

Monday, October 27	
9:00 - 9:25	COFFEE
MORNING SESSION	Chair: Changhui Tan (CSCAMM)
9:25 - 9:30	Eitan Tadmor (CSCAMM) <i>Welcoming Remarks</i>
9:30 - 10:10	Young-Pil Choi (Imperial College London) Global classical solutions for coupled fluid equations
10:15 - 10:55	Juan Calvo (Universitat Pompeu Fabra) Macroscopic limits and asymptotic behavior of some kinetic models in Astrophysics and Biology
11:00 - 11:30	COFFEE BREAK
11:30 - 12:10	Lijiang Wu (Carnegie Mellon University) Nonlocal interaction equations in heterogenous environment with boundary
12:15 - 2:00	LUNCH (hosted by CSCAMM)
AFTERNOON SESSION	Chair: Magali Tournus (Penn State University)
2:00 - 2:40	Ulrik Fjordholm (Norwegian University of Science and Technology) Computing measure-valued solutions of hyperbolic conservation laws
2:45 - 3:15	COFFEE BREAK
3:15 - 3:55	Franziska Weber (University of Oslo) Brinkman regularization of two-phase flows in porous media
4:00 - 4:40	Yoonsang Lee (New York University) Multi-scale methods for data assimilation in turbulent systems

Tuesday, October 28	
9:00 - 9:30	COFFEE
MORNING SESSION	Chair: Qin Li (California Institute of Technology)
9:30 - 10:10	Li Wang (University of California Los Angeles) Asymptotic-Preserving schemes for the semiconductor Boltzmann equation with two-scale collisions
10:15 - 10:55	Zhennan Zhou (Duke University) On the classical limit of a time-dependent self-consistent field system: analysis and computation
11:00 - 11:30	COFFEE BREAK
11:30 - 12:10	Graham Alldredge (RWTH Aachen University) A discontinuous Galerkin implementation of the entropy-based moment closure for linear kinetic equations
12:15 - 2:00	LUNCH
AFTERNOON SESSION	Chair: Jacob Bedrossian (CSCAMM)
2:00 - 2:40	Magali Tournus (Penn State University) How does the flagellum affect bacterial swimming?
2:45 - 3:15	COFFEE BREAK
3:15 - 3:55	Ian Tobasco (New York University) Energy scaling laws for an axially compressed thin elastic cylinder
4:00 - 4:40	Jinyeong Park (Seoul National University) Practical synchronization of Kuramoto system with an intrinsic dynamics

Wednesday, October 29	
9:00 - 9:30	COFFEE
MORNING SESSION	Chair: Jacob Bedrossian (CSCAMM)
09:30 - 10:15	Cheng Yu (University of Texas at Austin) Existence of Global Weak Solutions to the Compressible Navier-Stokes Equations with Density Dependent Viscosity
10:15 - 10:55	Xiaoqian Xu (University of Wisconsin-Madison) Mixing of passive scalars advected by incompressible enstrophy-constrained flows
11:00 - 11:30	COFFEE BREAK
11:30 - 12:10	Kyudong Choi (University of Wisconsin-Madison) On the Finite-Time Blowup of a 1D Model for the 3D Axisymmetric Euler Equations/ the 2D Boussinesq system
AFTERNOON SESSION	Free Afternoon
EVENING ACTIVITIES	
7:00	DINNER

Thursday, October 30	
9:00 - 9:30	COFFEE
MORNING SESSION	Chair: Jacob Bedrossian (CSCAMM)
9:30 - 10:10	Tarek Elgindi (Princeton University) Some Recent Results on Singular Transport Equations
10:15 - 10:55	Jingrun Chen (University of California Santa Barbara) Spin-polarized Transport in Ferromagnetic Materials
11:00 - 11:30	COFFEE BREAK
11:30 - 12:10	Vlad Vicol (Princeton University) Holder continuous solutions of active scalar equations
12:20 - 2:00	LUNCH (hosted by CSCAMM)
AFTERNOON SESSION	Chair: Li Wang (University of California Los Angeles)
2:00 - 2:40	Lee Ricketson (New York University) Multilevel methods for the kinetic equations of plasma dynamics
2:45 - 3:15	COFFEE BREAK
3:15 - 3:55	Bokai Yan (University of California Los Angeles) A Monte Carlo method with negative particles for general binary collisions and application to Coulomb collisions
4:00 - 4:40	Qin Li (California Institute of Technology) Spectral method for half-space kinetic equation

Friday, October 31	
9:00 - 9:30	COFFEE
MORNING SESSION	Chair: Changhui Tan (CSCAMM)
9:30 - 10:10	Gleb Zhelezov (University of Arizona) Coalescing Diffusion in the Keller-Segel Model
10:15 - 10:55	Jinhuan Wang (Duke University) The existence and uniqueness to a degenerate Keller-Segel system
11:00 - 11:30	COFFEE BREAK
11:30 - 12:10	Jia Zhao (University of South Carolina) Mathematical Modelling and Simulations of Cell Mitosis by a phase field approach
12:15	CLOSING