

**WiMSoCal 2020**  
**March 7 – 8, 2020**  
**University of California, Irvine**  
**Schedule**

**Saturday, March 7**

**Location: Emerald Bay AB, UCI Student Center**

**8:15 – 8:45**

Breakfast

**Location: Emerald Bay AB, UCI Student Center**

**8:45am – 9:00am**

Welcome by the organizers

**Parallel Talks Session I**

**9:00am – 11:00am**

**Location: Crescent Bay A, UCI Student Center**

**9:00 – 9:25**

Melike Sirlanci, California Institute of Technology

*Controlling Blood Glucose Levels of Intensive Care Unit Patients*

**9:30 – 9:55**

Anita Penkova, University of Southern California

*Mathematical model and experimentation for measuring the diffusion coefficient of intravitreally injected drugs in ex vivo and in vivo study*

**10:00 – 10:25**

Kimberly Ayers, Carroll College

*Stabilization of Quasi-Periodic Orbits of the Random Logistic Map*

**10:30 – 10:55**

Hossien Erjaee, University of California, Irvine

*Complexity and its Applications*

**Location: Crescent Bay B, UCI Student Center**

**9:00 – 9:25**

Sharon Lanaghan and Kristen Stagg, CSU Dominguez Hills

*Redesigning Calculus I with Standards Based Grading and Active Learning*

**9:30 – 9:55**

Nicole Fider, University of Arizona

*A tale of Tic-Tac-Toe: the day my students played*

**10:00 – 10:25**

Felicia Tabing, University of Southern California

*Combining Synesthesia, Mathematics, and Art*

**10:30 – 10:55**

Alessandra Pantano, University of California, Irvine

*Building college and STEM pathways for underserved youth by leveraging the mentoring power of undergraduate and graduate students*

**Location: Crescent Bay C, UCI Student Center**

**9:00 – 9:25**

Yesim Demiroglu, Harvey Mudd College

*Applications of Cayley Digraphs to Waring's Problem and Sum-Product Formulas*

**9:30 – 9:55**

Shanna Dobson, California State University, Los Angeles

*Higher Categorical Traces on  $Crys(X)$*

**10:00 – 10:25**

Sonali Vyas, California State University, Fullerton

*Murder Mysteries and Machine Learning*

**10:30 – 10:55**

Anna Ma, University of California, Irvine

*Randomized Kaczmarz for Tensors*

**Location: Crescent Bay D, UCI Student Center**

**9:00 – 9:25**

Tiffany Jones, University of Arizona

*Analysis of a Novel Helmholtz Approximation Method over Micro and Macro Regions*

**9:30 – 9:55**

Zhanerke Temirgaliyeva, University of Southern California

*Global regularity and long-time behavior of the solutions to the modified 3D Boussinesq equations*

**10:00 – 10:25**

Chunmei Wang, Texas Tech University

*Primal-Dual Weak Galerkin Finite Element Methods for First-Order Transport Problems*

**10:30 – 11:55**

Mahnaz Moradi Nargesi, Cal Poly Pomona

*Convolution Properties of Classes of Analytic and Meromorphic Functions*

**Location: Emerald Bay AB, UCI Student Center**

**11:00am – 11:30am**

Coffee

**Location: Emerald Bay AB, UCI Student Center**

**11:30am – 12:30pm**

Keynote Speaker 1

Erica Graham, Bryn Mawr College

*Uncovering reproductive phenotypes: mechanistic reduction and comprehensive model evaluation*

**Location: Emerald Bay AB, UCI Student Center**  
**12:30pm – 1:30pm**  
Lunch

**Location: Emerald Bay AB, UCI Student Center**  
**1:30pm – 2:30pm**  
Keynote Speaker 2  
Aisha Najerá, RAND Corporation  
*With an eye towards public policy research through a mathematician's lens*

**Location: Emerald Bay AB, UCI Student Center**  
**2:30pm – 2:45pm**  
Coffee

**Location: Emerald Bay AB, UCI Student Center**  
**2:45pm – 4:00pm**  
Breakout groups

**Location: Crystal Cove State Park beach**  
**4:00pm – 6:00pm**  
Walk on the beach  
A bus will depart from the front of the student center, by Pereira Dr, at 4:00 pm, and will bring people to the Crystal Cove State Park beach. The same bus will take people back to campus (to the dinner location). Everybody is encouraged to ride the bus to avoid having to pay \$15 at the entrance of the park. Should you choose to drive to the beach, plan to meet the rest of the conference participants at Beachcomber Cafe on 15 Crystal Cove, Newport Coast, CA 92657.

**Location: Yosemite Room, Department of Continuing Education**  
**6:15pm – 7:45pm**  
Dinner

**Location: McDonnell Douglas Auditorium**  
**8:00pm – 10:00pm**  
Dessert and wine reception, and screening of *“Secrets of the Surface, the mathematical vision of Maryam Mirzakhani”* with documentary creator George Csicsery.  
Introduction by Prof. Wolfson (UCI).

## **Sunday, March 8**

**Location: Woods Cove A, UCI Student Center**  
**7:30am – 8:30am**  
Mindfulness/Fulfillment/Meditation session

**Location: Pacific Ballroom AB, UCI Student Center**  
**8:15am – 9:00am**  
Continental breakfast

**Parallel Talks Session II**  
**9:00am – 11:00am**

**Location: Crescent Bay A, UCI Student Center**

**9:00 – 9:25**

Kelly Isham, University of California, Irvine  
*On the number of subrings of prime power index in  $\mathbb{Z}^n$*

**9:30 – 9:55**

Zhanar Berikkyzy, University of California, Riverside  
*Anti-van der Waerden numbers of graphs*

**10:00 – 10:25**

Yujia Ding, Claremont Graduate University  
*Accelerometer-Based Gait Segmentation: Simultaneously User and Adversary Identification*

**10:30 – 10:55**

Junyuan Joanne Lin, Loyola Marymount University  
*Algebraic Multigrid for Least Squares Problems on Graphs with Applications to Recommender System*

**Location: Crescent Bay B, UCI Student Center**

**9:00 – 9:25**

Kat Dover, University of California, Irvine  
*Deconstructing Clustering Algorithms for High Dimensional Data*

**9:30 – 9:55**

Lernik Asserian, University of Southern California  
*Nonparametric Probability Distribution Estimation in the Prohorov Metric Framework and its Application to the Alcohol Problem*

**10:00 – 10:25**

Maria Allayioti, University of Southern California  
*M-estimation in a diffusion model with application to biosensor transdermal blood alcohol monitoring*

**10:30 – 10:55**

Lora Weiss, University of California, Irvine  
*Mathematical Modeling of Cancer Stem Cell Enrichment*

**Location: Pacific Ballroom AB, UCI Student Center**

**11:00am – 11:30am**

Coffee

**Location: Pacific Ballroom AB, UCI Student Center**

**11:30am – 12:30pm**

Ranthy A.C. Edmonds, The Ohio State University  
*Let's Break it Down: Mathematical Atoms in Commutative Rings*

**Location: Emerald Bay AB, UCI Student Center**

**12:30pm**

Wrap-up. Box lunches will be served.