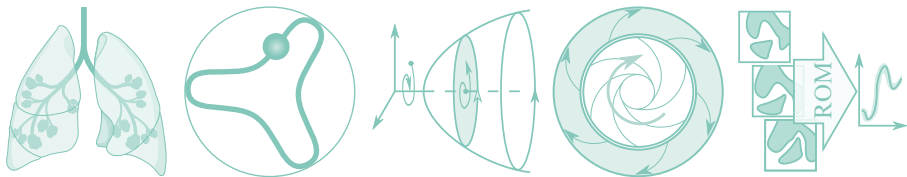


LIST OF PUBLICATIONS

Francesco Romano

Department of Fluid Mechanics and Energetics, Arts et Métiers, Lille

francesco.romano@ensam.eu



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BIOLOGICAL FLOWS

- B1 M. Muradoglu, F. Romanò, H. Fujioka, J. B. Grotberg, *Effects of surfactant on propagation and rupture of a liquid plug in a tube.*, J. Fluid Mech., **872** (2019) 407–437.
- B2 F. Romanò, H. Fujioka, M. Muradoglu, J. B. Grotberg, *Liquid plug formation in an airway closure model*, Phys. Rev. Fluids, **4** (2019) 093103.
- B3 Y. Hu, F. Romanò, J. B. Grotberg, *Effects of Surface Tension and Yield Stress on Mucus Plug Rupture: A Numerical Study*, J. Biomech. Eng., **142** (2020) 061007.
- B4 F. Romanò, V. Suresh, P. A. Galie, J. B. Grotberg, *Peristaltic flow in the lymphatic system*, Nature – Sci. Rep., **10** (2020), 21065.
- B5 F. Romanò, M. Muradoglu, H. Fujioka, J. B. Grotberg, *The effect of viscoelasticity in an airway closure model*, J. Fluid. Mech., **913** (2021), A31.
- B6 E. P. Beretta, F. Romanò, G. A. Sancini, J. B. Grotberg, G. F. Nieman, G. A. Miserocchi, *Pulmonary interstitial matrix and lung fluid balance from normal to the acutely injured lung*, Front. Physiol., **12** (2021), 781874.



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- B7 O. Erken, F. Romanò, J. B. Grotberg, M. Muradoglu, *Capillary instability of a two-layer annular film: An airway closure model*, J. Fluid Mech., **934** (2022), A7.
- B8 S. A. Bahrani, S. Hamidouche, M. Moazzen, K. Seck, C. Duc, M. Muradoglu, J. B. Grotberg, F. Romanò, *Propagation and rupture of elastoviscoplastic liquid plugs in airway reopening model*, J. Non-Newt. Fluid Mech., **300** (2022), 104718.
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- B10 F. Romanò, M. Muradoglu, H. Fujioka, J. B. Grotberg, *The effect of surfactant in an airway closure model*, Phys. Rev. Fluids, **7** (2022), 093103.
- B11 J. B. Grotberg, F. Romanò, *Computational Pulmonary Edema*, APL Bioengineering, **accepted** (2022).
- B12 O. Erken, B. Fazla, D. Izbassarov, F. Romanò, J. B. Grotberg, M. Muradoglu, *Effects of elastoviscoplastic properties of mucus on airway closure in healthy and pathological conditions*, **submitted** (2022).



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- P1 F. Romanò, H. C. Kuhlmann, *Numerical investigation of the interaction of a finite-size particle with a tangentially moving boundary*, Int. J. Heat Fluid Fl., **62** (A) (2016) 75–82.
- P2 F. Romanò, H. C. Kuhlmann, *Smoothed-profile method for momentum and heat transfer in particulate flows*, Int. J. Numer. Meth. Fluids, **83** (6) (2017) 485–512.
- P3 F. Romanò, H. C. Kuhlmann, *Particle–boundary interaction in a shear-driven cavity flow*, Theor. Comp. Fluid Dyn., **31** (4) (2017) 427–445.
- P4 F. Romanò, A. Hajisharifi, H. C. Kuhlmann, *Cellular flow in a partially filled rotating drum: regular and chaotic advection*, J. Fluid Mech., **825** (2017) 631–650.
- P5 F. Romanò, S. Albensoeder, H. C. Kuhlmann, *Topology of three-dimensional steady cellular flow in a two-sided anti-parallel lid-driven cavity*, J. Fluid Mech., **826** (2017) 302–334.
- P6 F. Romanò, H. C. Kuhlmann, M. Ishimura, I. Ueno *Limit cycles for the motion of finite-size particles in axisymmetric thermocapillary flows in liquid bridges*, Phys. Fluids, **29** (2017) 093303.



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- P7 C. Kuehn, F. Romanò, H. C. Kuhlmann, *Tracking particles in flows near invariant manifolds via balance functions*, *Nonlinear Dynamics, Nonlinear Dyn.*, **92** (2018) 983–1000.
- P8 F. Romanò, H. C. Kuhlmann, *Finite-size Lagrangian coherent structures in thermocapillary liquid bridges*, *Phys. Rev. Fluids*, **3** (2018) 094302.
- P9 F. Romanò, *Oscillatory switching centrifugation: dynamics of a particle in a pulsating vortex*, *J. Fluid Mech.*, **857** (2018) R3.
- P10 F. Romanò, H. Wu, H. C. Kuhlmann, *A generic mechanism for finite-size coherent particle structures*, *Int. J. Multiphase Flow*, **111** (2019) 42–52.
- P11 F. Romanò, Parvathy K. K., H. C. Kuhlmann, *Finite-size Lagrangian coherent structures in a two-sided lid-driven cavity*, *Phys. Rev. Fluids*, **4** (2019) 024302.
- P12 F. Romanò, H. C. Kuhlmann, *Finite-size coherent structures in thermocapillary liquid bridges: A review*, *Int. J. Microgravity Sci. Appl.*, **36** (2019) 360201.



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- P13 F. Romanò, *Reconstructing the unperturbed fluid flow by tracking of large particles*, Phys. Rev. Fluids, **4** (2019) 104301.
- P14 F. Romanò, P.-E. des Boscq, H. C. Kuhlmann, *Forces and torques on a sphere moving near a dihedral corner in creeping flow*, Eur. J. Mech. - B/Fluids, **84** (2020) 110–121.
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- P16 I. Barmak, F. Romanò, P. Kunchi Kannan, H. C. Kuhlmann, *Coherent particle structures in high-Prandtl-number liquid bridges*, Micrograv. Sci. Tech., **33** (2021), 1-10.
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- P19 F. Romanò, P.-E. des Boscq, H. C. Kuhlmann, *Stokesian motion of a spherical particle near a right corner made by tangentially moving walls*, J. Fluid Mech., **927** (2021), A41.



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- P20 I. Barmak, F. Romanò, H. C. Kuhlmann, *Finite-size coherent particle structures in high-Prandtl-number liquid bridges*, Phys. Rev. Fluids, **6** (2021), 084301.
- P21 F. Romanò, *Reconstructing the neutrally-buoyant particle flow near a singular corner*, Acta Mech. Sinica, **38** (2022), 1-8.
- P22 H. Wu, F. Romanò, H. C. Kuhlmann, *Attractors for the motion of a finite-size particle in a cubic lid-driven cavity*, J. Fluid Mech., **accepted** (2022).



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- S1 H. C. Kuhlmann, F. Romanò, *The lid-driven cavity*, Computational Modelling of Bifurcations and Instabilities in Fluid Dynamics, Springer, **50** (2019) 233–310.
- S2 F. Romanò, *Stability of generalized Kolmogorov flow in a channel*, Phys. Fluids, **33** (2021), 024106.
- S3 M. Stojanović, F. Romanò, H. C. Kuhlmann, *Stability of thermocapillary flow in liquid bridges fully coupled to the gas phase*, J. Fluid Mech., **949** (2022), A5.
- S4 M. Stojanović, F. Romanò, H. C. Kuhlmann, *Flow instability of high-Prandtl-number liquid bridges that are exposed to axial gas streams - Impact of dynamic surface deformations*, **to submit** (2022).
- S5 M. Stojanović, F. Romanò, H. C. Kuhlmann, *Flow instability of high-Prandtl-number liquid bridges with temperature-dependent properties*, **to submit** (2022).
- S6 M. Stojanović, F. Romanò, H. C. Kuhlmann, *Instability of axisymmetric flow in thermocapillary liquid bridge with temperature-dependent material properties: Derivation of the kinetic and thermal energy budgets*, **to submit** (2022).



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- T1** A. Baretter, B. Godard, P. Joseph, O. Roussette, F. Romanò, R. Barrier, A. Dazin, *Experimental and numerical analysis of a compressor stage under flow distortion*, Int. J. Turbomach. Propuls. Power, **6** (2021), 43.
- T2** M. Fan, G. Bois, A. Dazin, F. Romanò, *Effect of leakage on the instabilities in the vaneless diffuser of a centrifugal pump*, **submitted** (2022).
- T3** O. El Mekkadem, X. Chen, C. Phan, P. Joseph, A. Dazin, F. Romanò, *Wall attached jets for flow control*, **submitted** (2022).
- T4** A. Baretter, P. Joseph, O. Roussette, A. Dazin, F. Romanò, *Scaling laws at stall in an axial compressor with an upstream perturbation*, **submitted** (2022).
- T5** M. Fan, G. Bois, A. Dazin, F. Romanò, *Effect of diffuser length on the instabilities in the vaneless diffuser of a centrifugal pump*, **to submit** (2022).
- T6** M. Fan, G. Bois, A. Dazin, F. Romanò, *Modeling inflow condition for a vaneless diffuser of a centrifugal pump*, **to submit** (2022).



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- R1 F. Romanò, H. C. Kuhlmann, *Heat transfer across the free surface of a thermocapillary liquid bridge*, Tech. Mech., **39** (2019) 72–84.
- R2 F. Romanò, A. Charles, F. Dottori, A. S. Bahrani, *Transition to turbulence in a heated non-Newtonian pipe flow*, Phys. Fluids, **33** (2021), 091702.
- R3 A. Charles, F. Romanò, T. Ribeiro, S. Azimi, V. Rocher, J.-C. Baudez, S. A. Bahrani, *Laminar-turbulent intermittency in pipe flow for an Herschel-Bulkley fluid: Radial receptivity to finite-amplitude perturbations*, **accepted** (2022).

