

2nd NCUWM

Schedule for February 11-13, 2000

Friday, February 11, 2000

- 2:30 p.m. Welcome and Registration, Heritage Room, Nebraska Union
There will be soft drinks and snacks at the registration.
 - 3:30 p.m. Opening Session, Nebraska Union Auditorium
Welcome: Judy Walker, Chair of the Conference Organizing Committee
Opening Remarks: Merlin Lawson, Dean of Graduate Studies
 - 3:45 - 4:45 p.m. Plenary Session, Nebraska Union Auditorium
Karen Uhlenbeck, University of Texas
"Solitons: Where applied math meets algebra and geometry"
 - 4:45 - 5:00 p.m. Move to Burnett
 - 5:00 p.m. Session 1 - Presentations by Undergraduate Women
 - 5:00 - 5:15 p.m.
Burnett 103: Sarah Brown,
Cayley Graphs, Spectra of Cayley Graphs of $\mathbb{Z}/n\mathbb{Z}$, and Applications

Burnett 107: Tracy Phelps,
Analyzing Current Meter Data to Characterize Tidal and
Subtidal Processes in Delaware's Inland Bays
 - 5:20 - 5:35 p.m.
Burnett 103: Holly Marie Swisher,
Irreducibles in Block Semigroups

Burnett 107: Teresa Selee,
When Will the Ball Stop Bouncing?
 - 5:40 - 5:55 p.m.
Burnett 103: Everilis Santana-Vega,
Cycle Decomposition of Monomials Given by Permutations

Burnett 107: Joanna Bieri,
Grand Canyon River Trip Simulator Project
 - 7:00 p.m. Banquet, Holiday Inn Salon A/B rooms
Program: Sylvia Wiegand, UNL Dept. of Math. and Stats.
"Grace Chisholm Young, pioneer woman mathematician"
Introduced by: Allan Donsig, UNL Dept. of Math. and Stats.
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Saturday, February 12, 2000

- 8:00 a.m. Coffee, Juice and Rolls, Burnett 106
- 8:30 a.m. Session 2 - Presentations by Undergraduate Women
 - 8:30 - 8:45 a.m.
Burnett 103: Sarah Gulde,
Classification of Plane Curves

Burnett 107: Katherine Arrington,
Math Education/Math Modelling
 - 8:50 - 9:05 a.m.
Burnett 103: Courtney Fitzgerald,
Expected Areas of Randomly Generated Triangles

Burnett 107: Carrie Denton,
Math--It's A Beautiful Thing: A Look at Symmetry in Nature
 - 9:10 - 9:25 a.m.
Burnett 103: Maire Snipes,
Brownian Motion and the Shape of a Region's Boundary:
Generating Step Functions from Circle Domains

Burnett 107: Maria E. Rafael,
The Use of Writing in Teaching Mathematics
 - 9:30 - 9:45 a.m.
Burnett 103: Betseygail Rand,
Matrices with Non-Zero Minors as a Function of Sparsity

Burnett 107: Kathryn Rendall,
Rado Numbers for $X Y C = Z$
- 9:50 a.m. Break,
Burnett 106
- 10:10 a.m. Panel Discussion, Burnett 115: Is graduate school right for you?
Panelists: Julie Berg, Karl Kattchee, Cheryl Olsen, Karen Uhlenbeck
Moderator: Susan Hermiller, UNL Dept. of Math. and Stats.
- 11:10 a.m. Plenary Session, Burnett 115:
Suzanne Lenhart, University of Tennessee and Oak Ridge National Laboratories
"Applications of Optimal Control to Various Population Models"
Introduced by: Richard Rebarber, UNL Dept. of Math.
- 12:10 Noon Lunch, Valentinos party room
- 1:40 p.m. Session 3 - Presentations by Undergraduate Women
 - 1:40 - 1:55 p.m.
Burnett 103: Rhiannon Weaver,
New Congruences for the Partition Function

Burnett 107: Danielle Arett,
Generalized Towers of Hanoi: Codes and Graphs

- 2:00 - 2:15 p.m.
Burnett 103: Beth Noble,
Hash Functions

Burnett 107: Fumei Lam,
Forcing Numbers of Several Planar Graphs

- 2:20 - 2:35 p.m.
Burnett 103: Sara LaLumia,
The Black-Scholes Equation

Burnett 107: Melissa Desjarlais,
Number of Spanning Trees of a $1 \times n$ Grid Graph

- 2:40 p.m. Break, Burnett 106
- 3:30 p.m. Session 4 - Presentations by Undergraduate Women
 - 3:30 - 3:45 p.m.
Burnett 103: Debbie Zadina,
Control Theory

Burnett 107: Mirela Ciperjani,
Introduction to Lie algebras

- 3:50 - 4:05 p.m.
Burnett 103: Adegioriola Anjorin,
Chaos in the Dynamics of the Family of Logistic Maps

Burnett 107: Paulette Cha,
Algebraic Curves

- 4:10 - 4:25 p.m.
Burnett 103: Rebecca Weinholt,
From Stability to Chaos in Low-Dimensional Dynamics

Burnett 107: Kimberly Schneider,
Igusa Local Zeta Function of Elliptic Curves

- 4:30 - 5:30 p.m. Panel Discussion, Burnett 115: Choosing a Graduate School
Panelists: Matthew Koetz, Suzanne Lenhart, Lisa Orlandi-Korner, Amelia Taylor
Moderator: Roger Wiegand, Graduate Chair, UNL Dept. of Math. and Stats.
 - 5:30 p.m. End of the day reception, Burnett 106
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Sunday, February 13, 2000

- 8:00 a.m. Coffee, Juice and Rolls, Burnett 106
- 8:30 a.m. Session 5 - Presentations by Undergraduate Women
 - 8:30 - 8:45 a.m.
Burnett 103: Virginia M. Roberts,
Wavelets as a Tool for Remastering Music

Burnett 107: Michelle Bylund,
Random Sperner Systems
 - 8:50 - 9:05 a.m.
Burnett 103: Anne-Marie Hunter,
The Virtual Cell

Burnett 107: Monica Castro-Simmons,
Bi-Symmetric Invariants
 - 9:10 - 9:25 a.m.
Burnett 103: Elaine Spiller,
Four Wave Mixing in Optical Fibers: A Numerical Model

Burnett 107: Melissa DeLeon,
A Study of Sufficient Conditions for Hamiltonian Cycles
- 9:30 a.m. Break, Burnett 106
- 10:00 a.m. Session 6 - Presentations by Undergraduate Women
 - 10:00 - 10:15 a.m.
Burnett 103: Julia Brainin,
R³ as the Disjoint Union of Circles

Burnett 107: Jaclyn Kohles,
Partitions Which are Simultaneously t₁- and t₂-Core
 - 10:20 - 10:35 a.m.
Burnett 103: Yvonne Lai,
Popping Bubbles: the Double Bubble Conjecture in the Fourth Dimension

Burnett 107: Andrea Saunders,
Representing Chemical Transformations with Transitional Labelings of Graphs
- 10:40 a.m. End of Conference Wrap-up, Burnett 115:
Jim Lewis, Chair of the UNL Department of Mathematics and Statistics