

Dynamics Days US 2019 Schedule

All sessions in Hilton Orrington Grand Ballroom

I = Invited, C = Contributed, F = Flash

Thursday, January 3		
5:00 PM	8:00 PM	Registration

Friday, January 4		
7:30 AM	8:30 AM	Continental Breakfast
8:00 AM	5:00 PM	Registration
8:30 AM	8:45 AM	Opening Remarks (Niall Mangan and Danny Abrams)
8:45 AM	9:20 AM	I Leif Ristroph (NYU Courant) Sculptures formed by fluidic erosion and dissolving
9:20 AM	9:40 AM	C Petia Vlahovska (Northwestern) Emergent dynamics in active fluids of microrotors
9:40 AM	10:00 AM	C Elizabeth Wesson (Cornell) Dynamics of a triangular sessile drop: a minimal model
10:00 AM	10:45 AM	Break
10:45 AM	11:05 AM	C Jeffrey Tithof (U. Rochester) Temporal asymmetry of lagrangian coherent structures
11:05 AM	11:40 AM	I Beverley McKeon (Caltech) Systems analysis of wall turbulence: Characterizing natural and synthetic self-sustaining and self-similar processes
11:40 AM	12:00 PM	C Predrag Cvitanović (Georgia Tech.) Spatiotemporal cat: The simplest turbulent field theory
12:00 PM	2:00 PM	Lunch Break
2:00 PM	2:50 PM	F Flash Session A
2:50 PM	3:25 PM	I Tomas Bohr (Danish Technical University) The plumber's nightmare: modeling sugar export from a leaf
3:25 PM	4:05 PM	Break
4:05 PM	4:25 PM	C Alex M. Jurgens (UC Davis) Entropy rate and statistical complexity dimension of hidden processes
4:25 PM	5:00 PM	I Ed Ott (U. Maryland) Using machine learning to analyze chaotic systems
5:00 PM	5:20 PM	C Dan Wilson (U. Tennessee) A general framework for non-feedback control of chaos
7:30 PM	9:30 PM	Poster Session A

Saturday, January 5		
7:30 AM	8:30 AM	Continental Breakfast
8:00 AM	5:00 PM	Registration
8:45 AM	9:20 AM	I Jonathan Rubin (U. Pittsburgh) An approach to locating interesting structures in flows
9:20 AM	9:40 AM	C Daniel B. Cooney (Princeton) The replicator dynamics for multilevel selection in evolutionary games
9:40 AM	10:00 AM	C Zahra Aminzare (U. Iowa) A bursting neuron CPG model: phase reduction, dynamical mechanisms, and gait transitions
10:00 AM	10:40 AM	Break
10:40 AM	11:15 AM	I Jeff Moehlis (UC Santa Barbara) Controlling populations of neural oscillators

11:15 AM	11:35 AM	C	Zachary P. Kilpatrick (CU Boulder)	Tuning adaptive evidence accumulation in stochastically switching environments
11:35 AM	12:10 PM	I	Mauricio Santillana (Harvard)	Data driven machine learning approaches to monitor and predict events in healthcare. From population-level disease outbreaks to patient-level monitoring
12:10 PM	2:00 PM	Lunch Break		
2:00 PM	2:50 PM	F	Flash Session B	
2:50 PM	3:25 PM	I	Bing Brunton (U. Washington)	Data-driven dynamic models in neuroscience
3:25 PM	4:05 PM	Break		
4:05 PM	4:40 PM	I	Andrea Bertozzi (UCLA)	Spatio-temporal dynamics of swarm robotic systems
4:40 PM	5:00 PM	C	Sara A. Solla (Northwestern)	Long term stability of the low-dimensional dynamics of neural population activity associated with the consistent execution of learned behavior
5:00 PM	5:35 PM	I	Lauren Childs (Virginia Tech)	The dynamics of malaria infection
7:30 PM	9:30 PM	Poster Session B		

Sunday, January 6				
7:30 AM	8:30 AM	Continental Breakfast		
8:00 AM	5:00 PM	Registration		
8:45 AM	9:20 AM	I	Oluwaseyi Balogun (Northwestern)	Understanding the deformation and buckling of a bicycle wheel through modeling and experiments
9:20 AM	9:40 AM	C	Stephanie Dodson (Brown)	Mechanisms driving period-doubling bifurcations in spiral waves
9:40 AM	10:15 AM	I	Dan Rothman (MIT)	Earth's excitable carbon cycle
10:15 AM	10:55 AM	Break		
10:55 AM	11:30 AM	I	Marta Gonzalez (UC Berkeley)	Complexity science to study macroscopic dynamics in traffic and behavioral patterns
11:30 AM	11:50 AM	C	Sean P. Cornelius (Northeastern)	Emergence of Laplace-distributed growth rates in network dynamics
11:50 AM	12:10 PM	C	Louis M. Pecora (Naval Research Lab)	Synchronous clustering in multilayered networks
12:10 PM	2:00 PM	Lunch Break		
2:00 PM	2:35 PM	I	Heinrich Jaeger (U. Chicago)	The dynamics of acoustically levitated granular matter
2:35 PM	2:55 PM	C	Hyunsuk Hong (Chonbuk National University, Korea)	Heat dissipation for synchronization of coupled oscillators
2:55 PM	3:30 PM	I	Vincenzo Vitelli (U. Chicago)	Chiral active matter
3:30 PM	4:00 PM	Break		
4:00 PM	4:20 PM	C	Sam Dillavou (Harvard)	The hidden dynamics of static contact and static friction
4:20 PM	4:55 PM	I	Takashi Nishikawa (Northwestern)	Stable chimeras and independently synchronizable clusters in coupled oscillator networks
4:55 PM	5:05 PM	Ending Remarks		