AERC 2015 - Wednesday, April 15

| | | 8:15 - Opening Ceremony (Auditorium 800) | | | | | | | | |
|--|---|--|--|---|--|---|--|--|--|--|
| | 8:50 -Weissenberg Award Lecture (Auditorium 800) Dimitris Vlassopoulos - Outstanding Challenges in Entanglement Dynamics: Beyond the Classic Picture | | | | | | | | | |
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| | Auditorium 450 | Room 200 | Room GH | Room KL | Room I | Room J | | | | |
| 09:50 | CS1 - J. Roux Numerical simulation of model non- Brownian, highly concentrated | MB1 - D. Read Maximum stretch condition in branched polymer rheology: is "priority" exactly the | AT1 - L. Talini Measuring linear viscoelastic properties of solids and liquids from their | CR1 - A. Rüttgers Multiscale flow simulation of dilute polymeric fluids using bead-spring chains | IE1 - L. Pontani Emulsion droplets by design | SI1 - I. Maimouni Rayleigh-Taylor instability for yield stress fluids | | | | |
| 10:10 | suspensions CS2 - J. Chauchat | right concept? MB2 - H. Watanabe | spontaneous fluctuations AT2 - N. Ali | CR2 - S. Fielding | IE2 - K. Rumble | SI2 - M. Webster | | | | |
| | A DEM based model for simulating transient and steady state rheology of dense suspensions | Overshoot of shear stress and birefringence on start-up of shear: revisiting stress-optical rule | | Shear banding in time-dependent flows of complex fluids | Squeezing an emulsion with two continuous phases: centrifugal compression of the bijel | A comparative numerical study of time- dependent structured fluids in complex flows | | | | |
| 10:30 | CS3 - S. Gallier | MB3 - G. lanniruberto | AT3 - H. Wyss | CR3 - M. Trofa | IE3 - V. Preziosi | SI3 - A. Mütze | | | | |
| | Percolation clusters in non-colloidal sheared suspensions | Quantitative appraisal of a new CCR model for entangled linear polymers | Diffusing-wave spectroscopy in a standard dynamic light scattering setup | Numerical simulations of the competition between the effects of inertia and viscoelasticity on particle migration in Poiseuille flow | Nanoemulsions and bicontinuous emulsions: flow and interfacial properties | Evidence for simultaneous appearance of gradient and vorticity shear bands using time-resolved Rheo-SANS and laser light transmittance measurements | | | | |
| 10:50 - Coffee Break sponsored by IFP Energies Nouvelles | | | | | | | | | | |
| 11:20 | CS4 - S. Pieper | MB4 - C. Liu | AT4 - B. Loppinet | CR4 - A. Lamura | IE4 - M. van Deen | SI4 - D. Hoyle | | | | |
| | Direct observation of velocity fields of concentrated suspensions and formation of wall adjacent particle organization in a parallel plate rheometer via PIV | · | Rheooptical near wall velocimetry using evanescent wave dynamic light scattering | Rheologic and dynamic behavior of sheared vesicle suspensions | Rearrangements and plasticity in two- dimensional foams | Extensional necking instabilities in soft glassy materials | | | | |
| 11:40 | CS5 - S. Kiesgen de Rrichter | MB5 - S. Costanzo | AT5 - D. Auhl | CR5 - S. De | IE5 - B. Dollet | SI5 - L. Bravo | | | | |
| | Rheology of vibrated granular suspensions | Hybrid dendronized polymers: a new class of polymers with tunable rheology | Combined rheo-optics and rheo- scattering study of structural orientation and relaxation in biobased liquid- crystalline polymers | Viscoelastic flow modelling for polymer flooding | Ductile and fragile fracture in aqueous foams | Dynamics of entangled calf-thymus DNA solutions | | | | |
| 12:00 | CS6 - C. Heussinger | MB6 - M. Gahleitner | AT6 - P. Van Puyvelde | CR6 - P. Knechtges | IE6 - R. Höhler | SI6 - N. Germann | | | | |
| | Shear thickening vs. shear thinning: the role of frictional particle interactions in dense non-Brownian suspensions and dry granulates | Rheological effects of polypropylene plasticization in the melt and solid state | Assessing polymer powder flow for laser sintering | A new log-conformation formulation | Bubble or droplet interactions in foams or emulsions are non-local | Nonequilibrium thermodynamic modelling of shear banding in polymeric solutions | | | | |
| 12:20 | CS7 - J. Maia | MB7 - D. Long | AT7 - O. Laukkanen | CR7 - R. Keunings | IE7 - L. Jørgensen | SI7 - O. Manero | | | | |
| | From soft to hard-sphere colloids: The effect of contact force | Cellulose Acetate/plasticizer systems: structure, morphology and dynamics | Predicting strain accumulation in bituminous binders under repeated creep recovery loading | Modeling fiber suspensions: from dilute to concentrated regimes, from micro to macro descriptions | Yield stress and elasticity influence on surface tension measurements | A kinetic network model for inhomogeneous micellar flows | | | | |
| | | 12:40 - Lunch Break | | | | | | | | |

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|----------------------|---|---|---|--|---|---|--|--|
| 10 | CS8 - J. Morris | MB8 - P. Bacova | AT8 - A. Franck | CM1 - A. Gupta | SG1 - H. Winter | FB1 - M. Stading | | |
| 14:10 | Simulation of frictional interactions in | Dynamics of functionalized graphene | Quantitative imaging of fluid systems | Effect of Viscoelasticity on droplet | Soft Solid Rheology near the gel point | Rheology and swallowing – Effect of shear | | |
| | viscous suspensions: examination of discontinuous shear thickening | based polymer nanocomposites through detailed atomistic simulations | under flow: novel 3D rheoscope option for rotational rheometers | breakup and generation in microchannels: a Lattice Boltzmann study | | vs. extensional flow | | |
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| 14:30 | CS9 - B. Guy | MB9 - E. Peuvrel-Disdier | AT9 - J. Tajuelo | CM2 - V. Miralles | SG2 - T. Baumberger | FB2 - J. Engmann | | |
| 14 | Shear thickening drives the transition from colloidal to granular rheology | Structuration of organoclay/ polypropylene nanocomposites during | Magnetic microwires: a new and valuable tool for the interfacial stress rheometer | Foam drainage control using thermocapillary stress in a 2D- | Aging of mixed physical/chemical polymer gels | transport during human swallowing | | |
| | nom conoldar to grandiar meology | twin screw extrusion process | toor for the interracial stress medineter | microchamber | gei3 | transport during naman swanowing | | |
| 0 | CS10 - G. Chatté | MB10 - Y. Rharbi | AT10 Duttinoni | CM3 - T. Gibaud | CC2 A Klymonko | FD2 F La Plais | | |
| 14:50 | Controlling independently yield stress and | The alpha-dynamic and the glass | AT10 - I. Buttinoni Interfacial colloidal monolayers under | Wrinkling gels | SG3 - A. Klymenko Self-assembled responsive hydrogels | FB3 - F. Le Bleis Mechanisms of bread destructuration | | |
| 17 | shear thickening of concentrated | transition in confined polymers: | continuous shear: structure and flow | | based on amphiphilic copolymers | during chewing | | |
| | suspensions with surfactant | polystyrene nanoparticles | profiles | | | | | |
| 10 | CS11 - G. Bossis | MB11 - U. Handge | AT11 - A. Wierschem | CM4 - F. Del Giudice | SG4 - M. Bohdan | FB4 - S. Manneville | | |
| 15:10 | Abrupt shear thickening and stick-slip | Viscoelastic properties of composites of | Modified rotational rheometer for | Rheometry-on-a-chip: measuring the | Supramolecular assembly of self-healing | Failure of a protein gel under creep | | |
| | behavior of concentrated suspensions in the presence of fluidizer molecules | poly(vinyl butyral) and aluminum oxide particles near the maximum packing | measurements at narrow gaps | relaxation time of a viscoelastic liquid through particle migration in | nanocomposite hydrogels | | | |
| | the presence of huldizer molecules | fraction | | microchannel flows | | | | |
| 15:30 - Coffee Break | | | | | | | | |
| 8 | CS12 - A. Lindner | MB12 - G. Peters | AT12 - P. de Souza Mendes | CM5 - L. Campo-Deaño | SG5 - M. Heuzey | FB5 - M. Ortiz-Tafoya | | |
| 16:00 | ' | Self-regulation in flow-induced crystalline | QL-LAOS: the novel LAOS methodology | Complex flow dynamics around 3D | Synergistic interactions between gelatin | Rheological and thermal effects in κ - | | |
| | suspensions | structure formation of polymers | for the rheological characterization of | microbot prototypes: experimental and numerical study | and xanthan gum: effect of pH on | carrageenan gels by addition of | | |
| | | | complex fluids under process condit | numerical study | rheological properties | surfactants | | |
| 16:20 | CS13 - C. Clasen | MB13 - H. Caelers | AT13 - M. Calabrese | CM6 - M. Pilavtepe | SG6 - J. Peixinho | FB6 - L. Ramos | | |
| 16 | Experiments and modelling of the final stage pinching of particle supension | Deformation and failure kinetics of iPP polymorphs | The effect of branching on dynamic response of wormlike micelles (WLMs) | Microstructural difference of colloidal clay mineral suspension in repulsive | Diffusion-mechanical instability of a spherical gel | Novel gels from wheat gluten proteins | | |
| | filaments | polymorphs | under nonlinear shear flows | glassy and attractive gel-like states | sprierical ger | | | |
| 0 | CS14 - C. McIlroy | MB14 - F. Preda | AT14 - A. Santamaria | CM7 - E. Lopez | SG7 - T. Narita | FB7 - G. Della Valle | | |
| 16:40 | Modelling capillary break-up of | Influence of the strength and density of | Simultaneous LAOS and AC electrical | | Stress-strain relation of highly deformable | | | |
| 1 | particulate suspensions | hydrogen bonds on the viscoelasticity of | | flows in two and three-scale porous | dual crosslink gels having permanent and | cellular structure of wheat flour dough | | |
| | | polyamides | thermally activated nanocomposites | media | transient crosslinks | during shaping | | |
| 0 | CS15 - B. Haffner | MB15 - L. Conca | AT15 - F. Martoia | CM8 - B. Laborie | SG8 - K. Erk | FB8 - O. Duvarci | | |
| 7:00 | Flow and jamming of granular suspension | Mechanical response and yield behavior | Multiscale shear rheology of cellulose | Yield-stress fluid film deposition in | Rheological characterization of fracture- | Time dependency of structured food | | |
| | in foams | of glassy polymers | nanofibril water suspensions | circular channels | healing behavior displayed by a physically | materials in Large Amplitude Oscillatory | | |
| | | | | | associating polymer gel subjected to shear deformation | Shear | | |
| 0 | CS16 - N. Taccoen | MB16 - A. Rubin | AT16 - J. Wiklund | CM9 - R. Villey | SG9 - D. Szopinski | FB9 - M. Kristiawan | | |
| 17:20 | Stability and failure of an armored bubble | | | Effect of surface elasticity on the rheology | | A phenomenological model of starchy | | |
| 1 | • | acrylic-based polymer surfaces depending | commercial in-line fluid characterization | of nanometric liquids | of guar gum derivatives crosslinked with | materials expansion by extrusion | | |
| | | on their microstructures | system for industrial applications | | borate and transition metal ions | | | |
| :40 | CS17 - Y. Timounay | MB17 - D. Schubert | AT17 - R. Fulchiron | CM10 - D. Kawale | SG10 - O. Ronsin | FB10 - P. Thomar | | |
| 17: | Dynamics of 2D granular media at free interface | One-dimensional relaxation behaviour | Assessment of the hyper-viscoelastic | How does pore shape influence the flow | Rheological manifestations of strain | Rheological behaviour of dense milk | | |
| | interface | and compression of superabsorbent polymers. A novel approach to reveal | behavior of aorta phantoms from ultrasound images | of polymer solutions through porous media? | induced helix-coil transition in a protein gel | protein suspensions in the presence of minerals | | |
| | | corresponding consecutive differential | | | 6 | 2/3/3 | | |
| | | equation | | | | | | |
| | 18:00 - Poster Session Reception sponsored by Anton Paar (Great Hall) | | | | | | | |