

Tuesday, April 18	Selected topics in transport phenomena: deterministic and probabilistic aspects
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) Welcoming Remarks
9:30 - 10:10	Roman Shvydkoy (University of Illinois at Chicago) Fractional parabolic models arising in flocking dynamics and fluids
10:15 - 10:55	Eric Vanden-Eijnden (New York University) Spatiotemporal self-organization of fluctuating bacterial colonies
11:00 - 11:30	COFFEE BREAK
11:30 - 12:10	Benjamin Gess (Max Planck Institute for Mathematics in the Sciences) Well-posedness and regularization by noise for scalar conservation laws
12:15 - 2:00	LUNCH (hosted by CSCAMM)
AFTERNOON SESSION	Chair: Pierre-Emmanuel Jabin (University of Maryland)
2:00 - 2:40	Martina Hofmanova (Technical University Berlin) Stationary solutions to the compressible Navier-Stokes system driven by stochastic forces
2:45 - 3:15	COFFEE BREAK
3:15 - 3:55	Maria Lukacova (University of Mainz) Convergence of a mixed finite element-finite volume scheme for the compressible Navier-Stokes system via dissipative measure-valued solutions

Wednesday, April 19	Selected topics in transport phenomena: deterministic and probabilistic aspects
9:00 - 9:30	BREAKFAST (hosted by CSCAMM)
MORNING SESSION	Chair: Maria Lukacova (University of Mainz)
9:30 – 10:10	René Carmona (Princeton University) Mean Field Games: theory and applications
10:15 - 10:55	François Delarue (University of Nice Sophia Antipolis) Fluctuations and deviations in mean field games
11:00 - 11:30	COFFEE BREAK
11:30 - 12:10	Sandra Cerrai (University of Maryland) Large deviations for nonlinear SPDEs with vanishing noise correlation
12:15 - 2:00	LUNCH (hosted by CSCAMM)
AFTERNOON SESSION	Chair: Jacob Bedrossian (University of Maryland)
2:00 - 2:40	Alina Chertock (North Carolina State University) Numerical methods for hyperbolic systems of PDEs with uncertainties
2:45 - 3:15	COFFEE BREAK
3:15 - 3:55	Arnulf Jentzen (ETH Zurich) On numerical approximation algorithms for high-dimensional nonlinear PDEs, nonlinear SDEs, and high-dimensional nonlinear FBSDEs

Thursday, April 20	Selected topics in transport phenomena: deterministic and probabilistic aspects
9:00 - 9:30	BREAKFAST (hosted by CSCAMM)
MORNING SESSION	Chair: Alina Chertock (North Carolina State University)
9:30 - 10:10	Mark Freidlin (University of Maryland) Asymptotic problems for PDE's and a motion on the simplex of invariant measures
10:15 - 10:55	Jianfeng Lu (Duke University) Stochastic algorithms for high dimensional transport systems
11:00 - 11:30	COFFEE BREAK
11:30 - 12:10	Michele Coti Zelati (University of Maryland) Stochastic perturbations of passive scalars and small noise inviscid limits
12:15 - 2:00	LUNCH
AFTERNOON SESSION	Chair: Konstantina Trivisa (University of Maryland)
2:00 - 2:40	Pierre-Emmanuel Jabin (University of Maryland) Critical non Sobolev regularity for continuity equations with rough force fields
2:45 - 3:15	COFFEE BREAK
3:15 - 3:55	Anna Mazzucato (Pennsylvania State University) Loss of regularity in transport equations
4:00 - 4:40	Li Wang (SUNY Buffalo) Uniform regularity for linear kinetic equations with random input based on hypocoercivity
EVENING ACTIVITIES	
7:00	DINNER

Friday, April 21	Selected topics in transport phenomena: deterministic and probabilistic aspects
9:00 - 9:30	<i>BREAKFAST</i> (hosted by CSCAMM)
MORNING SESSION	<i>Chair: Dave Levermore</i> (University of Maryland)
9:30 - 10:10	Jacob Bedrossian (University of Maryland) Landau damping and nonlinear echoes
10:15 - 10:55	Christian Seis (University of Bonn) Optimal stability estimates for continuity equations
11:00 - 11:30	<i>COFFEE BREAK</i>
11:30 - 12:10	Gautam Iyer (Carnegie Mellon University) Anomalous diffusion in passive scalar transport
12:15	<i>CLOSING</i>