

Notable Events

Summer 2009:

All Girls/All Math: 12th Annual Mathematics Summer Camp for High School Girls

Summer, 2009:

Nebraska Research Experience for Undergraduates in Applied Mathematics
Mikil Foss, Stephen Hartke, Allan Peterson, Richard Rebarber

June 8-19, 2010:

Primarily Math Summer Institute

June 8-19, 2010 and July 6-17, 2010:

Nebraska Algebra Summer Institute

June 8-19, 2010 and July 6-17, 2010:

Math in the Middle Summer Institute

June 22-July 31, 2009:

IMMERSE Workshop (organized by Allan Donsig)

September 19-20, 2009:

KUMUNU 2009

September 2009:

Annual Undergraduate Scholarship Reception

November 6, 2009:

3rd Annual Pi Mu Epsilon Lecture: Andrew F. Rich of Manchester College, Indiana
(organized by Stephen Hartke and Petronela Radu)

November 12, 2009:

20th Annual Math Day

December 14, 2009:

Nebraska Summit on Mathematics Education

January 29-31, 2010:

Twelfth Annual Nebraska Conference for Undergraduate Women in Mathematics

March 5-6, 2010:

Graduate Recruiting Weekend

April 16, 2010:

14th Annual Rowlee Lecture: Carlos Kenig
(organized by George Avalos, Mohammad Rammaha, and Daniel Toundykov)

April 16-18, 2010:

Conference on Harmonic Analysis and PDE's:
(organized by George Avalos, Mohammad Rammaha, and Daniel Toundykov)

Eleventh Annual

Department of

Mathematics

Recognition Dinner

Tuesday

April 27, 2010

Nebraska Union • Regency

5:30 – 9:00 p.m.



Program

5:30 - 6:30 p.m. *Reception*
 6:30 - 7:30 p.m. *Dinner*
 7:30 *Presentations*

Presenters: John Meakin
 Judy Walker
 Gordon Woodward

Thank you to
Lynn Erbe, Marilyn Johnson and Mohammad Rammaha
for organizing the department's
eleventh annual recognition dinner

Program Designed by
Lori J. Mueller



Faculty and Staff Members Serving for 0 (mod 5) years:

George Avalos	10 years	Brian Harbourne	25 years
Cheryl Kane	20 years	Steve Dunbar	25 years
Mohammad Rammaha	25 years	John Meakin	40 years

External Grants and Contracts Received in 2009-2010:

George Avalos, NSF individual investigator research grant
Mark Brittenham, External funding for Center for Communications Research
Susan Cooper, AWM-NSF travel grant to speak at AMS-KMS Joint Mtg in Seoul, South Korea
Susan Cooper & Brian Harbourne, NSF grant to support annual KUMUNU 2009
Carina Curto, NSF individual investigator research grant
Carina Curto, Eileen Heberts, Vladimir Itskov, Interdisciplinary Seed Grant
Carina Curto & Vladimir Itskov, Research Council Visiting Scholars Grant
 GAANN grant, *Roger Wiegand* (Lead PI)
Brian Harbourne, NSA grant extended through 2009
Stephen Hartke, NSF individual investigator research grant
Stephen Hartke & Petronela Radu, NSF CCLI "Math in the City" grant
Susan Hermiller, External funding for Center for Communications Research
Susan Hermiller, Collin Bleak, John Meakin, NSF grant for the ICGS2009 Conference
Srikanth Iyengar, NSF individual investigator research grant
Jim Lewis, Ruth Heaton, Tom McGowan, Barb Jacobson, Supplement to the Math in the Middle Institute Partnership, NSF grant
 MCTP grant, *Allan Donsig, Tom Marley* (Lead PI), *Judy Walker*
 NCUWM (NSA) grant, *Allan Donsig* (Lead PI)
Petronela Radu, NSF individual investigator research grant
Richard Rebarber, UNL Research Council Interdisciplinary Seed grant
Richard Rebarber & Gordon Woodward, NSF REU Site grant for 2010-2012
Brigitte Tenhumberg, UNL Layman fund grant
Brigitte Tenhumberg, Participating faculty in NSF IGERT grant
Judy Walker, NSF individual investigator research grant
Mark Walker, Aravind Asok, Christian Haesemeyer, Eric Friedlander and Chuck Weibel, NSF grant Focused Research Group (FRG) for 2010-2013

National Offices:

Jim Lewis, Member of NRC Committee on the Study of Teacher Preparation Programs in the U.S.
Jim Lewis, Member of MSRI Educational Advisory Committee

UNL Parents Association Certificates of Recognition for Contributions to Students:

Steve Cohn (7), Marty Dougherty (1), Mikil Foss (2), Jamie Radcliffe (2), Robert Ruyle (1), David Skoug (13), Judy Walker (5), Gordon Woodward (11)

Roger Wiegand Award:

To Be Announced

Retirements:

Thomas Shores — Tom Shores is retiring after more than 40 years on the department's faculty: he joined the faculty in 1968. His research interests have spanned several different areas of mathematics including group theory, ring theory, commutative algebra and several areas of applied mathematics including numerical linear algebra, numerical differential equations and inverse theory. His teaching was honored with a UNL distinguished teaching award and an MAA Nebraska-South East South Dakota award for distinguished teaching. He served as Vice Chair from 1975 to 1980, as Acting Chair in 1986-87 and as director of the department's computer lab for many years.

Margaret Tyler — After 30 years of service to the University of Nebraska-Lincoln, Margaret Tyler has decided to retire from her position with the University Libraries effective June 30. Margaret joined the Libraries in 1980 in the Interlibrary Loan department. In August, 1983, she transferred to Oldfather Hall where she became the first and only full time Operations Supervisor for the Mathematics Library.

Graduate Students

Awards and Fellowships cont.:

2009-2010 GAANN Trainees:

Christopher Ahrendt, Justin DeVries, Michael Holm, Michael Janssen, Brian Johnson, Micah Leamer, David McCune, Lori McDonnell, Jared Ruiz, Ashley Sullivan, Michael Uhrig

2009-2010 MCTP Advanced Trainees (Fall):

Nathan Axvig, Jesse Burke, Anthony DeLegge, Kyle Fey

2009-2010 MCTP Advanced Trainees (Spring):

Laura Lynch, Zahava Wilstein

2009-2010 MCTP First-Year Trainees:

Rebecca Egg, Lauren Keough, Anisah Nu'Man

2009 Outstanding First Year Students: Tom Clark and Sara Reynolds

2009 Outstanding Teaching by a Graduate Student: Brian Johnson

2009 Emeritus Faculty Fellowship Scholars:

Brian Johnson (Bill Leavitt Award), Pei Pei (Lloyd Jackson Award), Amanda Croll, Courtney Gibbons

2009 Grace Chisholm Young and William Henry Young Fellowship:

Christopher Goodrich

2009 Outstanding Qualifying Exams:

Melanie DeVries

2009 Walter Mientka Teaching Award (newest award):

Tanner Auch

2009-2010 Conference Speakers:

Christopher Ahrendt — AMS Sectional Meeting, Baylor University
Nathan Axvig — AMS Sectional Meeting, Lexington, KY
Nathan Axvig — AMS/MAA Joint Meetings, San Francisco, CA
Ela Celikbas — AMS Sectional Meeting, St. Paul, MN
Olgur Celikbas — AMS/MAA Joint Meetings, San Francisco, CA
Inês Henriques — AMS/MAA Joint Meetings, San Francisco, CA
Laura Lynch — AMS Sectional Meeting, Albuquerque, NM
Lori McDonnell — AMS Sectional Meeting, Albuquerque, NM
Katie Morrison — AMS Sectional Meeting, Lexington, KY
Silvia Saccon — AMS/MAA Joint Meetings, San Francisco, CA
Derrick Stolee — AMS/MAA Joint Meetings, San Francisco, CA

Faculty and Staff

Mathematical Association of America's Polya Lecturer for 2009-10 and 2010-11:

Judy Walker

College of Arts & Sciences Distinguished Teaching Award:

Stephen Hartke

2010 Outstanding Postdoc Award

Susan Cooper (Honorable Mention)

New Faculty Members, August 2009:

• Carina Curto • Ananth Hariharan (Post Doc) • Vladimir Itskov

Undergraduate Students

Math Major Graduating with Highest Distinction:

Eric Norrgard

Math Majors Graduating with High Distinction:

Frank Moonyoung Lee, Charles Lucas, Patrick Olson, Joshua Reed, William (Billy) Sanders, Aimee Schwab, Steven Trout, Robert Woodward

Math Majors Graduating with Distinction:

Jessica Alley, Grayson Path, Rachael Schultz, Jordan Schleif

Math Majors Graduating with Honors:

Jessica Alley, Matthew James, Eric Norrgard, Rachael Schultz, William (Billy) Sanders, Sarah Scofield, Brian Stevens

Math Majors Graduated in August 2009:

Miranda Chrastil, Jordan Dudzinski, Joshua Lindsteadt

Math Majors Graduated in December 2009:

Jessica Alley, Derek Augustine, Amber Hansen, Eric Hoffman, Joseph Lach, Shirah Leedom, Charles Lucas, Amelia Martinez, Patrick Olson, Grayson Path, Rachael Schultz, Christopher Starkey

Math Majors Graduating in May 2010:

John DeVol, William Echtenkamp, Amy Gehring, Laura Janssen, Douglas Johnson, Hanieh Kamelian, Frank Moonyoung Lee, Catherine May, Eric Norrgard, Jonathan Olson, Joshua Reed, Eric Robbins, Christopher Rummel, William (Billy) Sanders, Jordan Schleif, Aimee Schwab, Autumn Shapland, Christie Shaw-Citta, Christopher Sheets, Jeffrey Thomas, Steven Trout, Mason Tye, Andrew Wardyn, Martin Wolff, Robert Woodward,

**Chancellor's Scholar*

Senior Honors Theses:

Jessica Alley (directed by Mark Brittenham)

William (Billy) Sanders (directed by Lucho Avramov and Srikanth Iyengar)

Undergraduate Research:

Research Experiences for Undergraduates Participants and Internships, Summer 2009:

Jessica Alley (California State, San Bernardino-Knot Theory)

Nicole Gaswick (Texas A&M, pre-REU)

Laila Gharzai (John's Hopkins)

Laura Janssen (Canisius, Buffalo)

Tyler Lemburg (Clemson University)

Zachary Norwood (University of Illinois, Bloomington)

William (Billy) Sanders (Hope College)

Undergraduate Creative Activities & Research Experiences (UCARE) Participants for 2009-2010:

Tyler Lemburg (directed by Jamie Radcliffe)

Wenling Ma (directed by Bo Deng)

Robert Woodward (directed by CSCE)

Research for Undergraduates in Theoretical Ecology (RUTE) Participants, Summer 2009:

Kevin Ahrendt, Laila Gharzai, Brian Hemen, Brenton Willoughby

2009 Putnam Competition Participants:

Robert Brase, Jonathan (Jay) Cummings, Nicole Gaswick, Frank Lee, Keler Marku, Zachary Norwood, Devor O'Connor, Corey Stone, Jacob Williams

2010 Modeling Competition Participants:

Ryan Hotovy, Corey Stone, Peter Schlette

Undergraduate Awards and Honors:

Goldwater Scholar:

Laila Gharzai (Honorable Mention)

Upperclass Scholars:

Jessica Alley, Lisa Amen, Derek Augustine, Adam Azzam, Robert Brase, Shari Brockett, Suet (Shelly) Chan, Jonathan (Jay) Cummings, John DeVol, Nicholas Doty, Logan Dudzinski, William Echtenkamp, David Foote, Tiffany Forycki, Nicole Gaswick, Laila Gharzai, Amber Hansen, Ryan Hotovy, Nicole Huffman, Kevin Jerger, Hanieh Kamelian, Emily Krumbach, Frank Moonyoung Lee, Tyler Lemburg, Skyler Lewis, Wen Luo, Catherine May, Collin McAcy, Benjamin McGill, Laura McKay, Katie McKeon, Joshua Niemeyer, Eric Norrgard, Zach Norwood, Skye O'Hearn, Jonathan Olson, Patrick Olson, Grayson Path, Michael Pfeiffer, Brianna Pinguoch, Dennis Rogers, Andrew Ruhrdanz, William (Billy) Sanders, Jordan Schleif, Joseph Schmiedeskamp, Rachael Schultz, Autumn Shaplund, Nathanael Spaulding, Nathan Stender, Corey Stone, Alexandra Toftul, Andrew Wardyn, Kamara Wright, Tucker Zeleny

Freshmen Eastman Scholars:

Amy Been, Casey Griffin, Evan Nash, James Owens, Clinton Pettit, Zion Schell, Amanda Sedor, Bradley Sedor, Zachary Skokan, W. Benton Whaley, Jordan Wiebe

Raikes School Scholars Math Majors, 2009-2010:

James Edmund Dumire (SO), Alexander Stewart Estes (JR), Justin Lee Hicks (SR), Skyler Wood Lewis (SO), James Joseph Owens (JR), Christopher Adam Rummel (SR), Steven Edward Trout (SR)

2010 Phi Beta Kappa:

Frank Moonyoung Lee, Eric Norrgard, William (Billy) Sanders, Robert Woodward

2010 Pi Mu Epsilon:

Alexander Adam Azzam, Kyle Bunkers, Pao Yi Cheah, David Foote, Charles Larrieu, Nathanael Spaulding, Wai Hong Yap

February Forum Recognition:

Amy Been, Brittany Bunker, Suet (Shelly) Chan, Susan Cooper, Kathryn DeJong, Tiffany Forycki, Nicole Gaswick, Andrea Hillen, Laura McKay, Aimee Schwab, Kamara Wright

Chairs Prize Award:

To Be Announced

Graduate Students

Ph.D. Recipients:

May 2010:

Anthony DeLegge advised by Steve Dunbar
Dissertation title: "Mathematical Modeling of Optimal Seasonal Reproductive Strategies of Plant Populations and a Comparison of Long-Term Viabilities of Annuals and Perennials".

Deanna Dreher advised by Judy Walker
Dissertation title: "Pseudocodewords of Graph Covers and Computation Trees".

Inês Henriques advised by Lucho Avramov
Dissertation title: "Quasi-complete intersections with applications to free resolutions over Artinian rings".

Ph.D. Recipients cont.:

August 2010 Ph.D. Recipients:

Christopher Ahrendt, advised by Lynn Erbe & Allan Peterson
Dissertation title: "Properties of the Generalized Laplace Transform and Transport Partial Dynamic Equation on Time Scales".

Nathan Axvig, advised by Judy Walker
Dissertation title: "Applications of Linear Programming to Coding Theory".

Olgur Celikbas, advised by Mark Walker & Roger Wiegand
Dissertation title: "Vanishing of Ext and Tor over complete intersection rings".

Silvia Saccon, advised by Roger Wiegand
Dissertation title: "One-dimensional local rings of infinite Cohen-Macaulay type".

Masters Degree Recipients:

August 2009:

Teena Andersen, Katherine Bohac, Michael Bomar, Jeremy Fries, Stephanie Fuehrer, Michaela Goracke, Marlene Grayer, Nicholas Imholte, Scott Johnsen, Brian Johnson, Michelle Looky, Sheila McCartney, Ryon Nilson, Marcia Ostmeier, Margaret Pickering, Edith Ronhovde, Zach Roth, Lindsey Sample, Mary Schneider, Amy Solomn, Jessica Thompson, Lexi Wichelt, Brandee Wilson, Xuan Yu, Anatoly Zlotnik

May 2010:

Abigail Brackins, Thomas Clark, Melanie DeVries, Jason Hardin, Kathryn Haymaker, Phillip Landry, Sara Reynolds, Kaelly Simpson, Ashley Weatherwax, Andrew Wilkerson

Published and/or Refereed Papers in 2009-2010:

C. *Ahrendt*, "The Laplace Transform on Time Scales", PanAmerican Mathematical Journal (2009).

C. *Ahrendt*, "Recursive Representations for the Unique Solution of the Transport Equation on Isolated Time Scales", International Journal of Dynamical Systems and Differential Equations-Special Issue (will appear summer 2010).

O. *Celikbas*, "Vanishing of Tor over complete intersections", Journal of Commutative Algebra (2009).

D. *Stolee*, C. *Bourke*, N.V. *Vinodchandran*, "A log-space algorithm for reachability in planar acyclic digraphs with few sources," 25th Annual IEEE Conference on Computational Complexity, June 2010.

Awards and Fellowships:

2009 University of Nebraska Presidential Fellowship:

Deanna Dreher

2009 Chancellors Doctoral Fellowship:

Brittney Hinds

2009 Othmer Graduate Fellowship:

Lauren Sipe, Nora Youngs