

Schedule of Student Talk Sessions

Room	Time	Name	School	Title
HUM 107	1:30 - 1:45	Taom Sakal	UC Santa Barbara	Sequential Dynamical Systems and the Iterated Phase Space
				The Chromatic Number of Distance Graphs Generated by the Sets $\{2, 3, x, y, z\}$ where x, y, z are unique prime numbers greater than 3 (Senior thesis)
	1:50 - 2:05	William Hua	CSU Los Angeles	
	2:10 - 2:25	Sharat Chandra	UC Irvine	On the Morphology of Arithmetic Sums of Cantor Sets
	2:30-2:45	---	---	---
Moderator:	Daphne Liu			
HUM 108 FR/SO	1:30 - 1:45	Jane Lee	Pepperdine University	Logarithmic Spirals (Class project)
	1:50 - 2:05	Chloe Avery, Talon Stark	UC Santa Barbara	A Really Great Presentation...Or Knot (Class project)
	2:10 - 2:25	Richard Carini, Nikola Kapamadzic, Connor Lemp	UC Santa Barbara	The World's NP-Hardest Game (Class project)
	2:30 - 2:45	Nicolas Geis, Thien Hoang, Adam Reevesman, Mi Yu	UC Santa Barbara	The Game of Slife (Class project)
Moderator:	Diana Nguyen			
HUM 109	1:30 - 1:45	Nadia Salem	CSU Bakersfield	Pi to the Twenty-Fifth Digit Programming in Python
	1:50 - 2:05	Hanna Kristensen	Pepperdine University	Applications and Mathematical Challenges of Digital Image Mosaicking
	2:10 - 2:25	Erika Ordog	Pepperdine University	Digital Image Mosaicking: The Algorithm and Its Challenges with Color Images
	2:30 - 2:45 FR/SO	Mahnoor Mian	Mira Costa College	Representation of Integers as Sums of Squares
Moderator:	Jeffrey Gray			

FR/SO indicates a session featuring talks by freshman and sophomores.

Schedule of Student Talk Sessions

Room	Time	Name	School	Title
HUM 110	1:30 - 1:45	---	---	---
	1:50 - 2:05	Ksenia Zakirov	Harvey Mudd College	Inextensible Chain Dynamics (Senior thesis)
	2:10 - 2:25	Elizabeth Kelley	Harvey Mudd College	When Does a Curve Inscribe a Square (Senior thesis)
	2:30 - 2:45	Eric Stucky	Harvey Mudd College	An Exposition of Kasteleyn's Solution to the Dimer Model (Senior thesis)
Moderator:	Patrick Guidotti			
HUM 111	1:30 - 1:45	Kevin Howe	California Lutheran Univ.	A Study of Pascal's Triangle, Square Pyramid, and Tetrahedron Fractal Dimensions and Patterns (Senior thesis)
	1:50 - 2:05	Manuel Lopez, Majerle Reeves	CSU Fresno	Modeling an Influenza Virus
	2:10 - 2:25	Sarah McGahan	CSU Fresno	Alexander- and Markov-type Theorems for Virtual Singular Links (Senior thesis)
	2:30 - 2:45	Adam Rose	UC Santa Barbara	Curvature Properties of Non-smooth Surfaces in Euclidean 3-space (Senior thesis)
Moderator:	Bradley Thomas			
HUM 112	1:30 - 1:45	Christina Tran	CSU Fullerton	On Sophie Germain's Essays (Historical/Bio)
	1:50 - 2:05	Erick Ortega, Rudolph Saenz	CSU Fullerton	Importance of Sampling Pattern and Regularization in Under-Sampled Magnetic Resonance Imaging (MRI)
	2:10 - 2:25	Su Ji Hong	California Lutheran Univ.	The Dual of Graph Invariants (Senior thesis)
	2:30 - 2:45	Kelsey Swerdfeger	Concordia University Irvine	Solving Linear Systems of Equations in Macaulay2 (Senior thesis)
Moderator:	Ann Watkins			
HUM 113 Featuring PUMP scholars	1:30 - 1:45	Brianna Amador, Giovanni Granados	CSU Northridge	Limit Cycle Behavior of Intraguild Predation (REU project)
	1:50 - 2:05	Pablo Chavarri, Samuel Fleischer	CSU Northridge	The Ecological Effects of Trait Variation in a u-Predator, v-Prey System (REU)
	2:10 - 2:25	Justin Mulvany	CSU San Marcos	Modeling Sleep and Wake Bout Phenomenon using Markov Processes
	2:30 - 2:45	Richard Adams, Janae Dixon	CSU Fresno	GRIM: Playing Games With Graphs (Senior thesis)
Moderator:	Ramin Vakilian			

Schedule of Student Talk Sessions

Room	Time	Name	School	Title
HUM 114 FR/SO	1:30 - 1:45	Farshud Sorourifar	Mira Costa College	Squaring a Circle: Creative Solutions to an Irrational Problem (Historical/Bio, Math Ed)
	1:50 - 2:05	Shannon Candon	Fullerton College	A 21'st Century Problem of Smale: What Are The Limits of Artificial and/or Human Intelligence? (Problem from math journal)
	2:10 - 2:25	George Hou	Arcadia High School	Separating Mixed Signals in a Noisy Environment Using Global Optimization
	2:30 - 2:45	Alexander Goldman	Fullerton College	Generalizing the Cross Product (Class project, Math Ed)
Moderator:	Shuba Simhan			
HUM 116	1:30 - 1:45	---	---	---
	1:50 - 2:05	Carlos Moran	California Lutheran Univ.	Quantum Dynamics of Nonlinear Interactions Generating Nonclassical States (REU project)
	2:10 - 2:25	Matthew Buhr	University of South Dakota	Dynamics of Glial Cell Defense Mechanisms in Response to Ischemic Hypoxia in the Brain (REU project)
	2:30 - 2:45	Casey Peters	University of Redlands	Homotopy Equivalence and Irreducibility in Digital Images (REU project, Senior thesis, Class project)
Moderator:	Courtney Davis			
HUM 117	1:30 - 1:45	Frank Madrid	CSU Bakersfield	A Bayesian Intra-Video Collusion Attack on Frame-by-Frame Video Watermarking (Senior thesis, Class project)
	1:50 - 2:05	Dayna Mann	Pepperdine University	An Individual-based Model of Chaparral Response to Frequent Wildfires (REU project)
	2:10 - 2:25	Samantha Armstrong, Danielle Riethmiller, Danielle Watson	University of San Diego	Impossible Hierarchies with the Deegan Packel Power Index (REU project)
	2:30 - 2:45	Khoi Vo	UCLA	The Weak Law of Large Numbers and Two Interesting Applications (REU project; Sr Project)
Moderator:	Don Hancock			

Schedule of Student Talk Sessions

Room	Time	Name	School	Title
HUM 118	1:30 - 1:45	Hillary Bese	CSU Fresno	The Well-Covered Dimension of Generalized Quadrangles with Regular Points (Graduate project) (REU/Sr Project)
	1:50 - 2:05	Gilbert Felix, Ozzy Gonzalez, Antonio Saucedo	CSU San Bernardino	Radio Number for Seventh Powered Path Graphs (REU project)
	2:10 - 2:25	Linda Alegria	CSU San Bernardino	Radio Number of Fourth Power Paths (Graduate project)
	2:30 - 2:45	James Chater	CSU Channel Islands	Some Properties of Continued Fractions (Graduate project)
Moderator:	Lisa Hernández			
HUM 119	1:30 - 1:45	Alberto Avecado	CSU San Bernardino	Distance sets and density parameters.
	1:50 - 2:05	Raameon Cawon, Lauren White	CSU Northridge	The Igusa Zeta Function of a Quadratic Form (REU project)
	2:10 - 2:25	Julia Dandurand	CSU Northridge	Crossing Numbers of k-page Book Graphs (Senior thesis)
	2:30 - 2:45	Qi Yang	USC	Big Data: Learning Near-isometric Linear Embeddings (REU project)
Moderator:	Daniel Katz			
HUM 120 FR/SO	1:30 - 1:45	Cristian Villator	LA Pierce College	Duodecimal: The Superior Name Base (REU project, Math Ed)
	1:50 - 2:05	Branden Melrose-Ensign	Victor Valley College	Buffon's Impossible Needle
	2:10 - 2:25	Parhan Pourdavood	Santa Monica College	The Falling Ladder Paradox
	2:30 - 2:45	Armin Niakan	Moorpark College	Topics om General Topology and Questions
Moderator:	Sheri Lehavi			

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