

Monday, October 14	
9:00 - 9:25	COFFEE
MORNING SESSION	Chair: Sebastien Motsch (Arizona State University) Opening session
9:25 - 9:30	Eitan Tadmor (CSCAMM) <i>Welcoming Remarks</i>
9:30 - 10:10	Yao Yao (University of Wisconsin-Madison) Enhancement of biological reaction by chemotaxis
10:15 - 10:55	José Alfredo Cañizo (University of Birmingham) The diffusive aggregation equation
11:00 - 11:30	COFFEE BREAK
11:30 - 12:10	Ricardo Alonso (Rice University) Viscoelastic granular materials: Intermediate Gaussian asymptotic state, exponential lower bounds and propagation of regularity.
12:15 - 2:00	LUNCH (hosted by CSCAMM)
AFTERNOON SESSION	Chair: Stephan Martin (Imperial College London) Swarming session
2:00 - 2:40	Jesús Rosado Linares (University of California, Los Angeles) Effects of emotion in swarming dynamics
2:45 - 3:15	COFFEE BREAK
3:15 - 4:00	Changhui Tan (University of Maryland) Multi-scale representations of flocking models and critical thresholds for the hydrodynamics
4:05 - 4:45	Daniel Balagué (North Carolina State University) Stability analysis of rings for 2nd order models in swarming

Tuesday, October 15	
9:00 - 9:25	COFFEE
MORNING SESSION	Chair: Changhui Tan (CSCAMM) Crowds & ants session
9:30 - 10:10	Raul Borsche (Technische Universität Kaiserslautern) Interaction of pedestrian motion and traffic networks
10:15 - 10:55	Sébastien Motsch (Arizona State University) Towards "crowd weather" prediction
11:00 - 11:30	COFFEE BREAK – POSTER SESSION
11:30 – 12:10	Simon Garnier (NJIT and Rutgers University) Ant wuz here! Following the trail of recent ant network research
12:15 - 2:00	LUNCH (hosted by CSCAMM)
AFTERNOON SESSION	Chair: Thomas Rey (CSCAMM) Macroscopic PDE session I
2:00 - 2:40	Nancy Rodriguez (Stanford University) Understanding the effects of location on segregation: A PDE approach
2:45 - 3:15	COFFEE BREAK – POSTER SESSION
3:15 - 4:00	Stephan Martin (Imperial College London) Averaged energy dynamics for linear FPEs under periodic friction and noise
4:05 – 4:45	Yongyong Cai (Purdue University) Error analysis of energy stable scheme for phase-field model

Wednesday, October 16	
9:00 - 9:30	COFFEE
MORNING SESSION	Chair: Maria Bruna (University of Oxford) Macroscopic PDE session II
09:30 - 10:15	Amélie Rambaud (University of Bio-Bio) Derivation of turbulent Shallow Water type models: A general framework
10:15 - 10:55	Weiran Sun (Simon Fraser University) Matching Boundary Conditions for Moment Systems
11:00 - 11:30	COFFEE BREAK – POSTER SESSION
11:30 - 12:10	Thomas Rey (University of Maryland) Moment realizability-based numerical method for multi-scale kinetic equations
AFTERNOON SESSION	Free Afternoon
EVENING ACTIVITIES	
7:00	DINNER

Thursday, October 17	
9:00 - 9:25	COFFEE
MORNING SESSION	Chair: Ricardo Alonso (Rice University) <i>PDE theory session</i>
9:30 - 10:10	Tran Minh-Binh (Basque Center for Applied Mathematics) Convergence to equilibrium of some kinetic models
10:15 - 10:55	Jacob Bedrossian (NYU) Inviscid damping and the asymptotic stability of planar shear flows
11:00 - 11:30	COFFEE BREAK – POSTER SESSION
11:30 – 12:10	Round Table
12:20 - 2:00	LUNCH
AFTERNOON SESSION	Chair: Nancy Rodriguez (Stanford University) <i>Math Biology session</i>
2:00 - 2:40	Sarthok Sircar (University of Colorado, Boulder) Multi-scale modeling in particulate suspensions and bio-fluids
2:45 - 3:15	COFFEE BREAK
3:15 - 4:00	Maria Bruna (University of Oxford) Excluded-volume effects in stochastic models of diffusion
4:05 - 4:45	Diane Peurichard (Universite Paul Sabatier Toulouse) Modelling adipose tissue homeostasis

Friday, October 18	
9:00 - 9:30	COFFEE
MORNING SESSION	Chair: Amélie Rambaud (University of Bio-Bio) <i>Kinetic numerics session</i>
9:30 - 10:10	Jeff Haack (University of Texas at Austin) Numerical computation of the Boltzmann equation with singular intermolecular potentials and multi species, multi-energy level gases
10:15 - 10:55	Qin Li (California Institute of Technology) Exponential asymptotic preserving scheme for the Boltzmann equation and related
11:00 - 11:30	COFFEE BREAK
11:30 - 12:10	Li Wang (University of California, Los Angeles) Contagion shocks in one dimension
12:15	CLOSING

POSTER SESSION (Tues-Thurs)

List of Posters:

- **Keith Burghardt** (University of Maryland)
Influence and rumor propagation in equilibrium on networks
- **Yongki Lee** (Iowa State University)
Thresholds for shock formation in traffic flow models with Arrhenius look-ahead dynamics
- **Krithika Mohan** (John Hopkins University)
Computational model for cell shape regulation through mechanosensing and mechanical feedback
- **Jose Morales Escalante** (University of Texas at Austin)
Deterministic full band Boltzmann-Poisson models for hot electron transport by means of empirical pseudopotential methods
- **Anamika Pandey** (Technische Universität Kaiserslautern)
Meshfree particle method for fluctuating hydrodynamic
- **Jia Zhao** (University of South Carolina)
A macroscopic biofilm model for antimicrobial persistence