, while Christine Leroux, a junior mathematical sciences major, finished third to earn \$25.

As in previous years, the exam was open to all full-time undergraduate students at NIU. Each participant turned in solutions to a choice of seven out of 15 problems. Underclass students had fewer restrictions on their choice than did upperclass students.

Problems on the exam included: (1) Given an irregular convex  $n$ -gon, what is the maximum number of points other than vertices in which the diagonals intersect? (2) Find the sum of the series  $1 + (1/2) + (1/3) + (1/4) + (1/6) + (1/8) + (1/9) + (1/12) + \dots$  where the terms are the reciprocals of the positive integers whose only prime factors are 2's and 3's. (3) Determine whether  $f(x, y) = (y^2 - x)(2y^2 - x)$  has a local maximum, a local minimum, or neither at  $(0,0)$ .

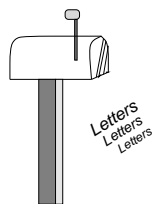
## TI Graphing Calculator Workshop at NIU

For a second year, the Department of Mathematical Sciences at NIU hosted a technology summer college short course for university, college, community college, and secondary school instructors. The June 10-14, 1996, workshop was taught by Professor Al Stickney of Wittenberg University in Springfield, Ohio. Participants spent substantial time with the new TI-92 learning to enhance the teaching and learning of selected mathematical topics.

## The High School Math. Contest

Another successful ICTM Regional High School Mathematics Contest was hosted by the department on February 24, 1996. A total of about 300 secondary school students, along with their mathematics teachers from northern Illinois participated. Students competed individually and in teams in 11 events. The nine participating schools were Cary-Grove High School; Downers Grove South High School; Geneva High School; Hoffman Estates High School; Illinois Math/Science Academy; Naperville Central High School; Naperville North High School; Schaumburg High School; and West Chicago High School. The team of NIU students and faculty who helped administer the contest consisted of 13 undergraduates, 8 graduate students, and 19 faculty members. The chair of the Contest Committee was Professor Helen Khoury. It is wonderful to see the talent and enthusiasm shown by the high school students participating in this contest and to note the dedication of the teachers these students have too!





## The News According to You

**Diane Nelson Borgwardt** ('93) married Jeff Borgwardt, another NIU graduate ('91 B.S. and '94 M.S.) in October 1994. She worked as a writer for Computer Associates - a software company. She has been working on an M.S. at Illinois Institute of Technology.

**Norm Gilbert** ('54) retired on July 31, 1995 from his position as director of testing services and professor of educational psychology at NIU, having served 26 years as director of testing services.

**Edward J. Goesel** ('69) is executive vice president, Accordia of Illinois, a National Insurance Broker.

**Henry J. Hermanowicz** ('49) retired from Pennsylvania State University in January 1992 as professor and dean of education Emeritus. An endowed professorship in education has been established at Penn State in his name. He spent the academic year 1992-93 as a Fulbright Scholar in Korea with a lecture/research award. He taught at both Seoul National University and Korea National University of Education. In Korea, his research dealt with the role of education and teacher preparation in Korea's five-year socio-economic plan.

**Ginna Connor Kietzmann** ('86 and '90) reports being the mathematics specialist for the learning center at Elmhurst College besides teaching math courses and the education course for pre-service elementary teachers.

**Regina Mack and Grefory Kurth** (both '92) were married on November 1994. They reside in Geneva, IL.

**Cheryl Penn** ('92) reports working at Madison Junior High School in Naperville. She teaches 6th grade math and coaches cheerleading and track. She has had two years of it and loves it!

**William Speer** ('69) writes being on leave at the University of Nevada at Las Vegas from his position as professor of mathematics education at Bowling Green State University.

## ALUMNI of 25 Years

Congratulations on the 25th anniversary of the Class of 1971. Here's a class listing of the Class of 1971 and their current home towns. If you can update some of the information, we would appreciate your help.

Providence Airheart, Romeoville, Illinois  
Marilee Alsip, Rolling Meadows, Illinois  
Dale Craig Barnhart, Bloomington, Illinois  
William Jon Bates, Oak Park, Illinois  
James Fredrick Bell

Abraham Besman  
Judith Bowman, Evanston, Illinois  
Barbara Brown, Highland Park, Illinois  
Mary C. Bown, Ft. Collins, Colorado  
Walter M. Brown, Jr., Crest Hill, Illinois

David Michael Buczek, Needham, Massachusetts  
James Cerny, Aurora, Illinois  
Terry Claudnic, Oglesby, Illinois  
Henri Colin, Lemont, Illinois  
Diane Lynnee Conklin, Chicago, Illinois

Robert Countryman, Fulton, Illinois  
Lawrence Cromwell, LaSalle, Illinois  
John W. Datschefski, Bolingbrook, Illinois  
Craig Byron Donath, Lombard, Illinois  
Mark J. Dugopolski, Hammond, Louisiana

Dennis Charles Dzak, Shorewood, Illinois  
Richard Merrill Efnor, Fairfax, Virginia  
Mary Ann Feltheim Fey, San Antonio, Texas  
Jeffrey Broling Fey, San Antonio, Texas  
Edward Louis Fritsch

Jeffrey Gardner, Evanston, Illinois  
Judith Karen Gast, Alexandria, Virginia  
Gerald Pierce Glass, McHenry, Illinois  
David N. Goldstein, Highland Ranch, Colorado  
Lawrence Gorski, New Berlin, Illinois

Ronald Gusstalli, Barrington, Illinois  
Cheryl Lea Haigh  
John Joseph Halpin, Jr., Tinley Park, Illinois  
Anita Elaine Heminger  
James Roger Herron, Rockford, Illinois

Susan Hildebrandt, DeKalb, Illinois  
Gloria Jean Hill, Elm Groe, Wisconsin  
Patricia B. Hill, Lake Forest, Illinois  
Jody Lynn Ogden Hoch, Gillette, Wyoming  
Robert Lee Houghtby, Tucson, Arizona

Scott Anthony Janis, Oak Forest, Illinois  
Jack Joseph, Morton Grove, Illinois  
Kathy Joy Juarez, Lisle, Illinois  
Janis Carolyn King  
Elizabeth Korjenek, Boca Raton, Florida

Robert Allen Kuhr, Woodridge, Illinois  
Frederick Langenberg, Phelps, Wisconsin  
John Gerard Laskasky, Addison, Illinois  
Jacob Lee, Prospect Heights, Illinois  
Carol Lynn Lewis, San Clemente, California

Charles Joseph Lizak, Elk Grove Village, Illinois  
Larry Robert Ludwig, DeKalb, Illinois  
William Lyckberg, Humble, Texas  
John Mark, DesPlaines, Illinois  
Martin John Mazurek, Flemington, New Jersey

James Michael Meinken, Escanaba, Wisconsin  
Richard Dennis Miles  
Anne Miller, Colorado Springs, Colorado  
Michael John Montes, Woodstock, Illinois  
Jeanette Moore, Machesney Park, Illinois

Laverne Ohlwine, Roscoe, Illinois  
Glan Ostergaard, Naperville, Illinois  
Thomas James Oswald, San Diego, California  
Anthony Owen, Westerville, Ohio  
Maria Anast Pappas, Tucson, Arizona

Pitsa G. Paros, Glenview, Illinois  
Robert Pattison, Geneva, Illinois  
Elizabeth Peifer, Sycamore, Illinois  
George Petterson, Park Ridge, Illinois  
Norbert Piotrowski, Arlington Heights, Illinois

Joseph Peter Pisano  
Daniel W. Quigley, Elm Grove, Illinois  
Laura Marie Reich, Moline, Illinois  
Thomas William Reimer, Woodstock, Illinois  
Michael C. Riggins, Jacksonville, Florida

Paul Roy Ringstrom, New Lenox, Illinois  
Carroll S. Robinson, Matteson, Illinois  
John Weston Rowan, Jr., Schaumburg, Illinois  
Steve Laszlo Santa, Lake Bluff, Illinois  
Cathy R. Schiller, Marengo, Illinois

Richard Joy Selan, Venice, California  
Frank Robert Serpone, Chicago, Illinois  
James Sibley, Evanston, Illinois  
Louis Alden Skoff, Kingwood, Texas  
Patricia L. Skoff, Kingwood, Texas

Diane Marie Sloan, Fort Wayne, Indiana  
David Bert Spangler, Northbrook, Illinois  
Dorothy Starace, Boise, Idaho  
Richard Steinestel, Valrico, Florida  
Cynthia Sternisha, Palos Hills, Illinois

Dale Paul Swanson, Rockford, Illinois  
Marybeth Tomlinson, Hillsboro, Missouri  
Howard Robert Vernick, Orefield, Pennsylvania  
Clemons Vetter, Stuttgart  
Thomas Walter, York, Nebraska

Wayne Joseph Walz, Manhattan, Illinois  
Joseph Martin Weresch, West Linn, Oregon  
Theodore Worzalla, Berwyn, Illinois  
Robert James Young, Jr., S. Barrington, Illinois  
Paul David Zander, Cortland, Illinois