

Northern California Undergraduate Mathematics Conference April 4, 2009

Schedule (tentative – times may vary slightly)

Time 8:30	Registration – Darwin Hall Lobby	
9:20	Welcome – Darwin Hall 103	
	Darwin Hall 103	Darwin Hall 107
9:30	<i>Visualizing Complex Mapping with Color</i> Holly Wright , Sonoma State University	<i>Creating Ideal Conditions for Ideal Cheese</i> Patrick Midgley, Anna Espitallier , Sonoma State University
9:50	<i>Fermathematics: Life and times of Pierre de Fermat</i> Colin O’Haire , Sonoma State University	<i>Quantifying a Question – A Students’ Story of Consulting</i> Kristen Roland, Amanda Frazier , Sonoma State University
10:05	10 Minute Break	
10:15	<i>Stochastic Innovations as a Mechanism for the Evolution of Scale-free Chemical Networks</i> Allison Beckwith, Kyle Pounder , St. Mary’s College of California	<i>Construction of Lattice Knots from the Gauss Code</i> Nicholas Normandin , San Francisco State University
10:35	<i>The Distribution of Digits of Prime Numbers in Binary</i> Stefanie Wang , St. Mary’s College of California	<i>Cellular Automata over Finite Groups</i> Erin Craig , New College of Florida
10:50	10 Minute Break	
11:00	Career Panel Discussion Darwin Hall 103	
12:00	Lunch – Darwin Hall Lobby	
	Darwin Hall 103	Darwin Hall 107
1:00	<i>Using Matrices to Simplify Problems in Optics</i> Kate Ellis , CSU Stanislaus	<i>Rotational Flow of Non-Newtonian Fluids: A Viscoelastic Model</i> Kris Kilpatrick , CSU Chico
1:20	<i>Financial Aid Incentives for Math Teacher Candidates and Math CSET Options</i> Viviana Medina , CSU Stanislaus	<i>Hyperbolic Circles are Circular!</i> Alma Gonzalez , Sonoma State University

1:40	<i>On Bertrand Paradox</i> Syed Abdul Aziz , Evergreen Valley College	<i>“R” You Waiting? – A look into server waiting times</i> Steven Kadow, Kristen Roland , Sonoma State University
1:55	10 minute break	
2:05	<i>Cyclic Numbers in a Base b</i> MinhDuc T Nguyen , Evergreen Valley College	<i>Context and Solutions for Maharam’s Problem</i> Alex Kudlick , UC Berkeley
2:25	<i>A Krasnosel’skii-Type Theorem Involving P-superarcs</i> Chad Griffith , Sonoma State University	<i>Ramsey Theory and Accessibility</i> Sara Brodsky , UC Berkeley
2:45	Darwin Hall 103 – Keynote Talk Speaker: Bernd Sturmfels Title: Tropical Mathematics Abstract: In tropical arithmetic, the sum of two numbers is their maximum and the product of two numbers is their usual sum. Many results familiar from algebra and geometry, including the Quadratic Formula, the Fundamental Theorem of Algebra, and Bézout’s Theorem, continue to hold in the tropical world. In this lecture we learn how to draw tropical curves and why evolutionary biologists might care about this.	
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