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 Shaun Hendy The stability of Janus particle clusters in flows
- 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 Richard Henchman *Hierarchical Method to Calculate the Entropy of Liquids*
- 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