

Monday 5 September – Afternoon

18:00 – 21:00

Welcome Reception (Arcades)

Tuesday 6 September – Morning

09:00 – 09:15			Opening		
09:15 – 10:00 Auditorium Maximum					
S. Glotzer					
Self assembly and the role of shape in hard particle fluids and crystals					
Chair: S. Dietrich					
10:15 – 11:25 Auditorium Maximum		10:15 – 11:35 Small Ceremonial Hall		10:15 – 11:25 Lecture Hall 28	
Session 5: Colloids		Session 1: Ionic and quantum liquids, liquid metals		Session 4: Polymers, polyelectrolytes, biopolymers	
Chair: H. Löwen		Chair: Y. Levin		Chair: C. Holm	
10:15 – 10:45 (keynote lecture)		10:15 – 10:45 (keynote lecture)		10:15 – 10:45 (keynote lecture)	
W. Kegel		M. Wilson		A. Grosberg	
Spontaneous formation of finite-size colloidal aggregates		Structure and dynamics of network-forming liquids		Crumpled globule, melt of rings, and genome folding	
10:45 – 11:05		10:45 – 11:05		10:45 – 11:05	
M. Haw		A. Parola		D. Démoulin	
Onset of mechanical stability in random sphere packings		Liquid-vapor transition in a symmetric binary mixture of charged colloids		Measurement of force generated by the growth of actin filaments	
11:05 – 11:25		11:05 – 11:35 (keynote lecture)		11:05 – 11:25	
M. Schmiedeberg		A. Meyer		R. Allen	
Stability, phase behavior and dynamics of light-induced colloidal quasicrystals		Diffusion of mass in liquid alloys		Exploring the "nucleation" of amyloid fibrils with experiments and computer simulations	
11:25 – 14:00					
Posters (Sessions 2, 9 and 10) and Coffee					
Lunch (12:15 – 13:45)					

Tuesday 6 September – Afternoon

<p>14:00 – 14:45 Auditorium Maximum K. Kremer Topological constraints matter: collapsed polymer globules, chromosome territories, nano composites Chair: A. van Blaaderen</p>		
<p>14:50 – 16:00 Auditorium Maximum Session 5: Colloids Chair: S. Glotzer</p>	<p>14:50 – 16:00 Small Ceremonial Hall Session 9: Non-equilibrium systems, rheology, nanofluidics Chair: R. Winkler</p>	<p>14:50 – 16:00 Lecture Hall 28 Session 2: Water, solutions and reaction dynamics Chair: F. Bruni</p>
<p>14:50 – 15:20 (keynote lecture) U. Gasser Structural changes and phase behavior of densely packed microgel particles</p>	<p>14:50 – 15:20 (keynote lecture) P. Olmsted Shear banding and related instabilities in entangled polymers</p>	<p>14:50 – 15:20 (keynote lecture) F. Caupin Exploring water at negative pressure</p>
<p>15:20 – 15:40 A. Philipse Cubic crystals from cubic colloids</p>	<p>15:20 – 15:40 P. Tierno Transversal dynamics of paramagnetic colloids in a longitudinal magnetic ratchet</p>	<p>15:20 – 15:40 X. Noblin On a use of negative pressures and cavitation to create motion in plants</p>
<p>15:40 – 16:00 I. Martchenko Structural and dynamic properties of concentrated suspensions of ellipsoids</p>	<p>15:40 – 16:00 V. Bickel Realization of a μm sized stochastic heat engine</p>	<p>15:40 – 16:00 E. Choi Heat capacity measurements of water at negative pressure</p>
<p>16:00 – 16:30 Coffee</p>		
<p>16:30 – 17:50 Auditorium Maximum Session 5: Colloids Chair: P. Keim</p>	<p>16:30 – 18:10 Small Ceremonial Hall Session 9: Non-equilibrium systems, rheology, nanofluidics Chair: P. Olmsted</p>	<p>16:30 – 17:50 Lecture Hall 28 Session 2: Water, solutions and reaction dynamics Chair: F. Caupin</p>
<p>16:30 – 16:50 D. Kraft Surface roughness directed self-assembly of colloidal micelles</p>	<p>16:30 – 16:50 D. Lusebrink Thermodiffusion of colloids with mesoscopic simulations</p>	<p>16:30 – 16:50 C. Chakravarty Order, entropy and water-like anomalies in tetrahedral liquids</p>
<p>16:50 – 17:10 H. R. Vutukuri Colloidal analogues of charged and uncharged polymer chains with tunable stiffness</p>	<p>16:50 – 17:10 E. Boek Colloidal asphaltene aggregation and deposition in capillary flow from multi-scale computer simulation and experiment</p>	<p>16:50 – 17:10 G. Stirnemann Relationship between structural fluctuations and dynamical disorder in water: an explanation for the non-Arrhenius behavior of cold water reorientation</p>
<p>17:10 – 17:30 M. Dennison Phase behavior and effective shape of semi-flexible colloidal rods and biopolymers</p>	<p>17:10 – 17:30 D. Truzzolillo Osmotic interactions and arrested phase separation in star-linear polymer mixtures</p>	<p>17:10 – 17:30 R. Torre Time-resolved laser spectroscopy on bulk and confined water</p>
<p>17:30 – 17:50 N. Ghofraniha Self-controlled confinement of nanoparticles in the web of grain boundaries of a colloidal polycrystal</p>	<p>17:30 – 17:50 M. Giglio Gradient-driven fluctuations in microgravity</p>	<p>17:30 – 17:50 F. Bruni Water proton's environment: a new water anomaly at atomic scale?</p>
	<p>17:50 – 18:10 I. Pagonabarraga Controlled drop emission by wetting properties in driven liquid filaments</p>	

Wednesday 7 September – Morning

<p>09:00 – 09:45 Auditorium Maximum E. T. J. Nibbering Exploring and exploiting photoacids to reveal ultrafast hydrogen bond and proton transfer dynamics in solution Chair: P. Linse</p>		
<p>10:00 – 11:10 Auditorium Maximum Session 7: Confined fluids, interfacial phenomena Chair: V. Lobaskin</p>	<p>10:00 – 11:10 Small Ceremonial Hall Session 2: Water, solutions and reaction dynamics Chair: A. Baranyai</p>	<p>10:00 – 11:10 Lecture Hall 28 Session 8: Supercooled liquids, glasses, gels Chair: D. Coslovich</p>
<p>10:00 – 10:20 A. A. Verhoeff Snap-off and coalescence of nematic liquid crystal drops</p>	<p>10:00 – 10:30 (keynote lecture) D. Manolopoulos Competing quantum effects in liquid water</p>	<p>10:00 – 10:30 (keynote lecture) M. Guthrie Manipulating liquid structure with pressure</p>
<p>10:30 – 10:50 C. Rascon Capillarity and gravity: New phase transitions</p>	<p>10:30 – 10:50 A. Zeidler Quantum effects in water</p>	<p>10:30 – 10:50 M. Mosayebi Correlated rearrangements in supercooled liquids from inherent structure deformations</p>
<p>10:50 – 11:10 M. Schmidt Non-additive hard sphere mixtures: from bulk liquid structure to wetting and layering transitions at substrates</p>	<p>10:50 – 11:10 T. Kühne Second generation Car-Parrinello molecular dynamics: theory and application to the liquid/vapor interface</p>	<p>10:50 – 11:10 S. Lang Liquid-glass phase diagram in confined geometry</p>
<p>11:10 – 14:00 Posters (Session 5) and Coffee Lunch (12:15 – 13:45)</p>		

Wednesday 7 September – Afternoon

<p>14:00 – 14:45 Auditorium Maximum P. Tarazona Intrinsic structure and capillary waves spectrum at liquid surfaces Chair: J.-P. Hansen</p>		
<p>14:50 – 16:00 Auditorium Maximum Session 7: Confined fluids, interfacial phenomena Chair: M.M. Buzza</p>	<p>14:50 – 16:00 Small Ceremonial Hall Session 6: Films, foams, surfactants, emulsions, aerosols Chair: P. Wagner</p>	<p>14:50 – 16:00 Lecture Hall 28 Session 8: Supercooled liquids, glasses, gels Chair: S. Sastry</p>
<p>14:50 – 15:20 (keynote lecture) O. Paris Adsorption and phase transitions of fluids in confinement: In-situ studies with X-rays, neutrons and light</p>	<p>14:50 – 15:20 (keynote lecture) S. Roke Small matters: a soap opera of SDS, oil and water at the nanoscopic oil droplet/water interface</p>	<p>14:50 – 15:20 (keynote lecture) P. Poole The liquid-liquid phase transition in simulations of supercooled water: local order parameters, mixture-like behavior, and glass-liquid coexistence</p>
<p>15:20 – 15:40 M. Blow Superhydrophobicity on hairy surfaces</p>	<p>15:20 – 15:40 C. Raufaste Interaction of a liquid jet with a soap film</p>	<p>15:20 – 15:40 J. M. Tavares Thermodynamics and structure of fluids with dissimilar patches</p>
<p>15:40 – 16:00 E. Jamie Surface effects on the demixing of colloid-polymer systems</p>	<p>15:40 – 16:00 S. Cohen-Addad How is interfacial rheology coupled with 3D foam rheology?</p>	<p>15:40 – 16:00 W. Lechner The role of the prestructured surface cloud in crystal nucleation</p>
<p>16:00 – 16:30 Coffee</p>		
<p>16:30 – 17:30 Auditorium Maximum Session 7: Confined fluids, interfacial phenomena Chair: J. Indekeu</p>	<p>16:30 – 17:30 Small Ceremonial Hall Session 6: Films, foams, surfactants, emulsions, aerosols Chair: T. Mason</p>	<p>16:30 – 17:30 Lecture Hall 28 Session 2: Water, solutions and reaction dynamics Chair: D. Manolopoulos</p>
<p>16:30 – 16:50 A. Tröster Positive Tolman length in the 3d fcc lattice gas with three-body Interactions</p>	<p>16:30 – 16:50 A. Vila Verde Structure and mechanism of formation of bile salt micelles from molecular dynamics simulations</p>	<p>16:30 – 16:50 J. Abascal Supercooled water: simulation and experiment</p>
<p>16:50 – 17:10 M. Hishida Long-range hydration effect of lipid membrane studied by terahertz time-domain spectroscopy</p>	<p>16:50 – 17:10 P. L. H. Cooray Interaction of granular particles on liquid interfaces</p>	<p>16:50 – 17:10 M. Kobayashi Relationship between the phase diagram, the glass-forming ability, and the fragility of a water/salt mixture</p>
<p>17:10 – 17:30 M. Wolff Surface slip investigated by scattering techniques</p>	<p>17:10 – 17:30 D. Baigl Photo-actuation of macro- and microfluidic systems</p>	<p>17:10 – 17:30 A. Baranyai A transferable model for water</p>
<p>19:00 – 23:00 Conference Dinner</p>		

Thursday 8 September – Morning

<p>09:00 – 09:45 Auditorium Maximum R. Piazza The unbearable heaviness of colloids Chair: L. Reatto</p>		
<p>10:00 – 11:10 Auditorium Maximum Session 5: Colloids Chair: M.M. Telo da Gama</p>	<p>10:00 – 11:10 Small Ceremonial Hall Session 3: Liquid crystals Chair: R. Kamien</p>	<p>10:00 – 11:10 Lecture Hall 28 Session 4: Polymers, polyelectrolytes, biopolymers Chair: I. Coluzza</p>
<p>10:00 – 10:30 (keynote lecture) P. Zihlerl Packings of soft colloids</p>	<p>10:00 – 10:30 (keynote lecture) C. Tschierske Design of complex liquid crystals with polyphilic molecules</p>	<p>10:00 – 10:30 (keynote lecture) D. Richter On the dynamics of macromolecules: from synthetic polymers to proteins</p>
<p>10:30 – 10:50 H. Löwen Crystallization in colloids and complex plasmas: similarities and complementarities</p>	<p>10:30 – 10:50 J. Yamamoto Molecular manipulator driven by spatial variation of liquid crystalline order</p>	<p>10:30 – 10:50 R. Sigel Dendronized polymers investigated by neutron scattering</p>
<p>10:50 – 11:10 J. Russo A dissimilar patch model with a "pinched" phase diagram</p>	<p>10:50 – 11:10 J. M. Romero-Enrique Complex fluids at complex surfaces: simply complicated?</p>	<p>10:50 – 11:10 R. Stehle Counter ion distribution and polyelectrolyte structure in dilute solutions seen by anomalous small angle scattering</p>
<p>11:10 – 14:00 Posters (Sessions 7 and 8) and Coffee Lunch (12:15 – 13:45)</p>		

Thursday 8 September – Afternoon

<p>14:00 – 14:45 Auditorium Maximum D. Chandler Pathways to forming glass: hierarchies, bubbles and order-disorder in space-time Chair: R. Evans</p>		
<p>14:50 – 16:00 Auditorium Maximum Session 3: Liquid crystals Chair: A. Imhof</p>	<p>14:50 – 16:10 Small Ceremonial Hall Session 7: Confined fluids, interfacial phenomena Chair: E. Lomba</p>	<p>14:50 – 16:00 Lecture Hall 28 Session 4: Polymers, polyelectrolytes, biopolymers Chair: G. Vlieghart</p>
<p>14:50 – 15:20 (keynote lecture) O. Henrich Amorphous networks and rheological response of blue phases in chiral nematic liquid crystals</p>	<p>14:50 – 15:20 (keynote lecture) G. Galli Ab-initio simulations of water at ambient conditions and under confinement</p>	<p>14:50 – 15:20 (keynote lecture) C. Pierleoni Coarse-graining strategy for polymers in solution</p>
<p>15:20 – 15:40 A. Fernandez-Nieves Frustrated nematic order in spherical geometries</p>	<p>15:20 – 15:40 V. Lobaskin Electrokinetics of air bubbles in water</p>	<p>15:20 – 15:40 F. Lo Verso Surface-functionalised nanoparticles: Statics and dynamical properties</p>
<p>15:40 – 16:00 S. Belli Biaxial nematic LCs: can polydispersity stabilize them?</p>	<p>15:40 – 16:10 (keynote lecture) M. L. Rosinberg Spontaneous imbibition in disordered porous solids: a theoretical study of helium in silica aerogels</p>	<p>15:40 – 16:00 D. Lenz Dendrimer cluster crystals</p>
<p>16:00 – 16:30 Coffee</p>		
<p>16:30 – 18:10 Auditorium Maximum Session 5: Colloids Chair: R. Piazza</p>	<p>16:30 – 18:10 Small Ceremonial Hall Session 7: Confined fluids, interfacial phenomena Chair: M.-L. Rosinberg</p>	<p>16:30 – 17:50 Lecture Hall 28 Session 4: Polymers, polyelectrolytes, biopolymers Chair: D. Vlassopoulos</p>
<p>16:30 – 16:50 J. Dobnikar Self-assembly of magnetic colloids</p>	<p>16:30 – 16:50 J. Indekeu Wetting transitions of infinite order</p>	<p>16:30 – 16:50 C. Holm Simulation of electrokinetic phenomena with discrete ions and beyond</p>
<p>16:50 – 17:10 L. Filion Self-assembly of a colloidal interstitial solid solution with tunable sublattice doping</p>	<p>16:50 – 17:10 M. Buzza Two-dimensional colloidal alloys</p>	<p>16:50 – 17:10 J. Farago Anomalous diffusion of a polymer chain in an unentangled melt</p>
<p>17:10 – 17:30 I. Coluzza Theory and simulations of designable modular self-assembling materials</p>	<p>17:10 – 17:30 L. Helden Salt induced changes of interactions in binary liquid mixtures</p>	<p>17:10 – 17:30 G. Vlieghart Compression, crumpling and collapse of spherical shells and capsules</p>
<p>17:30 – 17:50 F. Romano Self-assembly of a photonic colloidal crystal: a simulation study</p>	<p>17:30 – 17:50 J. Nase Hydrate formation at liquid-liquid and liquid-gas interfaces</p>	<p>17:30 – 17:50 J.-L. Barrat Nanoscale buckling instability of layered copolymers</p>
<p>17:50 – 18:10 F. Martinez-Veracoechea Design rule for colloidal crystals of DNA-functionalized particles</p>	<p>17:50 – 18:10 J. M. Oh Electric field driven instabilities on superhydrophobic surfaces</p>	

Friday 9 September – Morning

<p>09:00 – 09:45 Auditorium Maximum S. Nagel Jamming and the emergence of rigidity Chair: C.N. Likos</p>		
<p>10:00 – 11:30 Auditorium Maximum Session 9: Non-equilibrium systems, rheology, nanofluidics Chair: E. Boek</p>	<p>10:00 – 11:10 Small Ceremonial Hall Session 8: Supercooled liquids, glasses, gels Chair: R. Torre</p>	<p>10:00 – 11:10 Lecture Hall 28 Session 3: Liquid crystals Chair: P. Zihnerl</p>
<p>10:00 – 10:30 (keynote lecture) J. Vermant Effects of medium viscoelasticity on particle dynamics and structures in suspensions</p>	<p>10:00 – 10:30 (keynote lecture) K. Winkel Amorphous ices - the glassy states of water: the calorimetric glass-liquid transition of HDA</p>	<p>10:00 – 10:30 (keynote lecture) R. Kamien Smectics!</p>
<p>10:30 – 10:50 M. Smith Stretching dense colloidal suspensions: from flow to fracture</p>	<p>10:30 – 10:50 S. Sastry Structural relaxation and correlation length scales in glass forming liquids</p>	<p>10:30 – 10:50 A. Imhof Monodisperse silica bullets: a new model system that enables the real-space study of rod-like colloids</p>
<p>10:50 – 11:10 T. Besseling A real-space study of shear induced order in colloidal hard-sphere fluids</p>	<p>10:50 – 11:10 J. Kurzidim Dynamic arrest of fluids in porous media: crossover from glass- to Lorentz-like behavior</p>	<p>10:50 – 11:10 C. De Michele Self-assembly of DNA duplexes into polymers chains: theory, simulations and experiments</p>
<p>11:10 – 11:30 R. G. Winkler Non-equilibrium properties of semidilute polymer solutions in shear flow</p>		
<p>11:10 – 14:00 Posters (Sessions 1, 3, 4 and 6) and Coffee Lunch (12:15 – 13:45)</p>		

Friday 9 September – Afternoon

<p>14:00 – 14:45 Auditorium Maximum D. Quere Leidenfrost state Chair: D. Frenkel</p>		
<p>14:45 – 15:30 Auditorium Maximum M. Cates How different are polymeric glasses from glassy simple liquids? Chair: D. Frenkel</p>		
Coffee		
<p>16:00 – 18:00 Auditorium Maximum Session 6: Films, foams, surfactants, emulsions, aerosols Chair: S. Egelhaaf</p>	<p>16:00 – 17:40 Small Ceremonial Hall Session 10: Biofluids, active matter Chair: R. Goldstein</p>	<p>16:00 – 17:40 Lecture Hall 28 Session 1: Ionic and quantum liquids, liquid metals Chair: A. Parola</p>
<p>16:00 – 16:30 (keynote lecture) P. Wagner Formation of molecular clusters and aerosol particles</p>	<p>16:00 – 16:30 (keynote lecture) W. Poon Bacteria as active colloids</p>	<p>16:00 – 16:20 S. Saccani Soft-disk bosons: a minimal model for supersolidity</p>
<p>16:30 – 17:00 (keynote lecture) T. Mason Structuring nanoemulsions</p>	<p>16:30 – 17:00 (keynote lecture) F. MacKintosh Control of biopolymer network elasticity through architecture and molecular-motor activity</p>	<p>16:30 – 16:50 S. Hosokawa Transverse excitations in liquid Sn</p>
<p>17:00 – 17:20 A. Bogdan Liquid-coated ice particles in high-altitude clouds</p>	<p>17:00 – 17:20 A. Zöttl Motion of a model micro-swimmer in Poiseuille flow</p>	<p>17:00 – 17:20 S. Tazi Accurate force fields from ab-initio simulations: the case of aqueous ions</p>
<p>17:20 – 17:40 M. Miller Structure and stability of electrospray droplets</p>	<p>17:20 – 17:40 G. Volpe Behavior of microswimmers in complex environments</p>	<p>17:20 – 17:40 Y. Levin Ions at air-water interface: surface tensions and surface potentials of electrolyte solutions</p>
<p>17:40 – 18:00 J. de Ruiter Drops on functional fibers: from barrels to clamshells and back</p>		

Saturday 10 September – Morning

<p>09:00 – 10:00 Auditorium Maximum</p> <p>Session 5: Colloids</p> <p>Chair: B.M. Mladek</p>	<p>09:00 – 10:00 Small Ceremonial Hall</p> <p>Session 10: Biofluids, active matter</p> <p>Chair: W. Poon</p>	<p>09:00 – 10:00 Lecture Hall 28</p> <p>Session 8: Supercooled liquids, glasses, gels</p> <p>Chair: T. Loerting</p>
<p>09:00 – 09:20</p> <p>B. Van Megen</p> <p>What nucleates the crystal? Perspectives from studies of the hard sphere system</p>	<p>09:00 – 09:20</p> <p>P. Cicuti</p> <p>Hydrodynamic synchronisation in driven colloidal systems: a model for micro-pumps and biological flows</p>	<p>09:00 – 09:20</p> <p>C. Klix</p> <p>Elastic properties of glasses</p>
<p>09:20 – 09:40</p> <p>G. Doppelbauer</p> <p>Ordered equilibrium structures of patchy particles</p>	<p>09:20 – 09:40</p> <p>J. Tailleur</p> <p>Arrested phase separation in reproducing bacteria: a generic route to pattern formation?</p>	<p>09:20 – 09:40</p> <p>L. Cipelletti</p> <p>Highly nonlinear dynamics in a slowly sedimenting colloidal gel</p>
<p>09:40 – 10:00</p> <p>E. Koos</p> <p>Particle configurations and gelation in capillary suspensions</p>	<p>09:40 – 10:00</p> <p>R. Di Leonardo</p> <p>Bacterial ratchet motors</p>	<p>09:40 – 10:00</p> <p>R. Ni</p> <p>Glassy dynamics, spinodal fluctuations, and the kinetic limit of nucleation in suspensions of colloidal hard rods</p>
<p>10:00 – 10:30 Coffee</p>		
<p>10:30 – 11:15 Auditorium Maximum</p> <p>I. Musevic</p> <p>Liquid crystal colloids</p> <p>Chair: N.B. Wilding</p>		
<p>11:15 – 12:00 Auditorium Maximum</p> <p>R. Goldstein</p> <p>Synchronization of eukaryotic flagella</p> <p>Chair: N.B. Wilding</p>		
<p>12:00 – 12:15 Closing</p>		