

Time	Friday, January 3	
7:30 - 8:30	Registration with coffee and pastries	
8:30 - 8:45	Opening Remarks	
8:45 - 9:20	Bard Ermentrout (University of Pittsburgh)	Spatial resonances as a mechanism for pattern sensitive epilepsy and visual discomfort
9:20 - 9:40	Evan Davis (UCLA)	A model of mass shedding dynamics in thin-film particle-laden flows
9:40 - 10:15	Ian Grooms (CU Boulder)	Non-Kalman ensemble filters for high-dimensional dynamical systems in the geosciences
10:15 - 10:55	Coffee Break	
10:55 - 11:15	Golnar Gharooni Fard (CU Boulder)	Data-driven Modeling of Honeybee Communication During Aggregation and Food Exchange
11:15 - 11:50	Brian Hunt (University of Maryland)	Using Machine Learning to Improve Modeling of Complex Dynamical Systems
11:50 - 12:10	Joao Lizárraga (UNICAMP)	Synchronization of Sakaguchi Swarmalators
12:10 - 2:00	Lunch Break	
2:00 - 2:40	Flash Talks Session A	
2:40 - 3:15	Elizabeth Cherry (Georgia Tech)	Predicting complex spatiotemporal cardiac voltage dynamics using reservoir computing
3:15 - 3:35	Haotian Hang (University of Southern California)	Fish schooling at extreme scales
3:35 - 4:05	Coffee Break	
4:05 - 4:25	Emma Zajdela (Princeton and Santa Fe Institute)	Back in Fashion: Modeling the Cyclical Dynamics of Trends
4:25 - 5:00	Lai-Sang Young (New York University)	Neural mechanisms for pursuit eye movements
5:00 - 5:20	Guram Mikaberidze (University of Wyoming)	Network optimization for synchronizing systems with physics-informed AI
5:20 - 7:30	Dinner Break	
7:30 - 9:30	Poster Session A	

Time	Saturday, January 4	
8:00 - 9:00	Registration with coffee and pastries	
9:00 - 9:20	Adrian Pelcaru (Technical University Dresden)	Causality in nonlinear time series related to COVID-19
9:20 - 9:40	Tim Wilhelm Kroll (University of Münster)	Sparse identification of evolution equations via bayesian model selection
9:40 - 10:15	Iain Couzin (Max Planck Institute for Animal Behavior)	The spatiotemporal dynamics of decision-making
10:15 - 10:55	Coffee Break	
10:55 - 11:15	Sara Clifton (Denison University)	Bystander effect emerges from individual psychological prospects
11:15 - 11:50	Per Sebastian Skardal (Trinity College)	Identifying and suppressing unknown disturbances to dynamical systems using machine learning
11:50 - 12:10	Jay Fineberg (The Hebrew University of Jerusalem)	The Fundamental Physics of the Onset of Frictional Motion: How do laboratory earthquakes nucleate?
12:10 - 2:00	Lunch Break	
2:00 - 2:40	Flash Talks Session B	
2:40 - 3:15	Mason Porter (UCLA)	Bounded-Confidence Models of Opinion Dynamics on Networks
3:15 - 3:35	Bryan Daniels (Arizona State University)	Navigating bifurcations in collective decisions
3:35 - 4:05	Coffee Break	
4:05 - 4:40	Melike Sirlanci (University of Colorado Anschutz)	Dynamic System Modeling to Quantify Sex Differences in Type 2 Diabetes Pathogenesis
4:40 - 5:15	Andrea Bertozzi (UCLA)	Singular Shocks in Particle Laden Flow
5:15 - 7:30	Dinner Break	
7:30 - 9:30	Poster Session B	

Time	Sunday, January 5	
8:00 - 8:45	Registration with coffee and pastries	
8:45 - 9:20	Lou Pecora (University of Maryland)	Statistics for Differential Topological Properties between Data Sets with an Application to Reservoir Computers
9:20 - 9:40	Chris Curtis (San Diego State University)	Time Stepping in Dynamic Mode Decomposition via Machine Learning
9:40 - 10:00	Cody Fitzgerald (Northwestern University)	Physiological Models of Heterothermy
10:15 - 10:45	Coffee Break	
10:45 - 11:05	Daniel Cooney (University of Illinois Urbana-Champaign)	Spatial Pattern Formation and the Evolution of Cooperative Behavior
11:05 - 11:40	John Crimaldi (CU Boulder)	Scalar transport is rigged: Complex stirring and ecologic destiny
11:40 - 12:00	Heather Cihak (University of Minnesota)	Remember to forget: a mechanistic bump-attractor model of optimal forgetting with respect to serial bias
12:00 - 1:50	Lunch Break	
1:50 - 2:25	David Campbell (Boston University)	Periodic Orbits in Fermi-Pasta-Ulam-Tsingou Systems
2:25 - 2:45	Johannes Kassel (Max Planck Institute - Dresden)	Utilizing long memory and circulation patterns for stochastic forecasts of temperature extremes
2:45 - 3:05	Heather Zinn-Brooks (Harvey Mudd College)	Learning interaction kernels in asynchronous opinion dynamics on networks
3:05 - 3:35	Coffee Break	
3:35 - 4:10	Björn Sandstede (Brown University)	Data-driven methods for inference in dynamical systems
4:10 - 4:30	Tim Sauer (George Mason University)	Robust methods for coupling detection in nonlinear time series
4:30 - 4:40	Closing Remarks	