

Friday, January 27, 2012

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 Christine Kelley, University of Nebraska-Lincoln	Auditorium Second Floor, Nebraska Union
	1 <sup>st</sup> Plenary Talk: <i>Animation, Teeth and Skeletons</i> Ingrid Daubechies, Duke University	
	Panel Discussion: <i>Careers using Mathematics</i> <b>Moderator:</b> Dean Evasius, National Science Foundation <b>Panelists:</b> Anna Georgieva Kondic, Novartis Pharmaceuticals Angie Hodge, University of Nebraska at Omaha Navah Langmeyer, National Security Agency Jennifer McLoud-Mann, University of Texas at Tyler Ashley Moses, Booz Allen Hamilton	
7:00 pm	Banquet & Panel Discussion: <i>Random Bits of Advice</i> <b>Moderator:</b> Carina Curto, University of Nebraska-Lincoln <b>Panelists:</b> Sara Billey, University of Washington, Seattle Olguta Buse, Indiana U.-Purdue U. Indianapolis Ingrid Daubechies, Duke University	Regents Ballroom BCDEF, Embassy Suites

Saturday, January 28, 2012

Time	Event	Location
7:00 am – 8:05 am	<b>Breakfast</b> <i>Poster presenters should set up their posters at this time in Regents Ballroom A. Velcro tape will be provided.</i>	Atrium, Embassy Suites
<b>Session 1 – Presentations by Undergraduate Students</b>		
	<b>Regents Ballroom - B Embassy Suites</b>	<b>Regents Ballroom - C Embassy Suites</b>
8:10 am – 8:25 am	<i>Everyday we shufflin': analyzing circular decks and probability transition matrices</i> Mary Russell, Canisius College Anna Weigandt, Illinois State University Kassandra Averill, SUNY Potsdam	<i>Geometry and flow effects on the performance of vertical residential geothermal heating</i> Kathryn Lockwood, Fairfield University
8:30 am – 8:45 am	<i>Straightline Hanoi</i> Lisa Kaylor, Westminster College	<i>The restricted 3-body problem: a mission to L4</i> Rebecca Mitchell, Colorado College
8:50 am – 9:05 am	<i>Princes and dragons</i> Bertilla Sieben, Northern Arizona University	<i>Linear forms over finite Abelian groups</i> Ran Ji, Wellesley College
9:10 am – 9:25 am	<i>Stem detection of strawberries utilizing the medial axis transform</i> Danika Lindsay, Cal State University Channel Islands	<i>Art meets algebra: exploring colored graphs of groups</i> Kelsey Larson, College of St. Benedict
9:30 am – 9:45 am	<i>Domination and independence on the triangular honeycomb chessboard</i> Hong-Lien Tran, Kennesaw State University	<i>Periods of periodic orbits for maps on graphs homotopic to a constant map</i> Whitney Radil, College of St. Benedict
9:50 am – 10:50 am	<i>Sudoku hypercube construction and bounds</i> Emily Hill, Metro State College of Denver	<i>Digit after Digit of Divisibility?: Generating Sequences of Composite Numbers</i> April York, Transylvania University
9:50 am – 10:50 am	<b>Panel Discussion:</b> <i>Choosing a Mathematics Graduate Program</i> <b>Moderator:</b> Susan Hermiller, University of Nebraska-Lincoln <b>Panelists:</b> Emily Braley, University of North Carolina Rachel Chaphalkar, University of Montana Courtney Gibbons, University of Nebraska-Lincoln Heidi Goodson, University of Minnesota Rachel Hegemann, University of California, Los Angeles Juliann Leifeld, University of Minnesota Allison Moore, University of Texas at Austin Amanda Streib, Georgia Institute of Technology Caroline Turnage-Butterbaugh, University of Mississippi Dongmei Zhang, Pennsylvania State University	Regents Ballroom BC, Embassy Suites
10:50 am – 11:15 am	<b>Conference Photo</b> <i>If you did not sign a photo release statement, please do not participate in the group photo.</i>	Outside (if bad weather, in Atrium, Embassy Suites)

Time	Event	Location		
<b>Session 2 – Presentations by Undergraduate Students</b>				
	Regents Ballroom- B Embassy Suites	Regents Ballroom - C Embassy Suites	Regents Ballroom - EF Embassy Suites	
11:15 am – 11:30 am	<i>Two-face Monty Hall: a variation of host behavior</i> Stephanie Ihrig, Slippery Rock University	<i>Wavelet packet transforms and the FBI fingerprint image compression standard</i> Kaitlyn Gayvert & Sara Gearhart, SUNY Geneseo	<i>Space Filling Curves</i> Andrea Brown, Cedarville University	
11:35 am – 11:50 am	<i>Generalizing and justifying: pre-service K-8 teacher's strategies and representations</i> Kara Grier, Alverno College	<i>Where's Waldo: an application of image processing</i> Justine Cline, Coe College	<i>A metacalibration proof of the isoperimetric inequality on constant Gaussian curvature surfaces</i> Holly Arrowood, Furman University	
11:55 am – 12:10 pm	<i>FOILing girls into mathematics</i> Alisa Arnold, Metro State College of Denver	<i>Data analysis techniques for optical waveforms</i> Suzanne Carter, University of Iowa	<i>Tilings of a square with the central square removed</i> Amanda Goodrick, Slippery Rock University	
12:15 pm – 12:30 pm	<i>Conquering math anxiety</i> Lani Abels, Humboldt State University	<i>Connections between mathematics and music: the auditory aesthetics of the Baroque era</i> Regina Pollack, Canisius College	<i>Special cases of the Steinhaus problem</i> Elisabeth Berg, Seattle Pacific University	
12:40 pm – 2:00 pm	<b>Lunch</b> 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	
	<b>Faculty Program</b>		Alumni Room, Embassy Suites	
2:00 pm – 3:00 pm	<b>Poster Session</b> <i>Poster presenters will be available to discuss their posters.</i>		Regents Ballroom A, Embassy Suites	
3:10 pm – 4:05 pm	<b>2<sup>nd</sup> Plenary Talk:</b> <i>An Introduction to the Combinatorics and Geometry of Schubert Varieties</i> Sara Billey, University of Washington, Seattle		Regents Ballroom BC, Embassy Suites	
4:15 pm – 4:25 pm	<b>Snack Break</b>		Pre-Convention Area, Embassy Suites	
<b>Session 3 – Presentations by Undergraduate Students</b>				
	Regents Ballroom - B Embassy Suites	Regents Ballroom - C Embassy Suites	Regents Ballroom - EF Embassy Suites	
4:35 pm – 4:50 pm	<i>Reduced colored Khovanov homology of alternating knots</i> Lisa Piccirillo, Boston College	<i>CO-Mediated HbS polymer melting</i> Crystal Bennett, North Carolina A&T	<i>The effects of varying conditions on a Fibonacci-type polynomial sequence</i> Rebecca Miller, University of Central Oklahoma	
4:55 pm – 5:10 pm	<i>Investigation of 7-edge polygonal chains, stuck unknots, and stuck trivial chains</i> Susannah Coates & Alees Seehausen, Metro State College of Denver	<i>Application of a hillclimber algorithm to parallelize graph-based genome assembly</i> August Guang, Harvey Mudd College	<i>The cubic formula in characteristic 3</i> Dubravka Bodiroga, Hood College	

Time	Event	Location
5:20 pm – 6 pm	<b>Breakout Session 1</b> <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	<b>Breakout Session 2</b> <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 – 7:15 pm	<b>Poster Takedown</b> <i>If you presented a poster, please pick it up before the Pizza Dinner.</i>	Regents Ballroom A, Embassy Suites
7:15 pm	<b>Pizza Dinner</b> <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

### Please Note:

Checkout time on Sunday is 1:00pm.

#### If you are flying out of Lincoln:

Hotel shuttles to the airport depart on the hour, and every half hour as needed. Please be sure to let the front desk staff know when you need to depart. The typical amount of time needed to arrive at the Lincoln airport is 1 hour and 15 minutes prior to flight departure.

#### If you are flying out of Omaha:

Allow at least an hour of drive time to the airport (weather permitting) and an additional 1 hour and 15 minutes prior to flight departure. If you are using OmaLink, they should have scheduled this with you.

Sunday, January 29, 2012

Time	Event	Location
7:00 am – 8:15 am	Breakfast	Atrium, Embassy Suites
<b>Session 4 – Presentations by Undergraduate Students</b>		
	Regents Ballroom - B Embassy Suites	Regents Ballroom - C Embassy Suites
8:15 am – 8:30 am	<i>The delta-squared process and Fourier series of functions with multiple jumps</i> Emily Jennings, Georgia Institute of Technology	<i>Fundamentals of computational neuroscience</i> Montana Goodman, Southern Illinois University, Carbondale
8:35 am – 8:50 am	<i>Non-real zeros of derivatives of a class of real entire functions</i> Jessalyn Bolkema, Hope College	<i>Word length in alternate presentations of Thompson's group F</i> Alexis Johnson, Grand Valley State University
9:00 am – 9:50 am	Panel Discussion: <i>Summer Research Opportunities</i> <b>Moderator:</b> Sue Geller, Texas A&M University <b>Panelists:</b> Dean Evasius, National Science Foundation Katie Johnson, University of Nebraska-Lincoln Gretchen Koch-Noble, Goucher College Navah Langmeyer, National Security Agency Amanda Streib, Georgia Institute of Technology	Regents Ballroom BC, Embassy Suites
9:50 am – 10:00 am	Snack Break	Pre-Convention Area, Embassy Suites
<b>Session 5 – Presentations by Undergraduate Students</b>		
	Regents Ballroom - B Embassy Suites	Regents Ballroom - C Embassy Suites
10:00 am – 10:15 am	<i>Finding zero sets of tetranomials</i> Katherine Turner, Texas A&M University	<i>Optimization of multi-criteria decision analysis methods</i> Kizza Nandyose, Hood College
10:20 am – 10:35 am	<i>New techniques for computing generalized roundness</i> Danielle Mallare, Canisius College	<i>Emergency response in the city of Lincoln: analysis of the allocation of responding police officers</i> Kamara Wright, University of Nebraska-Lincoln
10:40 am – 10:55 am	<i>Nonlinear geometry of ultrametric spaces</i> Samantha Youmans, Canisius College	<i>City of Lincoln investments: optimizing benefits and risk</i> Jessica Burow, University of Nebraska-Lincoln
11:00 am – 11:15 am	<i>Bistellar equivalences of two families of simplicial complexes</i> Sara Cohen, University of California, Davis	<i>Access control logic</i> Kayla VonHagel, Kennesaw State University
11:20 am – 11:30 am	Closing Remarks Allan Donsig, University of Nebraska-Lincoln Christine Kelley, University of Nebraska-Lincoln	Regents Ballroom BC, Embassy Suites