

## 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 <b>Leif Ristroph</b> (NYU Courant)     Sculptures formed by fluidic erosion and dissolving
9:20 AM	9:40 AM	C <b>Petia Vlahovska</b> (Northwestern)     Emergent dynamics in active fluids of microrotors
9:40 AM	10:00 AM	C <b>Elizabeth Wesson</b> (Cornell)     Dynamics of a triangular sessile drop: a minimal model
10:00 AM	10:45 AM	Break
10:45 AM	11:05 AM	C <b>Jeffrey Tithof</b> (U. Rochester)     Temporal asymmetry of lagrangian coherent structures
11:05 AM	11:40 AM	I <b>Beverley McKeon</b> (Caltech)     Systems analysis of wall turbulence: Characterizing natural and synthetic self-sustaining and self-similar processes
11:40 AM	12:00 PM	C <b>Predrag Cvitanović</b> (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 <b>Tomas Bohr</b> (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 <b>Alex M. Jurgens</b> (UC Davis)     Entropy rate and statistical complexity dimension of hidden processes
4:25 PM	5:00 PM	I <b>Ed Ott</b> (U. Maryland)     Using machine learning to analyze chaotic systems
5:00 PM	5:20 PM	C <b>Dan Wilson</b> (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 <b>Jonathan Rubin</b> (U. Pittsburgh)     An approach to locating interesting structures in flows
9:20 AM	9:40 AM	C <b>Daniel B. Cooney</b> (Princeton)     The replicator dynamics for multilevel selection in evolutionary games
9:40 AM	10:00 AM	C <b>Zahra Aminzare</b> (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 <b>Jeff Moehlis</b> (UC Santa Barbara)     Controlling populations of neural oscillators

11:15 AM	11:35 AM	C	<b>Zachary P. Kilpatrick</b> (CU Boulder)	Tuning adaptive evidence accumulation in stochastically switching environments
11:35 AM	12:10 PM	I	<b>Mauricio Santillana</b> (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	<b>Bing Brunton</b> (U. Washington)	Data-driven dynamic models in neuroscience
3:25 PM	4:05 PM	Break		
4:05 PM	4:40 PM	I	<b>Andrea Bertozzi</b> (UCLA)	Spatio-temporal dynamics of swarm robotic systems
4:40 PM	5:00 PM	C	<b>Sara A. Solla</b> (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	<b>Lauren Childs</b> (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	<i>cancelled</i>	<i>cancelled</i>
9:20 AM	9:40 AM	C	<b>Stephanie Dodson</b> (Brown)	Mechanisms driving period-doubling bifurcations in spiral waves
9:40 AM	10:15 AM	I	<b>Dan Rothman</b> (MIT)	Earth's excitable carbon cycle
10:15 AM	11:00 AM	Break		
11:00 AM	11:20 AM	C	<b>Sam Dillavou</b> (Harvard)	The hidden dynamics of static contact and static friction
11:20 AM	11:40 AM	C	<b>Sean P. Cornelius</b> (Northeastern)	Emergence of Laplace-distributed growth rates in network dynamics
11:40 AM	12:00 PM	C	<b>Louis M. Pecora</b> (Naval Research Lab)	Synchronous clustering in multilayered networks
12:00 PM	2:00 PM	Lunch Break		
2:00 PM	2:35 PM	I	<b>Heinrich Jaeger</b> (U. Chicago)	The dynamics of acoustically levitated granular matter
2:35 PM	2:55 PM	C	<b>Hyunsuk Hong</b> (Chonbuk National University, Korea)	Heat dissipation for synchronization of coupled oscillators
2:55 PM	3:30 PM	I	<b>Vincenzo Vitelli</b> (U. Chicago)	Chiral active matter
3:30 PM	3:45 PM	Break		
3:45 PM	4:20 PM	I	<b>Takashi Nishikawa</b> (Northwestern)	Stable chimeras and independently synchronizable clusters in coupled oscillator networks
4:20 PM	4:30 PM	Ending Remarks		