

The 2012 Berkeley Mini Statistical Mechanics Meeting
January 13 – 15, 2012

Friday, January 13, 2012

5:00 pm	Registration & Check-In	Bixby Commons
7:30 pm	Poster Session I - Two-minute Talks David Chandler Presiding	Pitzer Auditorium
8:30 pm	Poster Session I - Presentation & Reception	Tan Hall Lobby

Saturday, January 14, 2012

7:45 am	Breakfast	Tan Hall Lobby
8:45 am	Introductory Remarks David Chandler	Pitzer Auditorium

Saturday Lecture Session I – Session chair: Hans Andersen **Pitzer Auditorium**

9:00 am	Sarah Keller, University of Washington <i>“Observations of lipid membranes in (roughly) 2D influenced by bulk water in 3D”</i>	
9:30 am	Anthony D. Dinsmore, University of Massachusetts, Amherst <i>“Probing Phase Transitions with Colloids: Non-classical nucleation and sublimation”</i>	
10:00 am	Frank Brown, University of California, Santa Barbara <i>“Composition dynamics on the surface of lipid bilayer membranes”</i>	
10:30 am	Coffee Break	Tan Hall Lobby

Saturday Lecture Session II – Session chair: George Oster **Pitzer Auditorium**

10:45 am	Jennifer Curtis, Georgia Institute of Technology <i>“The Cell’s Invisible ‘Organelle’: Mechanical and structural properties of the pericellular matrix”</i>	
11:15 am	Oskar Hallatschek, Max Planck Institute for Dynamics and Self-Organization <i>“The evolutionary advantage of being round”</i>	
11:45 am	Rosalind Allen, University of Edinburgh <i>“The roles of history and chance in microbial ecosystem development”</i>	
12:15 pm	Lunch	775 Tan Hall

Saturday Lecture Session III – Session chair: Gerhard Hummer	Pitzer Auditorium
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- 2:00 pm** **William A. Eaton, National Institutes of Health**
“An Ising-like model for protein folding”
- 2:30 pm** **John Chodera, University of California, Berkeley**
“Unraveling the statistical mechanics of biomolecules with force spectroscopy”
- 3:00 pm** **Thomas Miller, California Institute of Technology**
“Sec-facilitated Protein Translocation and Membrane Integration”
- 3:30 pm** **Coffee Break** **Tan Hall Lobby**

Saturday Lecture Session IV – Session chair: David Chandler	Pitzer Auditorium
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- 3:45 pm** **Katrin Winkel, University of Innsbruck**
“Amorphous ices – the glassy states of water?”
- 4:15 pm** **Paul Steinhardt, Princeton University**
“The search for natural quasi-crystals”
- 5:15 pm** **Break**
- 6:00 pm** **Poster Session II – Two minute talks** **Pitzer Auditorium**
- 7:00 pm** **Poster Session II– Presentation & Reception** **Tan Hall Lobby**

Sunday, January 15, 2012

- 8:00 am** **Breakfast** **Tan Hall Lobby**

Sunday Lecture Session I – Session chair: Michael Hagan	Pitzer Auditorium
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- 9:00 am** **Benjamin Rotenberg, CNRS and Université Pierre et Marie Curie**
“Charging mechanism in nanoporous carbon electrodes: The molecular origin of supercapacitance”
- 9:30 am** **Alessandro Laio, SISSA – The International School for Advanced Studies**
“Absolute transition rates for rare events from adiabatic decoupling of reactive dynamics”
- 10:00 am** **Aaron Dinner, University of Chicago**
“Currents of dynamic events”
- 10:30 am** **Coffee Break** **Tan Hall Lobby**

10:45 am **Michael Brenner, Harvard University**
“Irreversible interactions and self assembly”

11:15 am **Angelo Cacciuto, Columbia University**
“Free energy of multiple overlapping chains and self-assembly of ultra-soft nanoparticles”

11:45 am **Tuomas Knowles, Cambridge University**
“Biophysics of protein aggregation”

12:15 pm **Closing Remarks: David Chandler**

12:30 pm **Dim Sum Party**

775 Tan Hall