Mathematical Sciences Alumni News
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Professor Jeffrey Thunder

Assistant Chair
Professor John Wolfskill

Director of Undergraduate Studies
Professor Alastair Fletcher

Director of Graduate Studies
Professor Sien Deng

Director of the AIC
Professor Anders Linnér

Coordinators of Educator Licensure
Renee Olsen
Paul Stevenson
Greetings from the mathematical sciences department. Wow! It has been a year like no other here at NIU – as well as the nation and the world. NIU administrators realized that a crisis was unfolding right around the time of spring break. The break was extended an extra week so that instructors and students alike could prepare for moving all classes online for the remainder of the semester. Commencement exercises for May were rescheduled for Aug. in hopes the pandemic would be more under control by then, but even that was eventually scrapped. It really was a shame that our B.S., M.S., and Ph.D. graduates couldn’t enjoy the pomp and circumstance they had so deservedly earned, but the public health considerations simply had to take precedence.

This fall semester started with the majority of our classes being taught online. The university imposed a two week hiatus on face-to-face classes after Labor Day due to a rise of cases. After that, only a small number of classes were taught face-to-face on campus. There were some additional accommodations implemented to end the semester. The spring semester will be very much the same. We’re crossing our collective fingers that things can return more back to normal next academic year with the availability of a vaccine.

On the personnel front, I’m pleased to announce that we were able to hire Cheryl Korth in the office to replace Melody Winter, who left us for Human Resource Services last fall. We didn’t hire any tenured/tenure-track faculty last year, but we are happy to have hired some excellent instructors to help us with our heavy service course load. By the way, were you all aware that enrollment this fall was actually up from the previous year? That’s good news for the university, and we can certainly use good news during these trying times.

It is with both sadness and joy that I announce the retirement last June of our long time friend and colleague Qingkai Kong. The sadness, of course, is that his presence on our faculty will be sorely missed. The joy is for Professor Kong’s happiness to spend more time with his family and enjoy life to the fullest; I can’t think of anyone more deserving of a long and fulfilling retirement. Please see the article on Professor Kong in this newsletter.

Stay safe and be well.

— Jeff Thunder
Professor and Chair

For Fall 2020, the department welcomed Kevin A. Palencia Infante as a visiting assistant professor. Kevin was born and raised in Barranquilla, Colombia. He received his PhD in Mathematics from the University of Montana, Missoula and has a Master’s in Mathematics from the University of Puerto Rico, Mayagüez along with a Bachelor’s in Mathematics from the University of Atlántico, Colombia.

His research area is several complex variables. Specifically, he is interested in the study of homogeneous polynomials that are associated with the degree estimate problem of holomorphic proper mappings between balls in complex Euclidean spaces. Besides math, he enjoys playing soccer and going to the beach. Nobody tell him DeKalb doesn’t have any beaches! :)
COVID-19 Update

For those of you who aren’t familiar with NIU’s response to the pandemic, here’s your chance to briefly catch up on how it has affected NIU and the mathematics department.

The administration realized during spring break that drastic measures were necessary to combat the oncoming pandemic. The break was extended a second week in order for faculty and staff to ready the campus for a total conversion to online classes. It was a Herculean effort, and certainly not without its setbacks, but teaching and learning was able to go on and we were able to finish the semester. Of course, many of the best parts of the end of an academic year were lost: activities such as awards ceremonies and, most prominently, commencement.

All summer courses were conducted online. Interestingly enough, our department enrollments were up this summer. Perhaps students prefer online options over the summer; that’s certainly something the college and department will be looking at.

Late in the spring semester the provost set out planning guidelines for the fall 2020 semester. In particular, it was hoped that approximately 20% of the classes would be face-to-face, with the balance online and “hybrid” (a mix of online and face-to-face instruction). All face-to-face instruction was to take place with adequate space for social distancing, with classrooms disinfected between meetings. Of course, masks are worn at all times inside university buildings except for individuals alone in their private offices. Our department’s initial plans had to be rethought as the semester approached and once it commenced, however, as we attempted to adjust to constant changes.

On the plus side, overall university enrollment actually increased from the fall 2019 semester. That was really great news, as many were fearful of a significant enrollment decline due to the pandemic.

The math department ended up with most fall 2020 classes below the 400 level being taught online. Then we were thrown another curve when the COVID-19 testing positivity rate went above pre-determined thresholds after Labor Day, which triggered a two-week hiatus from all in-person functions (including teaching) for a mandated two-week period starting Sept. 14. Fortunately, the positivity rate declined back to acceptable levels during that time, but after that most instructors and students agreed to keep their courses online for the remainder of the semester.

Spring 2021 semester will be very much like this fall semester. We will not observe spring break – in its place, we will receive a couple of administrative closure days to allow students, faculty and staff time to recharge.

Department Hosts Annual Math Contest

As usual, the department was proud to host a regional ICTM math contest for high school students this past February. More than 400 students from 17 area high schools competed at this year’s contest.

This was the 40th year of the ICTM High School Mathematics Contest, and NIU has hosted all but one of these ICTM regional events. To get a sense of the scope of this competition, consider that there are 22 regions, NIU is in charge or region 13, and there are 21 simultaneous events. Successfully putting on this event takes a lot of effort and teamwork. Professor Linner was the point-person in charge again, and almost the entire faculty helped out in one way or another, along with many graduate and undergraduate NIU math students. This year the participants were addressed by both Acting Dean Judy Ledgerwood from the College of Liberal Arts and Sciences and also Provost Beth Ingram. Maybe next year we can get President Freeman!
The department welcomes new instructors Victoria Evangelista, Kevin Shryock and Ken Kubycheck, who started this fall semester. Both Victoria and Kevin received their M.S. degrees from the department this summer. Ken comes to us from a long and distinguished teaching career in the Elgin School District. He received his M.S. degree in mathematics from Northeastern Illinois University.

**Ken Kubycheck**
Hello all, I am teaching MATH 403/404 and 410/411 for the mathematical sciences department and I also have two ILAS 201 cohort sections this fall. I have taught high school mathematics, and some physics when needed, for 31 years in Elgin School District U-46. I have had many student teachers and have refined my craft of being able to teach the student teachers how to become better teachers and have a head start on a typical first-year teacher. This past spring this opportunity at NIU came up; I had to take it, for the challenge and to be able to help the teacher candidates to have that same head start. My wife, Pam, and I have lived in Sycamore since 1992.

**Kevin Shryock**
I am an instructor of mathematics, instructor of manufacturing and math education researcher. However, I am also a career-changer, with a bachelor’s degree in industrial engineering. I worked in the industry in the disciplines of engineering, sales, customer service, marketing, operations management and quality for five years to gain insight into how mathematics is used in a variety of applications and professions, all with the intention of eventually returning to academia and using this knowledge to advance the profession of teaching.

**Victoria Evangelista**
My bachelor’s degree is in music education, but my master’s degree is in math education. This is my 11th year teaching math. Your future is not set based on one decision. Pathways open based on every decision we make. I’m grateful to work with the NIU students, and I am grateful to be part of the NIU math team!

Welcome, Victoria, Kevin and Ken!
STEM Fest

For the ninth year in a row the department manned a booth in the university’s STEM Fest, which was held in Oct. 2019. Thought-provoking games and geometric puzzles were enjoyed by many bright young minds (and possible future mathematicians) at the department mathematics booth at STEM Fest 2019. Professors Krislock and Mincheva were joined by four amazing undergraduate volunteers from the NIU Math Club: Miranda Hahn, Cassie Mohr, Sebastian Osorio and Megan Ping.

Due to the pandemic, the 2020 STEM Fest was held online Oct. 31. The NIU Math Club created a video for the virtual event.
Applications and Involvement Component (AIC) Activities

A unique and crucial component of our Ph.D. program is the Applications and Involvement Component (AIC). Doctoral students attend a weekly seminar where they are shown “real world” applications of mathematics in other academic disciplines, government laboratories and industry. The AIC culminates in a semester internship where our students apply their knowledge and develop new skills in applying mathematics to today’s scientific, engineering and data-intensive questions. After the internship, the student produces a written report on their experience and delivers a presentation in the AIC seminar. This last year five graduate students completed their AIC requirements, successfully reporting and presenting on their internships.

**Amanda Mutekeke** worked at InteQ on a project titled Counting your Customers.

**Liang Tang** worked with NIU’s Center for Governmental Studies on a project titled Government data analysis and software applications.

**Kakoli Bhuyan** worked with the physics department at NIU on the project Observation of pattern formation in high-density cold electron beams.

**Eric Johnson** also worked at InteQ. His project was Mathematical Principles, SQL, and Python.

**Peter Sassman**’s project, Northern Illinois STEM Ready Program, was conducted under the auspices of the Illinois Mathematics and Science Partnership Grant Co-PI’d by Professor Mary Shafer.

In addition, the AIC was proud to host NIU alumnus **Al Erisman**, who spoke on “A Mathematical Journey: Theory, Industrial Practice, a Way of Being,” and also Professor Christos Takoudis of UIC, who gave a talk on applications in chemical and biomedical engineering.

**Professor Anders Linner**, AIC director, also notes that our AIC program has received national attention; he gave an overview of the program at the Mathematical Sciences Research Institute in Berkeley, CA, this last February and participated in a panel discussion with panelists from North Carolina State University, Microsoft, University of Minnesota Twin Cities and the Georgia Institute of Technology.

An Uplifting Graduation Story

Laurie Hoecherl received her M.S. in mathematics from NIU in 1985 and shares the following nice story. “This picture was taken this past May. My daughter, Krista Hoecherl, completed her Master of Science degree in biology: human anatomical sciences. When graduation was postponed/cancelled this spring, I brought home my master’s gown and hood that I wear at Kishwaukee College graduation ceremonies so that we could take some photos of her in graduation attire around NIU’s campus. I wanted to at least give her this much recognition. Since I also received my master’s degree from NIU, the university and subject colors on the hood were appropriate for her, too. This picture shows the two of us as NIU Graduate School alumni, mother and daughter, with exactly 35 years between earning our master’s degrees! When we realized this, I thought it would be nice to let you know, too.” Thank you, Laurie, for sharing! Congratulations, Krista!
The 42nd annual award ceremony was scheduled to be held on April 18, 2020, in the Barsema Alumni and Visitors Center Pollock Ballroom. Unfortunately, this was another casualty of the COVID-19 pandemic and we were sadly forced to cancel. However, that doesn’t take away from the accomplishments of our winners.

**2020 Mathematical Sciences Awards**

Incoming Freshman Scholarship
Hunter Allen
Nicholas Brigante

Clarence Ethel Hardgrove Scholarship
Brandon Ahne
Laura Ndialeloc
Edgar Dominguez
Bridget Sexton
Amanda Grady
Gladys Vilchiz
Matthew Grimm

Joseph C. and Marion E. Huber Memorial Scholarship
Jordan Lung
Chelsea Espanola

Michael J. Krowka Scholarship
Brandon Ahne
Monica Lopez

Gail Masters Gallagher Memorial Scholarship
Kristie Kaminski
Alyssa Mohr
Bianca Spalla

Tatsuji and Mami Kambayashi Memorial Scholarship
Christopher Herbig

Dale G. Jungst Memorial Scholarship
Brandon Ahne
Sophia Myong
Bianca Spalla
Emma Wille

Chaitan and Sarita Gupta Scholarship
Kylie Anderson

Dorothy and Glenn Erickson Scholarship
Pamela Hollingshead

Norma K. Stelford Memorial Scholarship
Luis Hernandez
Isabel Stone
Caroline Magnuson

Peter Nicholls Graduate Scholarship
Jacob Pratscher
Brooke Randazzo

M.M. Wheeler Scholarship
Emma Wille
Gladys Vilchiz
Bianca Spalla
Pamela Hollingshead
Laura Burkett
Brandon Ahne

M.M. Wheeler Teaching Award
Pattsy Alvarez
Isabel Stone

Donald R. Ostberg Award
Jared Brady
Jonathan Regnery

Certificate of Teaching Excellence
Amanda Muteteke
Peter Sassman
Marie Swartz

Outstanding Graduate Student Award
Jared Brady
Glenn Harris
Daniel Stoertz

Honorable Mention Undergraduates
Sean Wallace
Suzanne Heinlein

Honorable Mention Graduates
John Gallagher
Amanda Muteteke
Peter Sassman
Victoria Krones
Maria Swartz
William Mackelfresh
The Luong

Certificate of Merit Undergraduates
James Haas
Clayton Morrison
McKayla Snedeker
Pattsy Alvarez

Certificate of Merit Graduates
Eric Johnson
Dylan Rambow
Oday Hazaimah
Fatmah Alnaser
Kevin Shryock
Ian Sugrue
Thomas Ventimiglia
Aneta Rzepka

Dean's Award
Caroline Magnuson

Chair's Award
Isabel Stone
Professor Qingkai Kong Retires

Friday May 31, 2020, was a significant day for the department: it was the last working day for our beloved colleague Qingkai Kong, who started his well-earned retirement June 1. Qingkai was adamant when asked in early March that there be no “party” in his honor due to the (then nascent) pandemic. In hindsight he was clearly correct about not having a large social gathering.

Qingkai came to the department from the University of Alberta in fall 1992. His research ability was immediately apparent and the department enthusiastically recommended his promotion to associate professor with tenure in fall 1997, effective fall 1998. His copious research output continued unabated and he was subsequently granted early promotion to professor in Aug. 2002. Since then he has continued to be one of the department’s most productive researchers.

Qingkai has also excelled in the classroom; he received the university’s 2016 Excellence in Undergraduate Teaching Award in recognition for his contributions to our teaching mission. As if that weren’t enough, he had served as the department’s director of undergraduate studies since July 2009.

We could go on, but this is enough to make it clear how impressive a record he has amassed over his 28 years here at NIU. Clearly Qingkai is a special colleague, one of those rare individuals who excels at all aspects of the job: research, teaching and service. Indeed, his contributions have been nothing short of outstanding. While his presence will be sorely missed, he has amply earned his retirement.

We all wish Qingkai many years of happy retirement and offer heartfelt thanks for all he has done for us over the years. The department has been exceedingly lucky to have someone of his caliber. Thank you, Qingkai, for all you have done for the Department of Mathematical Sciences, the College of Liberal Arts and Sciences, and Northern Illinois University!

Our Newest Ph.D.s

**Glenn Harris** (August 2020) wrote his dissertation, Providing Better Choices: An Exploration of Solutions in Multi-objective Optimization and Game Theory Using Variational Analysis, under the direction of Professor Sien Deng.

**Oday Hazaimah** (August 2020) wrote his dissertation, Projective Splitting Methods for Maximal Monotone Mappings in Hilbert Spaces, under the direction of Professor Yunier Bello-Cruz.

**Hao Shen** (December 2019) wrote his dissertation, Applications of Bayesian Functional Data Analysis, under the direction of Professor Duchwan Ryu.

**Daniel Stoertz** (May 2020) wrote his dissertation, A Spider’s Web of Doughnuts, under the direction of Professor Alastair Fletcher.
Congratulations on the 25th anniversary of the class of 1995. Here is a listing of the class and their current hometowns. If you can update any information, we would appreciate your help.

**25th Anniversary Alumni**

Mr. Manal S. Aly  
Mr. Michael A. Andresen  
Kenosha, WI  
Mr. Brian A. Banghart  
Arnold, MD  
Ms. Tamara R. Barosk  
Lockport, IL  
Mrs. Kimberlee Bateas  
South Holland, IL  
Ms. Karen L. Berryhill  
Aurora, IL  
Mrs. Esther Billing  
Grand Rapids, MI  
Mr. Kevin P. Crom  
Schaumburg, IL  
Mr. Thomas D. Daugherty  
Plainfield, IL  
Mr. Kenneth W. Dentino  
Sugar Grove, IL  
Mr. Rhett W. Elder  
Crystal Lake, IL  
Mr. Glen J. Embertson  
San Francisco, CA  
Mrs. Angela C. Emmett  
Washington, D.C.  
Mrs. Suzanne C. Fisher  
Wheaton, IL  
Ms. Amber J. Fox  
Elkhorn, WI  
Mr. Robert A. Gammelgaard  
Rolling Meadows, IL  
Mr. Jason A. Geary  
Gurnee, IL  
Mr. Jose J. Gongora  
Greenbelt, MD  
Mr. Patrick M. Gorman  
Loveland, OH  
Mrs. Michelle A. Goy  
Bettendorf, IA  
Mrs. Polly A. Gray  
Wonder Lake, IL  
Ms. Michelle E. Hanna  
Lombard, IL  
Mr. William M. Harrod  
Brookfield, IL  
Mr. John A. Hauenstein  
Wheaton, IL  
Mr. Weiyao He  
Naperville, IL  
Ms. Carrie M. Helmig  
Peru, IL  
Mrs. Michelle L. Honeysett  
Naperville, IL  
Mrs. Grace C. Hornback  
Barrington, IL  
Dr. Goo Q. Huang  
Park Ridge, IL  
Mr. Grady R. Irey  
Highland Park, IL  
Mr. Mark J. Jaros  
Alsip, IL  
Mrs. Laura H. Jenkins  
Crystal Lake, IL  
Mr. James M. Kozik  
Franklin Park, IL  
Mrs. Amy L. Landolt  
Evanston, IL  
Mrs. Mary R. Lareau  
Darien, IL  
Ms. Ann R. Liakas  
North Aurora, IL  
Mrs. Janet E. Lighthart  
Virginia Beach, VA  
Mrs. Jia Liu  
Vernon Hills, IL  
Ms. Margaret M. Marquett  
Naperville, IL  
Ms. Christine Marron  
Willowbrook, IL  
Dr. Frank J. Marziano  
Mrs. Kimberlie J. Mattern  
Montgomery, IL  
Mrs. Yin H. McGlauchlin  
Woodridge, IL  
Mr. Sean G. Miller  
Boca Raton, FL  
Mr. Brian P. Moran  
Oswego, IL  
Mr. Thomas J. Morton  
Bend, OR  
Mr. James B. Nowak  
Rolling Meadows, IL  
Mr. Wayne C. Onak  
Chicago, IL  
Dr. Craig R. Ortiz  
Morris, IL  
Mrs. Allison M. Ozog  
Bartlett, IL  
Mr. Christopher W. Patula  
Grayslake, IL  
Mr. Paul W. Perry  
Genoa, IL  
Mr. Mark C. Pool  
Geneva, IL
25th Anniversary Alumni (continued)

Ms. Tracy S. Randle  
Plano, IL
Mr. Scott M. Rawlings  
Elmhurst, IL
Mr. Douglas M. Remrey  
Sugar Grove, IL
Mrs. Sheila A. Repka  
Roscoe, IL
Mr. David J. Rhodes  
Roscoe, IL
Mr. Mark S. Richards  
Lexington, KY
Ms. Tommie S. Riedl  
Marengo, IL
Mr. Robert J. Rizzo  
Chicago, IL
Ms. Tamra L. Ropeter  
Galena, IL
Mr. Kurt Schwantner  
Lombard, IL
Mr. William S. Seebauer  
San Diego, CA
Mr. Sunny Yu Shi  
Lincolnshire, IL
Mr. Scott C. Smith  
Clemmons, NC
Mr. Ron J. Solum  
Mundelein, IL
Ms. Leslie D. Stipe  
Elmhurst, IL
Mr. Yonglin Sun  
Lisle, IL
Mr. Kenneth A. Suslek  
Plainfield, IL
Dr. Susan T. Talarico  
Waupaca, WI
Mr. Juan A. Tapia  
Roscoe, IL
Mrs. Natalija B. Todorovic-Shaw  
Elmhurst, IL
Mr. Robert W. Tuskey  
Plainfield, IL
Mr. Joshua S. Vantassel  
Camarillo, CA
Mrs. Kimberly G. Vardy  
Wendell, NC
Mrs. Hsin-Ju Wang  
Algonquin, IL
Mr. Xin Wang  
Buffalo Grove, IL
Mr. Hongwu Wang  
Oak Park, IL
Ms. Christine E. Wells  
Aurora, IL
Ms. Dyanne J. Willow  
Loveland, CO