3\textsuperscript{rd} 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,
2\textsuperscript{nd} floor of Millikan Laboratory

\textit{Talk Session I}

Millikan 207:
9:00 – 9:20  Gizem Karaali, Pomona College
\textit{So what is a Combinatorial Hopf Algebra and what can you do with it?}

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

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

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

Millikan 208:
9:00 – 9:20  Su Liang, CSU San Bernardino
\textit{Nail Down the Misconception: }\frac{(a+c)}{(a+b)} = \frac{c}{b}

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

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

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

Millikan 213:
9:00 – 9:20  Johanna Hardin, Pomona College
\textit{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 Exirpation 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