

Monday, October 22	Young Researchers Workshop: Kinetic descriptions in theory and applications
9:00 - 9:25	BREAKFAST (hosted by CSCAMM)
MORNING SESSION	Chair: Eitan Tadmor (University of Maryland)
9:25 - 9:30	Eitan Tadmor (University of Maryland) <i>Welcoming Remarks</i>
9:30 - 10:10	Katy Craig , (University of California, Santa Barbara) Aggregation diffusion to constrained interaction: minimizers and gradient flows in the slow diffusion limit
10:15 - 10:55	Matthew Thorpe , (University of Cambridge) Discrete-to-continuum limits of p-Laplacian regularization in semi supervised learning on graphs
11:00 - 11:30	COFFEE BREAK
11:30 - 12:10	David Poyato , (University of Granada) Filippov trajectories and measure-valued solutions in the Kuramoto model with Hebbian singular couplings
12:15 - 2:00	LUNCH (hosted by CSCAMM)
AFTERNOON SESSION	Chair: Jan Peszek (University of Maryland)
2:00 - 2:40	Antonio De Rosa , (New York University) Anisotropic counterpart of Allard's rectifiability theorem and applications
2:45 - 3:15	COFFEE BREAK
3:15 - 3:55	Soledad Villar , (New York University) Quadratic assignment, semidefinite programming, and graph neural networks
4:00 - 4:40	Franca Hoffmann , (California Institute of Technology) Reverse Hardy-Littlewood-Sobolev inequalities

Tuesday, October 23	Young Researchers Workshop: Kinetic descriptions in theory and applications
9:00 - 9:30	<i>BREAKFAST</i> (hosted by CSCAMM)
MORNING SESSION	<i>Chair:</i> Ruiwen Shu (University of Maryland)
9:30 - 10:10	Sébastien Motsch , (Arizona State University) Kinetic equations and self-organized band formations
10:15 - 10:55	Changhui Tan , (University of South Carolina) On the Euler-Alignment system
11:00 - 11:30	<i>COFFEE BREAK</i>
11:30 - 12:10	Jan Peszek , (University of Maryland) Flocking with compactly supported communication
12:15 - 2:00	<i>LUNCH</i>
AFTERNOON SESSION	<i>Chair:</i> David Levermore (University of Maryland)
2:00 - 2:40	Yu Gu , (Carnegie Mellon University) Kinetic limits of random Schrodinger equation
2:45 - 3:15	<i>COFFEE BREAK</i>
3:15 - 3:55	Qin Li , (University of Wisconsin-Madison) Low rankness in forward and inverse kinetic theory
4:00 - 4:40	Zhenfu Wang , (University of Pennsylvania) On the uniqueness of the homogeneous relativistic Landau equation

Wednesday, October 24	Young Researchers Workshop: Kinetic descriptions in theory and applications
9:00 - 9:30	<i>BREAKFAST (hosted by CSCAMM)</i>
MORNING SESSION	<i>Chair: Qin Li (University of Wisconsin-Madison)</i>
9:30 – 10:10	Yunan Yang , (New York University) Optimal transport base approaches for nonlinear seismic inverse problems
10:15 – 10:55	Ming Zhong , (Johns Hopkins University) Learning physics from observation
11:00 – 11:30	<i>COFFEE BREAK</i>
11:30 – 12:10	Siming He , (Duke University) Suppression of blow-up in Patlak-Keller-Segel via fluid flows
12:15 – 12:55	Franziska Weber , (Carnegie Mellon University) A sufficient condition for the Kolmogorov 4/5 law for stationary martingale solutions to the 3D Navier-Stokes equations
AFTERNOON SESSION	<i>Free Afternoon</i>
EVENING ACTIVITIES	
7:00	<i>DINNER</i>

Thursday, October 25	Young Researchers Workshop: Kinetic descriptions in theory and applications
9:00 - 9:30	<i>BREAKFAST (hosted by CSCAMM)</i>
MORNING SESSION	<i>Chair: Sébastien Motsch (Arizona State University)</i>
9:30 - 10:10	Ruiwen Shu , (University of Maryland) Hydrodynamic flocking model with external potential forcing
10:15 - 10:55	Hui Huang , (Simon Fraser University) Self-organized dynamics in bounded domains
11:00 - 11:30	<i>COFFEE BREAK</i>
11:30 - 12:10	Christopher Tokita , (Princeton University) Social interactions can drive emergent behavioral diversity and modular social network structure
12:15 - 2:00	<i>LUNCH (hosted by CSCAMM)</i>
AFTERNOON SESSION	<i>Chair: Pierre-Emmanuel Jabin (University of Maryland)</i>
2:00 - 2:40	Telma Silva , (University of Cape Verde) Mathematical modeling and computational simulations of a chronic inflammatory disease
2:45 - 3:15	<i>COFFEE BREAK</i>
3:15 - 3:55	Hong-Yan Shih , (University of Illinois at Urbana-Champaign) Statistical mechanics of the laminar-turbulent phase transition and the connection to directed percolation
4:00 - 4:40	Matt Novack , (University of Texas at Austin) The inviscid 3D quasi-geostrophic system on bounded domains

Friday, October 26	Young Researchers Workshop: Kinetic descriptions in theory and applications
9:00 - 9:30	<i>BREAKFAST</i> (hosted by CSCAMM)
MORNING SESSION	<i>Chair: Javier Morales</i> , (University of Maryland)
9:30 - 10:10	Nicolas Garcia Trillos , (University of Wisconsin-Madison) Gradient flows of Wasserstein spaces on random geometric graphs and their continuum limits
10:15 - 10:55	Purba Chatterjee , (University of Illinois at Urbana-Champaign) Three-body interactions drive the transition to polar order in a simple flocking model
11:00 - 11:30	<i>COFFEE BREAK</i>
11:30 - 12:10	Yulong Lu , (Duke University) Scaling limit analysis of Stein variational gradient descent
12:15	<i>CLOSING</i>