

## Dynamics Days US 2018 Schedule

General Session: Colorado Ballroom A-E. Poster Sessions: Colorado Ballroom F.

I = Invited, C = Contributed, G = Ignite

Wednesday, January 3				
5:00 PM	8:00 PM	Registration		
Thursday, January 4				
8:00 AM	5:00 PM	Registration (coffee and pastries available 8:00 – 8:45)		
8:30 AM	8:45 AM	Opening Remarks		
8:45 AM	9:20 AM	I	<b>Chris Jones</b> (North Carolina)	Why should dynamicists be interested in data assimilation?
9:20 AM	9:40 AM	C	<b>Laura Munoz</b> (Rochester)	Observability analysis and estimator design for a cardiac cell model
9:40 AM	10:15 AM	I	<b>Peter Dodds</b> (Vermont)	Simon's fundamental rich-gets-richer model entails a dominant first-mover advantage
10:15 AM	10:55 AM	Break		
10:55 AM	11:15 AM	C	<b>Sarthak Chandra</b> (Maryland)	Generalized Kuramoto model in D dimensions: discontinuous transitions and implications for swarms
11:15 AM	11:50 AM	I	<b>Mark Hoefer</b> (Colorado at Boulder)	Solitonic dispersive hydrodynamics
11:50 AM	12:10 PM	C	<b>Jason Pina</b> (Pittsburgh)	Temporally periodic neural responses from spatially periodic stimuli
12:10 PM	2:00 PM	Lunch		
2:00 PM	2:50 PM	G	Ignite Session A	
2:50 PM	3:25 PM	I	<b>James Hudspeth</b> (Rockefeller)	Making an effort to listen: mechanical amplification by ion channels and myosin molecules in hair cells of the inner ear
3:25 PM	4:05 PM	Break		
4:05 PM	4:25 PM	C	<b>Aminur Rahman</b> (Texas Tech)	The chaotic ballet of walking droplets
4:25 PM	5:00 PM	I	<b>Alain Goriely</b> (Oxford)	The mathematics and mechanics of brain morphogenesis
5:00 PM	5:20 PM	C	<b>Jerome Daquin</b> (RMIT, Australia)	Drift in terrestrial orbits
7:30 PM	9:30 PM	Poster Session A		

Friday, January 5				
8:00 AM	5:00 PM	Registration (coffee and pastries available 8:00 – 8:45)		
8:45 AM	9:20 AM	I	<b>Panos Kevrekidis</b> (UMass)	Nonlinear waves in granular crystals: mathematical analysis, numerical computations and physical experiments
9:20 AM	9:40 AM	C	<b>Daniel Gurevich</b> (Georgia Tech)	Topological analysis of experimental recordings of ventricular fibrillation
9:40 AM	10:15 AM	I	<b>William Irvine</b> (Chicago)	Spinning top-ology (order, disorder and topology in mechanical gyro-materials and fluids)
10:15 AM	10:55 AM	Break		
10:55 AM	11:15 AM	C	<b>Hermann Riecke</b> (Northwestern)	Synchronization by uncorrelated noise: interacting collective oscillations in networks of oscillator networks
11:15 AM	11:50 AM	I	<b>Steven Haase</b> (Duke)	Host-Pathogen Dynamics During Malaria Infection
11:50 AM	12:10 PM	C	<b>Charles Doering</b> (Michigan)	Optimal bounds and extremal trajectories for time averages in nonlinear dynamical systems

12:10 PM	2:00 PM	<b>Lunch</b>		
2:00 PM	2:50 PM	G	<b>Ignite Session B</b>	
2:50 PM	3:25 PM	I	<b>Nathan Kutz</b> (Washington)	Data-driven discovery of governing equations and physical laws
3:25 PM	4:05 PM	<b>Break</b>		
4:05 PM	4:40 PM	I	<b>Cris Moore</b> (Santa Fe Institute)	Glassy dynamics of inference
4:40 PM	5:00 PM	C	<b>David Simpson</b> (Massey U., New Zealand)	The sausage-string structure of mode-locking regions of piecewise-linear maps
5:00 PM	5:20 PM	C	<b>Douglas Kelley</b> (Rochester)	Using optimal stretching to forecast advection-reaction-diffusion dynamics
7:30 PM	9:00 PM	<b>Poster Session B</b>		

<b>Saturday, January 6</b>				
8:00 AM	5:00 PM	Registration (coffee and pastries available 8:00 - 8:45)		
8:45 AM	9:20 AM	I	<b>Jean Luc Thiffeault</b> (Wisconsin)	The mathematics of taffy pulling
9:20 AM	9:40 AM	C	<b>Orit Peleg</b> (Colorado at Boulder)	Collective mechanical adaptation of honeybee swarms
9:40 AM	10:15 AM	I	<b>Kandice Tanner</b> (NIH)	The role of tissue biophysics in cancer
10:15 AM	10:55 AM	<b>Break</b>		
10:55 AM	11:15 AM	C	<b>Alice Schwarze</b> (Oxford)	Structural and functional redundancy in biological networks
11:15 AM	11:50 AM	I	<b>Laura Miller</b> (North Carolina)	Using computational fluid dynamics to understand the neuromechanics of jellyfish swimming
11:50 AM	12:10 AM	C	<b>David Campbell</b> (Boston University)	Intermittent many-body dynamics at equilibrium
12:10 AM	2:00 PM	<b>Lunch</b>		
2:00 PM	2:20 PM	C	<b>Jason Bramburger</b> (Brown)	Snaking in dimensions $1+\epsilon$
2:20 PM	2:55 PM	I	<b>Liz Bradley</b> (Colorado at Boulder)	The information dynamics of the paleoclimate
2:55 PM	3:15 PM	C	<b>Harry Swinney</b> (Texas at Austin)	Crystallization in a far-from-equilibrium system of sheared hard spheres
3:15 PM	3:45 PM	<b>Break</b>		
3:45 PM	4:20 PM	I	<b>Peko Hosoi</b> (MIT)	Hairy hydrodynamics
4:20 PM	4:40 PM	C	<b>Thomas Bury</b> (Waterloo)	Characterizing impending transitions in complex systems
4:40 PM	4:50 PM	<b>Ending Remarks</b>		