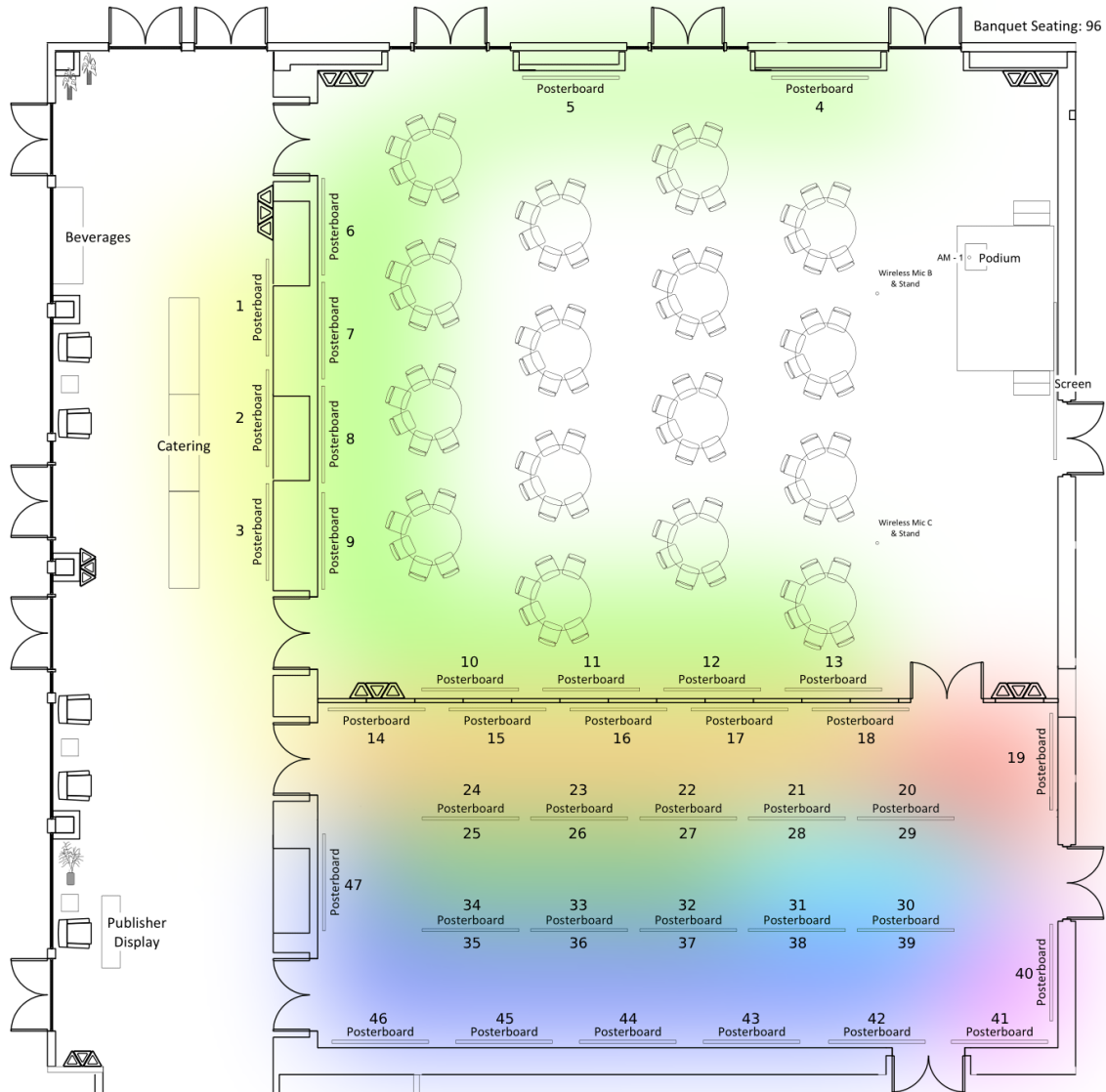


# Dynamics Days 2024 US

## Poster guide

1. Aurora Zhang: Structural Interventions on Persistent Social Inequalities
2. Nicholas Barendregt: An Information-Theoretic Model for Firefly Flash Pattern Evolution
3. Xueqing Yang: Dynamic Treatment by Credit Constraints on Households
4. Adam Rupe: Optimal Prediction of Partially-Observed Dynamical Systems
5. Alexandra Jurgens: Finite and Infinite Models: Optimal Prediction of Hidden Markov Processes
6. Dael Amzalag: Hybridizing Traditional and Next-Generation Reservoir Computers to Accurately Forecast Complex Dynamics
7. Davide Prosperino: Reconstructing recursive equations of complex systems using minimal reservoir computing
8. Himanshu Singh: Methods for Data-driven discovery with limited Data
9. Mauricio Díaz: Exploring  $(a, b)$ -Chaos: New Insights into Topological Dynamical Systems and Undecidability
10. Md Mazharul Islam: Comparing the Availability of ODE Solvers in R, Python, and MATLAB
11. Moyi Tian: Efficient Learning of Models for Temporal Networks
12. Sepideh Vafaie: Machine Learning, Food Web Dynamics, and Species Extinction
13. Wenjun Zhao: Quantifying patterns and their transitions in spatially extended systems
14. Camille Korbut: DNA Knotting Dynamics in Bacteriophages
15. Corey Lynn Murphey: A Dynamics-Inspired Model for Phonation-Induced Aerosolization
16. Joe Brennan: Chaos is not rare in plant seed production
17. Leopold Bilder: Rich dynamics in a modified vertex copy model motivated by protein-protein interaction networks
18. Lynn Jin: Reproducing Experimentally Observed Alternans in Cardiac Tissue with Fractional Diffusion
19. Jiacheng Xu: A dendrite-based model of the storage of novel, graded-amplitude inputs in working memory
20. Minh Duc Hoang: The effects of electrical brain stimulation pulse sequence on dopamine release dynamics
21. Matthew Semak: Unipedal Quiet Stance: Resolving Temporal Scaling using a Binary Record of the Jerk
22. Maxfield Comstock: How large flocks of birds turn: Insights from simulations
23. Mikael Toye: Cardiac Tissue in Chaos under Periodic Stimuli and Fibrillation: Experiments and Control
24. Vincent Lovero: Efficient and Robust Numerical Methods to Study Traveling Waves in Detailed-Biophysical Models of Cardiac Tissue
25. Ben Mestel: Network model simulation of the GB power system frequency during underfrequency events 2018–19
26. Hangjun Cho: Cardinality of collisions in the asymptotic phase-locking for the Kuramoto model with inertia
27. Jackson Williams: Persistence of Steady States for Dynamical Systems on Large Networks

28. Ethan Custodio: Computing Ionization Rates from Periodic Orbits in Chaotic Rydberg Atoms
29. Mikhael T. Semaan: First and Second Laws of Information Processing
30. Scott Habermehl: From theory to experiment: construction and dynamics of a network nano-electro-mechanical oscillators
31. Xiangyi Meng: An enhanced percolation model for establishing quantum communication
32. Kazuya Sawada: Nonlinear dynamics of temporal networks
33. Kyle Soni: Node stratification arises from simple walk-based preferential attachment rules
34. Sabina Adhikari: Oscillatory and chaotic synchronization behavior in coupled oscillator systems with higher order interactions, community structure, and phase lags
35. Jeffrey S. Olafsen: Coupled logistic maps for chaotic encryption of information
36. Micah Tseng: Extended, Exactly Solvable Chaotic Oscillator
37. Lichuan Xu: Noise-Induced Transitions in Anisotropic Two-Dimensional Turbulence
38. Md Mainul Hasan Sabbir: Quantifying Chaotic Self-mixing in Active Fluids
39. Keisuke Taga: A reaction-diffusion model for the pattern formation of the tape-peeling trace
40. Ivan Zhu: Synthesis of Catalyst-Loaded Alginate (F-LA) Beads for the Belousov-Zhabotinsky (BZ) Reaction
41. Simbarashe Nkomo: Experimental and Theoretical Studies of Factors Linked to Complex Behaviors in Small Networks of Belousov-Zhabotinsky Oscillators
42. Omar Aguilar: Structure and patterns of one-dimensional spin lattice models
43. Ryan James: On the Dependency Structure of Multivariate Distributions
44. Simon Dräger: Predicting and Explaining Thermohaline Flow Using Deep Learning
45. Taylor Whitney: Ballistic Transport of Swimmers in a Periodic Vortex Lattice
46. Troy Tsubota: Bifurcation delay and front propagation in the real Ginzburg-Landau equation on a time-dependent domain
47. Zach Atkins: Generation of Novel Chord Progressions via a Musically-Inspired Chaotic Mapping



Brain Dynamics, Cognitive Processes

Chemical Dynamics, Reaction-Diffusion Systems

Chaos, Fluid Dynamics, Turbulence, Physical Phenomena

Quantum

Complex Networks and System Interactions

Data-Driven Modeling and Machine Learning in Dynamics

Epidemiological, Social, and Behavioral Dynamics

Biological Systems and Ecological Dynamics

