

Friday, January 28, 2011

Time	Event	Location
1:00 pm – 3:15 pm	Registration & Snacks <i>Snacks and hot beverages will be provided.</i>	Pre-Convention Area, Embassy Suites
3:40 pm – 6:05 pm	Conference Opening Session Judy Walker, University of Nebraska-Lincoln David Manderscheid, Dean of the College of Arts & Sciences, University of Nebraska-Lincoln Allan Donsig, University of Nebraska-Lincoln	Auditorium Second Floor, Nebraska Union
	1 st Plenary Talk: <i>Modeling and Analysis of Circadian Clocks</i> Linda R. Petzold, University of California, Santa Barbara	
	Panel Discussion: <i>Careers Using Mathematics</i> Moderator: Dean Evasius, National Science Foundation Panelists: Fan Chung, University of California, San Diego Christine Jerritts, Imagine Math Gail Letzter, National Security Agency Helen Moore, Pharsight Corporation Rebecca Swanson, Nebraska Wesleyan University	
7:00 pm	Banquet & Panel Discussion: <i>Random Bits of Advice</i> Moderator: Laura Lynch, University of Nebraska-Lincoln Panelists: Linda Petzold, University of California, Santa Barbara Christine Jerritts, Imagine Math Helen Moore, Pharsight Corporation Joyce Yen, University of Washington Katie Morrison, University of Nebraska-Lincoln	Regents Ballroom BCDEF, Embassy Suites

Saturday, January 29, 2011

Time	Event	Location
7:00 am – 8:05 am	Breakfast <i>Poster presenters should set up their posters at this time in Regents Ballroom A. Velcro tape will be provided.</i>	Atrium, Embassy Suites
Session 1 – Presentations by Undergraduate Students		
	Regents Ballroom - B Embassy Suites	Regents Ballroom - C Embassy Suites
8:10 am – 8:25 am	<i>Geometric 2-D shape modeling</i> Christine Caples, Fairfield University	<i>Cops and robbers on planar graphs</i> Silviya Valeva, Mount Holyoke College
8:30 am – 8:45 am	<i>Equitent problems</i> Katelynn Kochalski, Canisius College	<i>L(3,2,1) labeling of three-dimensional grids</i> Holly Arrowood, Furman University
8:50 am – 9:05 am	<i>A discrete consideration of Aleksandrov's projection theorem</i> Sarah Mullin, Canisius College and Hannah Yee, Hillsdale College	<i>An elementary approach to Laplacian integral non-threshold split graphs</i> Jessica Fuller, Seton Hall University
9:10 am – 9:25 am	<i>Unifying geometry: the Cayley-Klein scheme</i> Emma Chiappetta, Bowdoin College	<i>Computer-assisted graph theory</i> Anita Thomas, Illinois Institute of Technology
9:30 am – 9:45 am	<i>Continuously moving Parseval frames on smooth manifolds</i> Eileen Martin, The University of Texas at Austin	<i>Associated primes of the cover ideal</i> Kimberly Kesting, Fairfield University
		Regents Ballroom - EF Embassy Suites
		<i>Scheduling prison guards and faculty: examples using linear programming</i> Stephanie Bobo, Belmont University
		<i>A mathematical model for one-dimensional quasi-crystals</i> Natasha Bollers, City University of New York Medgar Evers College
		<i>Edge-enhancing speckle denoising for ultrasound images</i> Helene Duke, Providence College
		<i>Laser-driven electron and X-ray beams for imaging of dense structures relevant to biomedical applications</i> Laila Gharzai, University of Nebraska-Lincoln
		<i>Algorithms for automated spoken word recognition</i> Laura Booton, Nebraska Wesleyan University and Kristen May, Canisius College

Time	Event	Location	
9:50 am – 10:50 am	<p>Panel Discussion: <i>Choosing a Mathematics Graduate Program</i> Moderator: Judy Walker, University of Nebraska-Lincoln Panelists: Anna Marie Bohmann, University of Chicago Susie Brooks, University of Iowa Elizabeth Claassen, University of Nebraska-Lincoln (Statistics) Kelly Funk, University of Illinois at Urbana-Champaign Jenny George, The Ohio State University Katie Morrison, University of Nebraska-Lincoln Jasmine Ng, Washington University in St. Louis Amanda Taylor, Binghamton University Mary Clair Thompson, Auburn University</p>	Regents Ballroom BC, Embassy Suites	
10:50 am – 11:15 am	<p>Conference Photo <i>If you did not sign the photo release statement, please do not participate in the group photo.</i></p>	Outside at Federal Building, P Street between 9 th and 10 th streets	
	<p>Snack Break <i>Posters will be on view in Regents Ballroom A.</i></p>	Pre-Convention Area, Embassy Suites	
Session 2 – Presentations by Undergraduate Students			
	Regents Ballroom - B Embassy Suites	Regents Ballroom - C Embassy Suites	
	Regents Ballroom - EF Embassy Suites		
11:15 am – 11:30 am	<i>A new family of matroids</i> Meredith Daw and Karin Kralicek, Northern Arizona University	<i>Highly non-injective polynomial maps on the rational numbers</i> Ruthi Hortsch, University of Michigan	<i>Modeling the motion of the robot arm of a space shuttle subject to a torque constraint</i> Amanda Goodrick, Slippery Rock University
11:35 am – 11:50 am	<i>Fractional nabla-difference calculus</i> Nicki Gaswick, University of Nebraska-Lincoln	<i>Realizable graphs of equivalence classes of zero divisors</i> Chelsea Johnson, Brigham Young University	<i>Mesoscale modeling of quantum yield in nanocrystalline devices</i> Samantha Irvin, Wartburg College
11:55 am – 12:10 pm	<i>An interesting topology on the complex affine line</i> Andrea Kriz, University of Michigan	<i>The geometry of one-relator groups</i> Natalie Coston, Northern Arizona University	<i>On the classification of structurally stable flows</i> Madeline Schrier, University of South Dakota
12:15 pm – 12:30 pm	<i>Level 2 weakly holomorphic modular forms of negative weight with minimal poles</i> Jocelyn Peck, Brigham Young University	<i>Recent developments in numerical semigroups</i> Brooke Fox and Maggie Schroeder, Northern Arizona University	<i>Extinction times of solutions to a degenerate partial differential equation</i> Perla Salazar, Kansas State University

Time	Event	Location	
12:40 pm – 2:00 pm	Lunch Please see restaurant list in your registration materials. If you'd like to go with a group, meet in the hotel Lobby by 12:50 pm.	Downtown Lincoln	
	Faculty Program	Alumni Room, Embassy Suites	
2:00 pm – 3:00 pm	Poster Session <i>Poster presenters will be available to discuss their posters.</i>	Regents Ballroom A, Embassy Suites	
3:10 pm – 4:05 pm	2 nd Plenary Talk: <i>Graph Theory in the Information Age</i> Fan Chung, University of California, San Diego	Regents Ballroom BC, Embassy Suites	
4:15 pm – 4:25 pm	Snack Break	Pre-Convention Area, Embassy Suites	
	Session 3 – Presentations by Undergraduate Students		
	Regents Ballroom - B Embassy Suites	Regents Ballroom - C Embassy Suites	Regents Ballroom - EF Embassy Suites
4:35 pm – 4:50 pm	<i>A Bayesian time series attack on video digital watermarks</i> Melissa Marchand, California State University, Bakersfield	<i>Rank disequilibrium in multiple-criteria evaluation schemes</i> Faye Stevens, Mount Holyoke College and Jamie Woelk, Western State College	<i>Population dynamics of gregarine parasites in damselfly hosts</i> Brittany Bunker, University of Nebraska-Lincoln
4:55 pm – 5:10 pm	<i>Statistical analysis of diagnostic accuracy with applications to cricket</i> Lauren Mondin, Sam Houston State University	<i>Disrupting terrorist networks</i> Danika Lindsay, California State University, Channel Islands	<i>Controlling plague among prairie dogs</i> Stephanie Reed, University of South Dakota
5:20 pm – 6:00 pm	Breakout Session 1 <i>Undergraduates have been assigned to breakouts. Please find your tickets at the back of your nametag. Faculty and graduate students are welcome to attend any of the breakout sessions.</i>	Alumni Room; Regents D, E or F; Chancellor's Room 1, 2 or 3 – Embassy Suites	
6:10 pm – 6:50 pm	Breakout Session 2 <i>Undergraduates have been assigned to breakouts. Please find your tickets at the back of your nametag. Faculty and graduate students are welcome to attend any of the breakout sessions.</i>	Alumni Room; Regents D, E or F; Chancellor's Room 1, 2 or 3 – Embassy Suites	
6:50 pm – 7:30 pm	Poster Takedown <i>If you presented a poster, please pick it up before the Pizza Dinner.</i>	Regents Ballroom A, Embassy Suites	
7:30 pm	Pizza Dinner <i>Table assignments for conference guests are featured in your bio packet. Review these assignments to maximize your networking opportunities.</i>	Regents Ballroom BC, Embassy Suites	

Sunday, January 30, 2011

Time	Event	Location		
7:00 am – 8:15 am	Breakfast	Atrium, Embassy Suites		
Session 4 – Presentations by Undergraduate Students				
	Regents Ballroom - B Embassy Suites	Regents Ballroom - C Embassy Suites	Regents Ballroom - EF Embassy Suites	
8:15 am – 8:30 am	<i>The weak Bruhat order and separable permutations</i> Fan Wei, Massachusetts Institute of Technology	<i>Proof of Fermat's last theorem when n is 4</i> Regina Pollack, Canisius College	<i>Weak Allee effect, grazing, and S-shaped bifurcation curves: computational results</i> Bonnie Roberson, Mississippi State University	
8:35 am – 8:50 am	<i>Sorting affine permutations</i> Alexandra Wood, DePaul University	<i>Noncommutative partial fractions and continued fractions</i> Darlayne Addabbo, Rutgers University	<i>Weak Allee effect, grazing, and S-shaped bifurcation curves: analytical results</i> Emily Poole, University of Arkansas	
8:55 am – 9:10 am	<i>Finding a near-optimal multihomogeneous structure of a set of polynomial equations</i> Amanda Zeringue, Colorado State University	<i>Investigations in linear algebra and combinatorics related to biclique decompositions of graphs</i> Shadiyah Mangru, George Mason University	<i>Ant foraging behavior in the presence of climate change</i> Ngoc Thai, Truman State University	
9:10 am – 9:20 am	Snack Break	Pre-Convention Area, Embassy Suites		
Session 5 – Presentations by Undergraduate Students				
	Regents Ballroom - B Embassy Suites	Regents Ballroom - C Embassy Suites	Regents Ballroom - EF Embassy Suites	
9:20 am – 9:35 am	<i>Using technology to transform established pedagogy in a mathematics content preparation course</i> Maren Zobott, Northern Arizona University	<i>A play on words</i> Kendra Weiss, Metropolitan State College of Denver	<i>Using matrix analysis to model the spread of an invasive plant, <i>Alternanthera philoxeroides</i></i> Samantha Erwin, Murray State University	
9:40 am – 9:55 am	<i>Undergraduate research and student interest</i> Katie Spence, North Georgia College & State University	<i>SET and disjoint complete caps in $AG(4,3)$</i> Catherine Pelland, Pomona College	<i>The effect of localized oil spills on Atlantic loggerhead turtle population dynamics</i> Margaret-Rose Leung, Oregon State University and Samantha Stykel, Luther College	
10:00 am – 10:15 am	<i>Student engagement</i> Mary Bottoms, North Georgia College & State University	<i>A piece of paper and a pair of scissors</i> Christine Rakowski, Daemen College		

Time	Event	Location
10:20 am – 11:10 am	<p>Panel Discussion: <i>Summer Research Opportunities</i></p> <p>Moderator: Stephanie Edwards, Hope College</p> <p>Panelists: Dean Evasius, National Science Foundation Gail Letzter, National Security Agency Rebecca Swanson, Nebraska Wesleyan University Katie Haymaker, University of Nebraska-Lincoln Jasmine Ng, Washington University in St. Louis Amanda Taylor, Binghamton University</p>	Regents Ballroom BC, Embassy Suites
11:10 am – 11:20 am	<p>Closing Remarks</p> <p>Allan Donsig, University of Nebraska-Lincoln Judy Walker, University of Nebraska-Lincoln</p>	Regents Ballroom BC, Embassy Suites
11:20 am – 2 pm	Hotel Checkout/Shuttles to Airport	Embassy Suites