

3rd Annual Southern California Women in Math Symposium
Saturday, November 20, 2010, Pomona College
Schedule

Harry's Room (209)

8:15–9:00 Registration, coffee and continental breakfast,
2nd floor of Millikan Laboratory

Talk Session I

Millikan 207:

9:00 – 9:20 Gizem Karaali, Pomona College
So what is a Combinatorial Hopf Algebra and what can you do with it?

9:30 – 9:50 Julia Galstad, UC Santa Barbara
The Effect of Tilting on the Quivers of Left Serial Algebras

10:00 – 10:20 Maria Isabel Bueno Cachadina, UC Santa Barbara
Recovery of eigenvectors of Matrix Polynomials from Generalized Fiedler linearizations

10:30 – 10:50 Laura Zirbel, UC Santa Barbara
Random Embedded Polygons and Characteristics Correlated with Knotting

Millikan 208:

9:00 – 9:20 Su Liang, CSU San Bernardino
Nail Down the Misconception: $(a+c)/(a+b) = c/b$

9:30 – 9:50 Kathryn Leonard, CSU Channel Islands
Doing Research with Academic Year Undergraduate Groups

10:00 – 10:20 Liming Wang, UC Irvine
A Critical Quantity for Noise Attenuation in Biological Systems

10:30 – 10:50 Hala K. King, Cal Lutheran
An Overview of Two Public Key Cryptosystems

Millikan 213:

9:00 – 9:20 Johanna Hardin, Pomona College
Outliers when Clustering Microarray Data

- 9:30 – 9:50** Gulhan Bourget, CSU Fullerton
A Modified Test to Detect Significant Genes
- 10:00 – 10:20** Alona Chubatiuk, USC
Nonparametric Methods for Estimating an Unknown Probability Distribution: Maximum Likelihood and Bayesian Approaches
- 10:30 – 10:50** Olga Korosteleva, CSU Long Beach
Does Extirpation of the Primary Tumor Give Boost to Growth of Metastases? Evidence Revealed by Mathematical Modeling
- Millikan 218:**
- 9:00 – 9:20** Ellie Grano, UC Santa Barbara
The Jellyfish Algorithm
- 9:30 – 9:50** Emille Davie Lawrence, Cal Poly Pomona
An Introduction to Right-Angled Artin Groups
- 10:00 – 10:20** Azadeh Rafizadeh, UC Riverside
Twisted Alexander Polynomials and Fiberability
- 10:30 – 10:50** Kathleen Grace Kennedy, UC Santa Barbara
A new algorithm for the Multivariable Alexander Polynomial of a Link
- 11:00 – 11:20** Yen Duong, UC Santa Barbara
A New Problem with Expander Graphs
- Harry's Room**
- 11:30 – 11:50** Coffee break
- 11:50 – 12:45** Breakout sessions. (Various rooms)
- Smith Campus Center 201**
- 12:45 – 2:00** Lunch
- Millikan 134**
- 2:00 – 3:00** Asuman Aksoy, Claremont McKenna College
Keynote Address in Millikan 134
Norms That Are Not: Projections With Respect to Numerical Radii
- Harry's Room**

3:00 – 3:30 Coffee

Talk Session II

Millikan 207:

3:30 – 3:50

Cynthia Flores-Monroy, UC Santa Barbara
An Investigation of Compact Manifolds with Positive Curvature

4:00 – 4:20

Barbara Herzog, UC Riverside
Toward a Notion of Index for Critical Points of Distance Functions

4:30 – 4:50

Emek Kose Can, Loyola Marymount
Vector Fields and Differential Forms for Optical Design

Millikan 213:

3:30 – 3:50

Mihaela Ignatova, USC
Unique Continuation and Complexity of Solutions to Higher Order Elliptic and Parabolic Equations

4:00 – 4:20

Sara Jamshidi, CSU Los Angeles
The Sub-Super Solution Method Applied to a Hyperbolic Initial Boundary Value Problem

4:30 – 4:50

Nishu Lal, UC Riverside
The Spectral Zeta Function of Fractals and Multivariable Complex Dynamical System

Millikan 218:

3:30 – 3:50

Amy Mulgrew, CSU Long Beach
Mathematical Features of Placenta Images Investigated with Techniques of Pattern Recognition

4:00 – 4:20

Sarah Olson, Tulane University
Coupling Biochemistry, Mechanics, and Hydrodynamics to Model Hyperactivated Sperm Motility

4:30 – 4:50

Elizabeth Thoren, UC Santa Barbara
*How Fluid Flow is like a Tennis Racket:
An Exploration into the Geometry of Fluid Motion*

Harry's room:

5:00 – 6:00

Wrap-up with wine and cheese in Harry's Room, Millikan 209

The Annual Southern California Women in Math symposia are generously supported by the EDGE Southern California mentoring network, WiSE at the University of Southern California, and the Dept of Mathematics at the University of Southern California.

Organizers:

Alissa Crans, Loyola Marymount University

Cymra Haskell, University of Southern California

Ami Radunskaya, Pomona College