

The 2014 Berkeley Mini Statistical Mechanics Meeting
January 10 – 12, 2014

Friday, January 10, 2014

5:00 pm	Registration & Check-In	Bixby Commons
7:30 pm	Poster Session I - Two-minute Talks David Chandler Presiding	120 Latimer Hall
8:30 pm	Poster Session I - Discussions & Light Reception	Tan Hall Lobby

Saturday, January 11, 2014

7:45 am	Breakfast	Tan Hall Lobby
8:45 am	Introductory Remarks David Chandler	120 Latimer Hall

Saturday Lecture Session I – Discussion chair: David Limmer **120 Latimer Hall**

9:00 am	Thomas Loerting, University of Innsbruck <i>“Crystallization and glass transition in amorphous ice”</i>	
9:30 am	Livia Eleonora Bove, CNRS – Université Pierre & Marie Curie <i>“Exploring the phase diagram of salty water: nano-phase segregation, polyamorphism and salty-ice crystallization”</i>	
10:00 am	David Pine, New York University <i>“Non-equilibrium phase behavior and scaling in suspensions of periodically sheared fibers”</i>	
10:30 am	Coffee Break	Tan Hall Lobby

Saturday Lecture Session II – Discussion chair: Tuomas Knowles **120 Latimer Hall**

10:45 am	Jasna Brujic, New York University <i>“The architecture of biomimetic emulsions”</i>	
11:15 am	Cecilia Clementi, Rice University <i>“Rapid exploration of configuration space with diffusion-map-directed molecular dynamics”</i>	
11:45 am	Daniel S. Fisher, Stanford University <i>“Statistics of neutral genomic variation driven by hitchhiking”</i>	

12:15 pm Lunch 775 Tan Hall

Saturday Lecture Session III – Discussion chair: Rob Jack 120 Latimer Hall

2:00 pm **Giulio Biroli, Institut de Physique Théorique, CEA Saclay**
“Self-induced disorder, avalanches and dynamical facilitation in glass-forming liquids”

2:30 pm **Mark Ediger, University of Wisconsin-Madison**
“Highly stable organic glasses”

3:00 pm **Ludovic Berthier, University of Montpellier 2 & CNRS**
“Nonequilibrium glass transitions in driven and active matter”

3:30 pm Coffee Break Tan Hall Lobby

Saturday Lecture Session IV – Discussion chair: Christopher Jarzynski 120 Latimer Hall

3:45 pm **Eran Rabani, Tel Aviv University**
“Self-averaging Stochastic Kohn-Sham density functional theory”

4:15 pm **Massimiliano Esposito, University of Luxembourg**
“Stochastic thermodynamics and coarse graining”

4:45 pm **John Cardy, University of Oxford**
“Stresses and strains in the Ising and other models”

5:30 pm Break

6:30 pm Poster Session II – Two minute talks 120 Latimer Hall

7:30 pm Poster Session II– Discussions & Light Reception Tan Hall Lobby

Sunday, January 12, 2014

8:00 am Breakfast Tan Hall Lobby

Sunday Lecture Session I – Discussion chair: Steve Whitelam 120 Latimer Hall

9:00 am **Michael Engel, University of Michigan**
“Beyond close-packing: complex order with simple models”

9:30 am **Salvatore Torquato, Princeton University**
“Hyperuniform disordered materials: A new state of matter”

10:00 am **Raissa D’Souza, University of California, Davis**
“Statistical mechanics of percolation and cascades on networks”

10:30 am Coffee Break Tan Hall Lobby

Sunday Lecture Session II – Discussion chair: Michael Hagan	120 Latimer Hall
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10:45 am Ramin Golestanian, University of Oxford
“Making nonequilibrium matter with active colloids”

11:15 am Gijsje Koenderink, FOM Institute AMOLF
“Self-organization of active soft matter”

11:45 am John Toner, University of Oregon
“Rice, locusts, and excitonic Bose-Einstein condensation: A hydrodynamic theory of polar active smectics”

12:15 pm Closing Remarks: David Chandler

12:30 pm Dim Sum Party 775 Tan Hall

Mini after the Mini: Glasses and Other Far From Equilibrium Phenomena

9:00 AM	David Chandler	Cooling Protocols Connected to the s -Ensemble
9:15 AM	Rob Jack	Investigating Amorphous Order in Stable Glasses by Random Pinning
9:30 AM	Juan P. Garrahan	Overlap Transitions, Defects, and the Glass Transition
9:45 AM	Ludovic Berthier	Configurational Entropy in Supercooled Liquids
10:00 AM	David Limmer	Length and Time Scales of Water's Glass Transition
10:15 AM	Grzegorz Szamel	Emergence of Elasticity in Glass-Forming Liquids: What Can We Learn from the Spatial Correlations of Particle Displacements
10:30 AM	Yang Zhang	Odd-even Effects of Glass Transition Temperature with a Network-forming Ionic Glass
10:45 AM	Francesco Zamponi	Critical Exponents of the Jamming Transition
11:00 AM	Patrick Charbonneau	Hopping in a Simple Glass Model
11:15 AM	Short break to get coffee	
11:25 AM	Nicolas Giovambattista	Pressure and Heating-Induced Glass-Glass Transformations in Computer Simulations of Water
11:40 PM	Eric Vanden-Eijnden	Flows in Complex Networks: Theory, Algorithms, and Application to Lennard-Jones Cluster Rearrangement
11:55 PM	Mike Hagan	Patterns, Structures, and Dynamics in Active Colloidal Systems
12:10 PM	Steve Whitlam	Self-Assembly at a Nonequilibrium Critical Point
12:25 PM	Todd Gingrich	Dynamic Phase Transitions in Simple Driven Kinetic Networks