

IWNMNNF 2019 - 19th International Workshop on Numerical Methods for Non-Newtonian Flows, June 16- 20th 2019, Peso da Régua, Portugal

Sunday, 16th June 2019		Monday 17th June 2019		Tuesday 18th June 2019		Wednesday 19th June 2019	
08:40-09:00		Session 0, 08:40-09:00 Organisers Chairman: Ian Frigaard		Session 5, 8:40-10:20 Chairman: Robert Poole		Session 9, 8:40-10:20 Chairman: Luca Brandt	
09:00-09:20		Roger I. Tanner Computations and experiments in non-colloidal suspension rheology		08:40-09:00 Simon Haward Viscoelastic flow and instabilities around microfluidic cylinder		08:40-09:00 Anke Lindner Secondary flows of viscoelastic fluids in serpentine microchannels	
09:20-09:40		Michael D. Graham Critical layer structures and mechanisms in elastoinertial turbulence		09:00-09:20 Mateus Guimarães Direct Numerical Simulations of turbulent planar jets of viscoelastic FENE-P fluids		09:00-09:20 Anselmo Pereira Water entry of yield-stress droplets	
09:40-10:00		Stefan Turek The "Tensor Diffusion" approach for simulating viscoelastic fluids without solvent		09:20-09:40 Yerasi Sumithra Reddy Simulation of viscoelastic fluid flows using lattice Boltzmann method		09:20-09:40 Naser Hamed Modelling of flexible fibres in viscous fluid flow	
10:00-10:20		Monica F. Naccache Cement curing process in the presence of a fluid loss zone		09:40-10:00 Parisa Sarmadi Progress with triple layer core-annular flows		09:40-10:00 Radhakrishna Sureshkumar Direct numerical simulation of heat transfer reduction in viscoelastic turbulent channel flow	
10:20-10:50		COFFEE BREAK		10:00-10:20 Martien A. Hulsen Using the contravariant deformation tensor formulation in simulation of viscoelastic fluid flow		10:00-10:20 Manuel Alves Viscoelastic fluid flow simulation using coupled solvers in OpenFOAM®	
10:50-11:10		Session 2, 10:50- 12:30 Chairman: Mike Graham		10:20-10:50 COFFEE BREAK		10:20-10:50 COFFEE BREAK	
11:10-11:30		Lin Zhou Stochastic mesoscale modeling for wormlike micellar and networked fluids		10:50-11:10 Stefano Lovato Verification and Validation of CFD simulations of non-Newtonian laminar flows on canonical test cases		10:50-11:15 Round table	
11:30-11:50		Kiyosi Horiuti A dumbbell model with binary slip states in non-affine polymer-diluted turbulent flow		11:10-11:30 Hugo Abreu Influence of polymer additives on small scale dynamics of a turbulent/non-turbulent interface in shearless flows		11:50-12:00 M. Naccache ICR 2020 announcements	
11:50-12:10		Pierre Seramito A Newton method for the log-conformation formulation of the Johnson-Segalman viscoelastic fluid		11:30-11:50 Stylianos Varchanis New, faster and consistent FEM for viscoelastic flows		12:10-12:15	
12:10-12:30		Ali Etrati Formation of static layers during displacement of Bingham fluids in eccentric annuli: Three-dimensional simulations		11:50-12:10 Jan Helmig Unsteady, Temperature-Dependent, and Non-Newtonian Simulations in Plastics Processing		12:10-12:15 A fully-resolved immersed boundary numerical method to simulate particle-laden viscoelastic flows	
12:30-14:00		LUNCH		12:10-12:30 Célio Fernandes		LUNCH	
14:00-14:20		Session 3, 14:00-15:40 Chairman: Martien Hulsen		12:30-14:00 LUNCH		12:15-13:45 LUNCH	
14:20-14:40		Gilmar Mompean Beyond the Maximum Drag Reduction Asymptote		14:00-14:20 Marco Ellero Shear-thickening of a non-colloidal suspension with a viscoelastic matrix		14:30-19:30 TOUR	
14:40-15:00		Olivier Ozenda A new tensorial model for non-colloidal suspensions: from microstructure anisotropy to normal stress differences and shear induced migration.		14:20-14:40 Hamid Anbarlooei Direct numerical simulation of turbulent flows of power law fluids over rough walls			
15:00-15:20		Simon Ingelsten Efficient Viscoelastic Flow Computation using a Lagrangian-Eulerian method and GPU-acceleration		14:40-15:00 Michael Cromer Role of polymer physics and extensional rheology in the development of an elastic instability in cross-slot flow			
15:20-15:40		Tim Phillips Compressible and Nonisothermal Viscoelastic Flow between Eccentrically Rotating Cylinders		15:00-15:20 Jonathan Evans Die-swell singularity for PTT and Giesekus fluids			
15:40-16:10		Larissa Muravleva The accelerated proximal gradient method for yield-stress fluid flows with wall slip		15:20-15:40 Luca Brandt Laminar and Turbulent flows of an elastoviscoplastic fluid			
16:10-16:30		COFFEE BREAK		15:40-16:10 COFFEE BREAK			
16:30-16:50		Session 4, 16:10-17:50 Chairman: Marco Ellero		16:10-16:30 Angela Nieckele Non-linear Reynolds Stress and Conformation Tensors Models for Viscoelastic Turbulent Flow			
16:50-17:10		Julien Férec Effect of coupling 2D non-homogeneous flows and fiber orientation for Newtonian and power-law suspending fluids		16:30-16:50 J. Esteban López-Aguilar Numerical predictions for contraction-flow of Boger fluids under various geometrical configurations			
17:10-17:30		Ekaterina Muravleva Deep learning methods for viscoplastic flows modelling		16:50-17:10 Flávio Marchesini Study of Polypropylene planar flow and extrudate swell: A comparison between 3D numerical simulations and experiments			
17:30-17:50		Konstantinos Zografos A Phase Field approach for two-phase viscoelastic flows		17:10-17:30 Saeed Parvar Local Similarity Solution for a steady Laminar Planar Jet of a viscoelastic FENE-P Fluid			
17:50-18:10		Seyed Taghavi Effects of wall slip on the stability of plane Poiseuille flow of Bingham fluids		17:30-17:50 Mónica Oliveira Optimised microfluidic designs for complex fluid flow studies under controlled deformation			
18:00-19:00		Miguel Nóbrega Effects of elasticity, inertia and viscosity ratio on the drag coefficient of a sphere translating through a viscoelastic fluid		17:50-18:10			
18:00-19:00		Registration		18:00-19:00			
19:00-19:30		Welcome drink		19:00-19:30			
19:30-21:30		DINNER		19:30-21:30		DINNER	
		19:30-21:30		19:30-21:30		19:20-22:30	
		DINNER		DINNER		BANQUET	