

<b>Monday, November 28</b> <b>Room 330 Gross Hall</b>	<b>Young Researchers Workshop:</b> <b>Stochastic and deterministic methods in kinetic theory</b>
8:45 - 9:15	<b><i>BREAKFAST &amp; REGISTRATION</i></b>
<b>MORNING SESSION</b>	<b><i>Chair: Jianfeng Lu</i></b> (Duke University)
9:15 - 9:20	<i>Opening Remarks</i>
9:20 - 9:30	<b>Eitan Tadmor</b> (University of Maryland) <i>Welcoming Remarks and KI-Net</i>
9:30 - 10:10	<b>Yao Yao</b> (Georgia Tech) <i>Long time behavior of solutions to the 2D Keller-Segel equation with degenerate diffusion</i>
10:15 - 10:55	<b>Cheng Yu</b> (University of Texas at Austin) <i>Energy conservation for the weak solutions of the compressible Navier-Stokes equations</i>
11:00 - 11:30	<b><i>COFFEE BREAK</i></b>
11:30 - 12:10	<b>Lee Ricketson</b> (New York University) <i>Sparse grid techniques for particle-in-cell simulations</i>
12:15 - 2:00	<b><i>LUNCH</i></b>
<b>AFTERNOON SESSION</b>	<b><i>Chair: Tom Beale</i></b> (Duke University)
2:00 - 2:40	<b>Moon-Jin Kang</b> (University of Texas at Austin) <i>On kinetic Cucker-Smale flocking models with a strong local alignment force</i>
2:45 - 3:25	<b>Zhennan Zhou</b> (Duke University) <i>Towards a mathematical understanding of surface hopping algorithms</i>
3:30 - 4:00	<b><i>COFFEE BREAK</i></b>
4:00 - 4:40	<b>Zhenning Cai</b> (Duke University) <i>The surface hopping Gaussian beam method and the application in mixed quantum-classical dynamics</i>
4:45 - 5:25	<b>Alexander Watson</b> (Columbia University) <i>Dynamics of wavepackets in spatially inhomogeneous crystals by multi-scale analysis</i>

<b>Tuesday, November 29</b> <b>Room 330 Gross Hall</b>	<b>Young Researchers Workshop:</b> <b>Stochastic and deterministic methods in kinetic theory</b>
9:00 - 9:30	<i><b>BREAKFAST</b></i>
<b>MORNING SESSION</b>	<i><b>Chair: Jingwei Hu</b></i> (Purdue University)
9:30 - 10:10	<b>Christian Mendl</b> (Stanford University) Matrix-valued quantum Boltzmann methods
10:15 - 10:55	<b>Maja Taskovic</b> (University of Pennsylvania) Exponential moments for the homogeneous Kac equation
11:00 - 11:30	<i><b>COFFEE BREAK</b></i>
11:30 - 12:10	<b>Helge Dietert</b> (Paris 7 - Diderot) Landau damping to partially locked states in the Kuramoto model
12:15 - 2:00	<i><b>LUNCH</b></i>
<b>AFTERNOON SESSION</b>	<i><b>Chair: Alina Chertock</b></i> (North Carolina State University)
2:00 - 2:40	<b>Amic Frouvelle</b> (Paris Dauphine University) Stability of Dirac masses for simple alignment processes on the sphere
2:45 - 3:25	<b>Changhui Tan</b> (Rice University) Global regularity for the fractional Euler alignment system
3:30 - 4:00	<i><b>COFFEE BREAK</b></i>
4:00 - 4:40	<b>Jingwei Hu</b> (Purdue University) A stochastic Galerkin method for the Boltzmann equation with high dimensional random inputs using sparse grids
4:45 - 5:25	<b>Zhenfu Wang</b> (University of Maryland) Mean field limit for stochastic particle systems with singular forces

<b>Wednesday, November 30</b> <b>Room 330 Gross Hall</b>	<b>Young Researchers Workshop:</b> <b>Stochastic and deterministic methods in kinetic theory</b>
8:30 - 9:00	<b><i>BREAKFAST</i></b>
<b>MORNING SESSION</b>	<b><i>Chair: Yao Yao</i></b> (Georgia Tech)
9:00 – 9:40	<b>Lei Li</b> (Duke University) <i>A definition of fractional calculus and basic properties of fractional ODEs</i>
9:45 - 10:25	<b>Nastassia Pouradier Duteil</b> (Rutgers University - Camden) <i>Control of reaction-diffusion equations on time-evolving manifolds</i>
10:30 - 10:45	<b><i>COFFEE BREAK</i></b>
10:45 - 11:25	<b>Jia Zhao</b> (University of North Carolina at Chapel Hill) <i>Modeling and simulation of active liquid crystals with applications in cell mitosis</i>
<b>AFTERNOON SESSION</b>	<b><i>Free Afternoon @ Room 270 Gross Hall</i></b>
<b>EVENING ACTIVITIES</b>	
6:00	<b><i>DINNER</i></b> (Restaurant: <i>The Pit, 321 W Geer St, Durham, NC 27701</i> )

<b>Thursday, December 1 Room 330 Gross Hall</b>	<b>Young Researchers Workshop: Stochastic and deterministic methods in kinetic theory</b>
8:30 - 9:00	<b><i>BREAKFAST</i></b>
<b>MORNING SESSION</b>	<b>Chair: Zhennan Zhou</b> (Duke University)
9:00 - 9:40	<b>Yong Zhang</b> (New York University, Courant Institute) <i>Accurate and efficient computation of nonlocal potentials based on Gaussian-sum approximation</i>
9:45 - 10:25	<b>Lihui Chai</b> (University of California, Santa Barbara) <i>Semiclassical limit of the Schrödinger-Poisson-Landau-Lifshitz-Gilbert system</i>
10:30 - 10:45	<b><i>COFFEE BREAK</i></b>
10:45 - 11:25	<b>Scott Smith</b> (Max Planck Institute for Mathematics in the Sciences) <i>The Boltzmann equation with stochastic kinetic transport</i>
11:30 - 1:30	<b><i>LUNCH</i></b>
<b>AFTERNOON SESSION</b>	<b>Chair: Jacob Bedrossian</b> (University of Maryland)
1:30 - 2:10	<b>Bokai Yan</b> (University of California, Los Angeles) <i>A uniformly efficient method for spatial inhomogeneous plasma</i>
2:15 - 2:55	<b>Sona Akopian</b> (University of Texas at Austin) <i>From Boltzmann to Landau: convergence of solutions and propagation of integrability in the Coulomb case</i>
3:00 - 3:30	<b><i>COFFEE BREAK</i></b>
3:30 - 4:10	<b>Yuwei Fan</b> (Stanford University) <i>On the stability of the moment models for kinetic equation</i>

<b>Friday, December 2</b> <b>Room 330 Gross Hall</b>	<b>Young Researchers Workshop:</b> <b>Stochastic and deterministic methods in kinetic theory</b>
8:30 - 9:00	<i><b>BREAKFAST</b></i>
<b>MORNING SESSION</b>	<i>Chair: Bokai Yan</i> (University of California, Los Angeles)
9:00 - 9:40	<b>Xiaoqian Xu</b> (Carnegie Mellon University) <a href="#">Suppression of chemotactic explosion by mixing</a>
9:45 - 10:25	<b>Chong Wang</b> (George Washington University) <a href="#">On the Modeling of a Ternary Inhibitory System</a>
10:30 - 10:45	<i><b>COFFEE BREAK</b></i>
10:45 - 11:25	<b>Chenjie Fan</b> (Massachusetts Institute of Technology) <a href="#">Log-log blow up solutions of NLS at exactly <math>m</math> points</a>
11:30	<i><b>CLOSING</b></i>