Non-equilibrium molecular dynamics school: Tuesday, July, 12th

Speaker setup: 9:00 - 9:25 AM				
09:25 - 09:30				Welcome
09:30 - 10:15	Peter	Daivis	RMIT University	Non-equilibrium thermodynamics - basics
10:15 - 11:00	Peter	Daivis	RMIT University	Non-equilibrium thermodynamics - extensions
Morning Tea: 11:00 - 11:30 AM				
11:30 - 12:15	Billy	Todd	Swinburne University	Homogeneous atomistic systems
12:15 - 13:00	Billy	Todd	Swinburne University	Inhomogeneous systems
Lunch: 13:00 - 14:00				
14:00 - 15:30				Software setup & Tutorial 1
Afternoon Tea: 15:30 - 16:00				
16:00 -17:00				Tutorial 2

Advanced scattering and microscopy school: Wednesday, July, 13th

Speaker setup: 9:00 - 9:25 AM				
Session 1				
09:25 - 09:30				Welcome
09:30 - 10:15	David	Paganin	Monash University	Ghost-imaging using x rays and neutrons
10:15 - 11:00	Alison	Funston	Monash University	Scanning near-field optical microscopy (title TBC)
Morning Tea: 11:00 - 11:30 AM				
Speaker setup				
Session 2				
11:30 - 12:15	Susie	Seibt	Australian Synchrotron, ANSTO	Anything goes: SAXS/WAXS at the Australian Synchrotron
12:15 - 13:00	Andrew	Clulow	Australian Synchrotron, ANSTO	Small Angle Scattering from Solutions
Lunch: 13:00 - 14:00				
Speaker setup				
Session 3				
14:00 - 14:45	Andrew	Martin	RMIT	Introduction to fluctuation scattering: a new way to probe disordered 3D structure at advanced x-ray light sources.
14:45 - 15:30	Rico/Leonie	Tabor/V'ant Hag	Monash University	SANS and USANS
Afternoon Tea: 15:30 - 16:00				
Speaker setup				
Session 4				
16:00 -16:45	Timothy	Petersen	Monash University	Hybrid reverse Monte Carlo modelling
16:45 - 17:00				Wrap-up remarks/closing

Meeting Day 1: Thursday, July, 14th

Speaker setup: 8:30 - 9:00 AM

				Session 1: Colloids ***Chair: Peter Daivis***
09:00 - 09:10				Welcome
09:10 - 09:40	Asaph	Widmer-Cooper	University of Sydney	The Thermodynamic Origins of Chiral Twist in Monolayer Assemblies of Rod-like Colloids
09:40 - 10:10	Amelia	Liu	Monash University	Local stability and local structure of colloidal glasses
10:10 - 10:40	Gerd	Schroeder-Turk	Murdoch University	Microscopy analysis of bicontinuous phases in plant plastid membranes
				Morning Tea: 10:40 - 11:10 AM *Speaker setup*
				Session 2: Scattering ***Chair: Billy Todd***
11:10 - 11:40	David	Paganin	Monash University	Fokker-Planck equation for optical beams
11:40 - 12:10	Jing	Fu	Monash University	Recent advances in nanoscale tomography of soft matters
12:10 - 12:40	Andrew	Martin	RMIT University	Introducing the Pair-Angle Distribution Function: measuring multi-atom statistics of disordered materials
				Lunch: 12:40 - 14:00 *Speaker setup*
				Session 3 A: Simulations - Principles ***Chair: Debra Bernhardt***
14:00 - 14:30	Ellie	Hajizadeh	University of Melbourne	ML-based optimisation for accelerated and targeted multiscale soft matter design
14:30 - 15:00	David	Huang	University of Adelaide	Systematic coarse-graining of molecular simulation models with anisotropic particles
15:00 - 15:30	Luca	Maffioli	Swinburne University of Technology	Measuring the response of highly confined fluids in a Couette flow: the TTCF formalism
				Afternoon Tea: 15:30 - 16:00 *Speaker setup*
				Session 3 B: Simulations - Principles ***Chair: David Huang***
16:00 -16:30	Stephen	Sanderson	University of Queensland	Machine learning a Time-Local Fluctuation Theorem for non-equilibrium steady-states
16:30 - 17:00	Tim	Duignan	University of Queensland	Accurate first principles simulation of salt water using deep learning.
17:00 - 17:20	Mikhail	Suyetin	Karlsruhe Institute of Technology	Proof of concept: Molecular Dynamics study of memory nanodevice based on Zn-MOF-74.
				Informal Dinner

Meeting Day 2: Friday, July, 15th

Speaker setup: 8:30 - 9:00 AM

			Session 5: Active Matter ***Chair: Asaph Widmer-Cooper***	
09:00 - 09:30	Prabhakar	Ranganathan	Monash University	Cluster and conquer: invasion of asoft substrate by colonies of rod-shaped cells
09:30 - 10:00	Rahil	Valani	University of Adelaide	Generating active matter from strange attractors
10:00 - 10:30	Shibu	Saw	Roskilde University	Role of the configurational temperature in active-matter models
			Morning Tea: 10:30 - 11:00 *Speaker setup*	
			Session 6 A: Simulations - Applications ***Chair: Nathan Clisby***	
11:00 - 11:30	Shern	Tee	University of Queensland	When Is A Supercapacitor Like A Protein?
12:30 - 12:00	Dominic	Robe	Monash University	Linear viscoelasticity of sssociating star polymers
12:00 - 12:20	Isaac	Pincus	Monash University	Modelling dilute solutions of semiflexible polymers with excluded-volume and hydrodynamic interactions
			Lunch: 12:20 - 13:40 *Speaker setup*	
			Session 6 B: Simulations - Applications ***Chair: Rahil Valani***	
13:40 - 14:00	Patrick	Adams	RMIT University	Using the pair-angle distribution function to analyse protein structure.
14:00 - 14:20	Silpa	Mariya	Monash University	Are soft dendrimers dynamically equivalent to hard spheres?
14:20 - 14:40	Michael	Rinaudo	University of Sydney	Simulating nanoparticle superLattices with Molecular Dynamics
14:40 - 15:00	Sobin	Alosious	Swinburne University of Technology	The effect of electrostatic interactions on Kapitza resistance in nano-confined water.
			Afternoon Tea: 15:00 - 15:30 *Speaker setup*	
			Session 6 C: Simulations - Applications ***Chair: Dominic Robe***	
15:30 - 15:50	Christian	Zuluaga-Bedoya	University of Queensland	Entry resistance in flexible zeolitic nanosheets
15:50 - 16:10	Kyle	Stevens	University of Newcastle	Lennard-Jones potential and continuum nodelling for heterogeneous molecules
16:10 - 16:30	Marltan	Wilson	University of Adelaide	General high-dimensional neural networks for anisotropic coarse-grained molecular simulation models
16:30 - 16:50	Sleeba	Varghese	Swinburne University of Technology	Improved methodology to compute the intrinsic friction coefficient at solid-liquid interfaces
16:50 - 17:00				Close