

Programme

Monday 14 April

11:30	Registration <i>Porter's Lodge, Mary Allen Building</i>	
12:00	Lunch <i>Great Hall</i>	
13:20	Welcome address J L Keddie, University of Surrey, UK	
Chair: M P Allen, University of Warwick, UK		
13:30 – 14:15	(Invited) Hydrodynamics and phase behaviour of active suspensions S Fielding, Durham University, UK <i>Auditorium</i>	
	Rheology of Active and Biological Matter <i>Auditorium</i> Chair: M P Allen, University of Warwick, UK	Confined Fluids and Interfacial Phenomena <i>John Hammond Lecture Theatre</i> Chair: M Buzza, University of Hull, UK
14:20	Rheology and shear-induced diffusion of dense red blood cell suspensions T Krueger, University of Edinburgh, UK	Capillary force on a micrometric sphere trapped at a fluid interface exhibiting arbitrary curvature gradients M Nobili, CNRS / Université Montpellier 2, France
14:35	Motility fractionation of bacteria by centrifugation C Maggi, Università di Roma "Sapienza", Italy	Capillary fluctuations, interface potential and the film height dependent surface tension of adsorbed liquid films L G MacDowell, Universidad Complutense de Madrid, Spain
14:50	Bacterial delivery of colloids over anisotropic barriers N Koumakis, Università di Roma "Sapienza", Italy	Relaxation of surface tension in the liquid-solid interfaces of Lennard-Jones liquids A V Lukyanov, University of Reading, UK
15:05	Active matter at high density S Henkes, University of Aberdeen, UK	Off-equilibrium surface tension in colloidal suspensions D Truzzolillo, CNRS / Université Montpellier 2, France
15:20	Viscoelastic response of actin networks at intermediate distances A Sonn-Segev, Tel Aviv University, Israel	Structure of photo-responsive semifluorinated alkanes at the water-air interface A Theodoratou, FORTH / University of Crete, Greece
15:35	Poster session A, exhibition and refreshments <i>Boulind Suite</i>	
	Biological Systems <i>Auditorium</i> Chair: G Battaglia, University College London, UK	Colloids and Nanoparticles <i>John Hammond Lecture Theatre</i> Chair: M P Allen, University of Warwick, UK
16:15	Similar emergent states in swarming animals and thermophoretic colloids M S Turner, University of Warwick, UK	Near-wall dynamics of spherical colloids: Translational and rotational diffusion M Lisicki, University of Warsaw, Poland
16:30	Emergent run-and-tumble in a simple model of Chlamydomonas R Bennett, University of Oxford, UK	Asphaltene deposition in microfluidic capillary flow experiments and particulate computer simulation C M Seifried, Imperial College London, UK
16:45	Microswimmer motility in rigid and elastic confinement R Ledesma-Aguilar, Northumbria University, UK	Colloidal musical chairs - String- and loop-like cooperative motion in locally perturbed 2D colloidal crystals J Sprakel, Wageningen University, The Netherlands
17:00	Clathrin aggregation by rotational brownian dynamics I M Ilie, University of Twente, The Netherlands	How do platinum janus particles swim? A Brown, University of Edinburgh, UK
17:15	Self-organisation of swimming bacteria in confined geometries H Wioland, University of Cambridge, UK	Hydrodynamic synchronisation of simple rotors S Box, University of Bristol, UK
17:30	Poster session A, exhibition and refreshments <i>Boulind Suite</i>	
18:30	Break	
19:30	Dinner <i>Great Hall</i>	

Tuesday 15 April

08:00	Breakfast (residential guests only) <i>Great Hall</i>	
Chair: J L Keddie, University of Surrey, UK		
09:00 - 09:45	(Invited) Capillary-driven flow in thin polymer films K Dalnoki-Veress, McMaster University, Canada <i>Auditorium</i>	
	Polymers, Polyelectrolytes and Biomolecules <i>Auditorium</i> Chair: J L Keddie, University of Surrey, UK	Self-Assembly, Biomimetics and Pattern Formation <i>John Hammond Lecture Theatre</i> Chair: G Battaglia, University College London, UK
09:50	Unwinding dynamics of polymers: a model for single biomolecules? J-C Walter, University Montpellier 2, France	Enzyme-driven chemotactic synthetic vesicles D Cecchin, University College London, UK
10:05	Threading dynamics of ring polymers in a gel D Michieletto, University of Warwick, UK	Encapsulating hydrogenase active site analogues in peptide-based supramolecular hydrogels: a photochemical study P W J M Frederix, University of Strathclyde, UK
10:20	New method to predict the surface tension of complex synthetic and biological polyelectrolyte/surfactant mixtures R A Campbell, Institut Laue-Langevin, France	Motility-induced phase separation in an active dumbbell fluid G Gonnella, Università di Bari, Italy
10:35	Kinetic control over out-of-equilibrium self-assembled hydrogels V D Nguyen, Wageningen University, The Netherlands	Atom-scale computer-aided design of organic-inorganic interfaces D Thompson, University of Limerick, Ireland
10:50	Poster session A, exhibition and refreshments <i>Boulind Suite</i>	
	Biological Systems <i>Auditorium</i> Chair: N Hunt, University of Strathclyde, UK	Rheology and Non-equilibrium Phenomena <i>John Hammond Lecture Theatre</i> Chair: P Cicuta, University of Cambridge, UK
11:30	The role of intrinsically disordered proteins under conditions of abiotic stress F Yuen, University of Cambridge, UK	Length-scale dependent aging and plasticity of a colloidal polycrystal under cyclic shear E Tamborini, Université Lyon 1, France
11:45	Traffic jams on the microtubule network D Miedema, University of Amsterdam, The Netherlands	Particle response during the yielding transition of colloidal glasses D V Denisov, Van der Waals-Zeeman Institute, The Netherlands
12:00	Multiscale self-assembly of fibrin governs its polymerization kinetics, fiber and network structure, as well as nonlinear rheological properties N A Kurniawan, FOM Institute AMOLF, The Netherlands	Molecular dynamics simulations of flow in nanopores D A Ross, Imperial College London, UK
12:15	Nanoscale ligand spacing influences receptor triggering in immunological synapses I E Dunlop, Imperial College London, UK	Microfluidic-SANS: in situ molecular insight into non-equilibrium phenomena in complex fluids C G Lopez, Imperial College London, UK
12:30	Exploring the molecular bases of cytoskeleton-cell membrane interactions, by live imaging approach L Chierico, University College London, UK	Interfacial rheology of model particles at liquid interfaces J H J Thijssen, University of Edinburgh, UK
12:45	Lunch <i>Great Hall</i>	
Chair: G Battaglia, University College London, UK		
14:00 - 14:45	(Invited) Scaling laws of polymer membranes: from synthetics to nuclear envelopes and mechanotransduction D E Discher, University of Pennsylvania, USA <i>Auditorium</i>	
	Self-Assembly, Biomimetics and Pattern Formation <i>Auditorium</i> Chair: G Battaglia, University College London, UK	Confined Fluids and Interfacial Phenomena <i>John Hammond Lecture Theatre</i> Chair: M P Allen, University of Warwick, UK
14:50	Orientational texture of lipid membrane domains A Cohen Simonsen, University of Southern Denmark, Denmark	Crystal-liquid interfacial free energy via thermodynamic integration R Benjamin, Heinrich-Heine Universitaet, Germany

Tuesday 15 April continued

15:05	Phase separation within hybrid polymer/lipid vesicles used as biomimetic membranes J F Le Meins, Bordeaux University, France	Circularly confined quasi-hard-discs: the role of boundary adaptivity I Williams, University of Bristol, UK
15:20	Photo cross-linked and pH sensitive polymersomes - nanoreactor and membrane studies J Gaitzsch, University College London, UK	Displacement mechanisms in micro-models from micro-fluidic experiments and pore scale lattice Boltzmann simulations E S Boek, Imperial College London, UK
15:35	Poster session B, exhibition and refreshments <i>Boulind Suite</i>	
Chair: M Buzza, University of Hull, UK		
16:15 - 17:00	(Invited) Directed assembly in soft matter KJ Stebe, University of Pennsylvania, USA <i>Auditorium</i>	
	Surfactants, Foams and Vesicles <i>Auditorium</i> Chair: M Buzza, University of Hull, UK	Optical Methods and Imaging <i>John Hammond Lecture Theatre</i> Chair: N Hunt, University of Strathclyde, UK
17:05	Unveiling the bifurcation diagram of pattern formation in surfactant monolayer transfer M H Koepf, École Normale Supérieure, France	Exploring soft matter with X-ray scanning micro- and nano-diffraction techniques E Di Cola, European Synchrotron Radiation Facility (ESRF), France
17:20	Extreme deformation of giant unilamellar vesicles in a complex shear flow A Pommella, Imperial College London, UK	Single cell monitoring of redox potential using Surface-enhanced Raman Spectroscopy K Fisher, University of Edinburgh, UK
17:35	Foams stabilized by mixtures of nanoparticles and oppositely charged surfactants: Relationship between bubble shrinkage and foam coarsening A Maestro, University of Cambridge, UK	Optical Coherence Tomography Velocimetry of complex fluids A V Malm, University of Manchester, UK
17:50	Poster session B, exhibition and refreshments <i>Boulind Suite</i>	
18:30	Break	
19:30	Conference dinner <i>Great Hall</i>	

Wednesday 16 April

08:00	Breakfast (residential guests only) <i>Great Hall</i>	
Chair: M Buzza, University of Hull, UK		
09:00 - 09:45	(Invited) Self-assembly of patchy colloids D J Pine, New York University, USA <i>Auditorium</i>	
	Colloids and Nanoparticles <i>Auditorium</i> Chair: M Buzza, University of Hull, UK	Self-Assembly <i>John Hammond Lecture Theatre</i> Chair: G Battaglia, University College London, UK
09:50	Phase diagrams for magnetic nanofilaments J J Cerdà, Universidad de las Islas Baleares, Spain	Epitaxy and polymorph selection in heterogeneous crystal nucleation J P Mithen, University of Surrey, UK
10:05	Colloidal aggregation and dynamics in anisotropic fluids O Mondain-Monval, University of Bordeaux, France	Simulation of polymer network formation: Phase behavior of aggregating chains H Mortazavi, Eindhoven University of Technology, The
10:20	The effects of polydispersity and metastability on colloidal crystallization R M L Evans, University of Leeds, UK	Dynamic renormalisation group theory reveals sequential mechanism of oligomer generation in protein aggregation T C T Michaels, University of Cambridge, UK

Wednesday 16 April continued

10:35	Poster session B and refreshments <i>Boulind Suite</i>	
Chair: J L Keddie, University of Surrey, UK		
11:15 - 12:00	(Invited) Single molecule studies of protein aggregation D Klenerman, University of Cambridge, UK <i>Auditorium</i>	
	Colloids and Nanoparticles <i>Auditorium</i> Chair: J L Keddie, University of Surrey, UK	Liquid Crystals <i>John Hammond Lecture Theatre</i> Chair: M P Allen, University of Warwick, UK
12:05	Ligand-mediated nanoparticle interactions at fluid-fluid interfaces V Garbin, Imperial College London, UK	On phase behaviour and dynamical signatures of charged platelet suspensions S Jabbari-Farouji, University of Joseph-Fourier, France
12:20	Studying complex nanoparticle adsorption at liquid interfaces A Nelson, ETH Zürich, Switzerland	Knotted defects in nematic liquid crystals T Machon, University of Warwick, UK
12:35	Design of a fluorinated magneto-responsive material with tuneable ultrasound scattering properties K Zimny, University of Bordeaux, France	Double twist liquid crystal model of collagen structure A Brown, Dalhousie University, Canada
12:50	Lunch <i>Great Hall</i>	