

2006 Boulder Summer School
Physics of Soft Matter: Complex Fluids and Biological Materials
Contributed Posters

There will be four meetings to view posters.

Week 2: Mon 7/3 & Thurs 7/6, 7:00-8:00 pm. If your last name begins with **A-I**, please have your poster up during these times. During one of these times, we ask you to stand by and discuss your poster; during the other time please feel free to view the other posters.

A-E: please stand by your poster on Mon, 7/3.

F-I: please stand by your poster on Thurs, 7/6.

Week 3: Mon 7/10 & Thurs 7/13, 7:00-8:00 pm. If your last name begins with **J-Z**, please have your poster up during these times.

J-M: please stand by your poster on Mon, 7/10.

N-Z: please stand by your poster on Thurs, 7/13.

Location: 11th floor of Gamow Tower.

<u>Name of Presenter</u>	<u>Title of Poster</u>	Date to stand by poster:
Adam Abate	Topological persistence near jamming	7/3
Aphrodite Ahmadi	Hydrodynamics of solutions of crosslinked biofilaments	7/3
Aparna Baskaran	Green-Kubo expressions for transport coefficients of a granular fluid	7/3
John Beausang	Hidden Markov methods in DNA loop detection <i>via</i> the tethered particle experiment	7/3
Vladimir Belyi	Electrostatic origin of genome packing in viruses	7/3
Jacy Bird	Observations of spreading and splashing from drop impact	7/3
Connie Chang	Viral encapsulation of nanoemulsion droplets	7/3
Patrick Charbonneau	Thermodynamics and dynamics of short-ranged attractive systems	7/3
Shenfeng Cheng	MD simulations of contact line motion in partially miscible binary fluids	7/3
Tamara Chiba	Single protein unfolding with the atomic force microscope	7/3
Aidan Craig	Field theory of polymers with directional interactions	7/3
Djamel El Marsi	Growing length scale on approaching the glass transition	7/3
Wouter Ellenbroek	Critical scaling in linear response of granular matter	7/3
Mark Elsesser	Synthesis and fabrication of non-spherical colloids	7/3
Allison Ferguson	Dynamical heterogeneity and long-lived stress: signatures of jamming in dense, granular flow	7/6
Henry Fu	Stabilizing superconductivity in nanowires by dissipation	7/6
Jennifer Galanis	Spontaneous patterning in confined liquid crystals	7/6
Lizette Gonzalez	Chiral segregation in the deformable hard needles model using Gibbs Monte Carlo simulations	7/6
Vernita Gordon	Phase separation in model lipid membranes	7/6
Zengcai Guo	Undulatory locomotion on land	7/6
Olivia Halt	Coarsening in the dry foam limit	7/6

Sarah Hashmi	The effect of confinement on the flow of hard sphere suspensions	7/6
Evan Hohlfeld	Instability at infinite wave number, poroelasticity and creasing in polymer gels	7/6
Aurelia Honerkamp-Smith	Critical fluctuations in a model lipid membrane	7/6
Phil Huang	Building shape surfactants: creating star-branched and rod-sphere complexes using genetically engineered viruses	7/6
Katie Humphry	Effects of geometric confinement on two-phase flow in microfluidic devices	7/6
Timon Idema	Curved domains in giant vesicles	7/6
Gregoria Illya	Simulation studies of lipid bilayers around a conical inclusion	7/6
Louise Jawerth	Elastic properties of fibrin fiber networks	7/10
Elizabeth Janus	Molecular dynamics simulations of p53 and effects of mutations on structural stability	7/10
Ercan Kamber	Tilting transition in lattice dimers	7/10
Karen Kasza	Molecular mechanisms in prestress-dependent cell mechanics	7/10
Hiroaki Katsuragi	Dynamics of granular impact cratering	7/10
Michael Lang	Polymer gels and networks: formation, structure, and properties	7/10
Clayton Lapointe	Elastic interactions and manipulation of magnetic nanowires in nematic liquid crystals	7/10
Sigolene Lecuyer	Vesicle formation from a single supported bilayer	7/10
Sang-Hyuk Lee	Brownian motion in a potential landscape implemented with holographic optical tweezers	7/10
Gerald Lim	Vesicle-like biomechanics governs important aspects of nuclear geometry in fission yeast	7/10
Lisa Manning	Sensitivity to perturbations: drag in a fluid/wall system and shear banding in amorphous solids	7/10
Jeetain Mittal	Relationship between the thermodynamics, dynamics and structure for confined and supercooled liquids	7/10
Michael Murrell	Mechanics of tissue formation	7/10
Rupert Nash	Unsettled questions in sedimentation studied using point forces in lattice-Boltzmann	7/13
Joyce Noah	Binary collision approximations for the memory function for density fluctuations in equilibrium atomic liquids	7/13
Prasanta Pal	Jamming in quasi-one dimensional systems	7/13
Matt Pennington	Scaling laws for DNA-tethered particle dynamics	7/13
Heidi Perry	A comparison of chemical gelation to the glass transition through molecular dynamics simulation	7/13
Marco Polin	Measurements of effective colloidal interactions	7/13
Homin Shin	Elastic stiffness of grain boundary scars and dislocation dynamics	7/13
Yehuda Snir	Entropically driven helix formation	7/13
Jinsuk Song	Finite size effects on surface tension and its fluctuations	7/13
Ashlee St. John	Phase behavior in "overpacked" microgel assemblies	7/13
Emma Terama	Simulations of lipid membranes with alcohol	7/13
Chantal Valeriani	Homogeneous crystal nucleation in computer simulations	7/13
James Wilking	Elastic nanoemulsions	7/13
Aron Yoffe	What is the size and shape of single-stranded viral RNA?	7/13