Program

Talks (Messel Lecture Theatre, Sydney Nanoscience Hub)

Monday Nov 27

8:00 *coffee/tea*

8:50 *Welcome*

8:55 Philipp Schönhöfer *Mixed pears and oranges: From bicontinuous to micelle-like phases*

9:20 Pierre Rognon *Dense granular flows: Another turbulence?*

9:45 Ruru Li *Does particle friction control the consolidation of colloidal gels?*

10:10 *coffee/tea*

10:40 *Poster Session*

11:10 Itai Einav *Rice-quakes in crunchy soft matter*

11:35 Amelia Liu *Probing local structure in glasses with small probe transmission diffraction*

12:00 Andrew Martin *Extracting real-space angular distributions from fluctuation diffraction data*

12:25 *lunch*

2:00 Daniel Ladiges *A hybrid method for solving the Boltzmann equation*

2:25 Georg Gottwald *Going beyond the central limit theorem: Stochastic model reduction for fast-slow systems with moderate time-scale separation*

2:50 Rajarshi Chakrabarti *Dynamics in a non-equilibrium bath*

3:15 Timothy Atherton *Percolation transition in the packing of bidisperse particles on a curved surface*

3:40 *coffee/tea*

4:20 Ern Seang Ong *Molecular dynamics simulation of polyelectrolytes in aqueous solution*

4:45 Nathan Clisby *Efficient implementation of connectivity changing moves for dense polymers*

5:10 Ravi Jagadeeshan *Size, shape and diffusivity of single Debye-Hückel polyelectrolyte chain in solution*

5:35 *end*

6:30 *dinner*

Tuesday Nov 28

8:55 Shaun Hendy *The stability of Janus particle clusters in flows*

9:20 Peter Daivis *NEMD – a small and simple non-equilibrium molecular dynamics program*

9:45 Francois Guillard *Drag and lift forces in granular media*

10:10 *coffee/tea*

10:40 *Poster Session*

11:10 David Huang *Molecular simulation algorithms for concentration-gradient-driven flow*

11:35 Ann Bui *Nonequilibrium optical tweezer dynamics*

12:00 David Ostler *Electropumping in functionalised carbon nanotubes*

12:25 *lunch*

2:00 Kirill Glavatskiy *Surface tension of molecular liquids from the Ising model*

2:25 Toby Hudson *Simulation in higher dimensions to avoid bottlenecks in three.*

2:50 Mario Liu *Why grains are thermal and quite normal after all*

3:15 Chunguang Tang *Atomistic origin of transient hardening and stress serrations in a CuZr metallic glass*

3:40 *coffee/tea*

4:20 Gang Sun *The structural origin of enhanced dynamics at the surface of a glassy alloy*

4:45 Asaph Widmer-Cooper *Self assembly of patchy nanorods at an interface*

5:10 Owen Jepps *Modelling density dependent collective diffusion in microporous Knudesen flows*

5:35 *Conclusion*

Posters (Please set up Monday morning after 8:00am and take down by 4:20pm on Tuesday)

Isaac Gresham	Particle Transport through Fibrous Networks
Alexander Smith	Droplet Motion on Super Hydrophobic Surfaces
Jared Wood	Self-assembly of Nanorods in Polymer Solution
Adrian Menzel	Coleman Markovitz equation from non-linear response theory
Malcolm Ramsay	The detection and characterization of molecular crystals
Ian Douglass	On the dissolution and precipitation of a model organic glass
Hessam Jami	Atomic stress and bonding mechanism in the aerosol deposition method using molecular dynamic simulation
Benjy Marks	Dynamic X-ray radiography reveals particle size and shape orientation fields during granular flow
Yawei Liu	Pressure-gradient approach fails to predict the microscopic Marangoni flow and diffusio-osmosis.
Luca Maffioli	A new method of calculation of the entropy using MD
Debora Monego	Ligand-mediated interaction between colloid particles
Kannan Ridings	Thermal properties of metal nanowires
Stephen Hannam	Investigation of crystallization inhibition through molecular dynamics
Richard Henchman	Dissecting the Entropy Change of Molecular Binding