

# UNIVERSITÀ DEGLI STUDI DELL'AQUILA

# Prof. Luca Biancofiore Curriculum scientifico

(Aggiornato il 2024/02/29)

## Personal contacts

onal contacts
• ? Email: luca.biancofiore@univaq.it
• ? Office Phone: +39 0862 434546
• ? Webpage: web4.bilkent.edu.tr/fluidframe
• ? Twitter: https://twitter.com/FluidFrameLab
• ? Linkedin: https://www.linkedin.com/in/luca-biancofiore-a9675383/  Qualification
• ? 2007 - 2011: PhD Thesis in Applied Mathematics
• ? Subject: Influence of confinement on the spatio-temporal development of wake flows

? University of Nice - Sophia Antipolis (France)

• ? 2004 - 2006: MSc in Chemical Engineering
• ? University of L?Aquila (Italy)
• ? Final grade: 110/110 cum laude
• ? 2000 - 2004: BSc in Chemical Engineering
• ? University of L?Aquila (Italy)
? Final grade: 110/110 cum laude
Employment
• ? 10/2023: Associate Professor at University of L?Aquila (Italy)
• ? 07/2022-09/2023: Associate Professor at Bilkent University (Turkey)
• ? 07/2022-09/2023: Associate Professor at Bilkent University (Turkey) • ? 01/2016-07/2022: Assistant Professor at Bilkent University (Turkey)
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? 01/2012-08/2012: Research Associate at Imperial College London (United Kingdom)

? 09/2011-12/2011: Postdoctoral researcher at University of Nice - Sophia Antipolis (France)

#### **Research Grants**

- ? 2022-2025: TUBITAK 1001, SOFICOOL (SOlar falling-Film COOLing): a detailed analysis towards a new design of the cooling system of photovoltaic thermal modules for greenhouse applications.
- ? 2022-2025: TUBITAK 1001, Multiscale modelling and texture design for lubricated interfaces with non-Newtonian fluids.
- ? 2021-2024: TUBITAK 2507 Bilateral cooperation programs: TUBITAK DFG (Germany), Distribution of Particles in a Droplet and Positioning on the Surface During Evaporation.
- ? 2020-2022: TUBITAK 2509 Bilateral cooperation programs: TUBITAK CNR (Italy), Self-assembly of complex shaped active particles in controlled optical potentials.
- ? 2019-2024: European Training Network, Active Matter: From Fundamental Science to Technological Applications
  - ? 2018-2021: TUBITAK 3501, Career Development Program (CAREER), Investigation of phase-changing falling liquid films sheared by a turbulent gas
    - ? 2017-2021: TUBITAK 1001, A theoretical-computational framework to model fluid lubrication
  - ? 2014-2016: Imperial College Junior Research Fellowship 2015, Unravelling the complexity in elastohydrodynamic

#### lubrication

- ? 2012-2014: Marie Curie IntraEuropean Fellowship 2012, Stability and transition to turbulence in polymeric shear flows
- ? 2012-2013: Go?ran Gustafsson Postdoctoral Fellowship in Science, Stability of non-Newtonian shear flows

  Awards
- ? 2020: Mustafa Parlar Research Incentive Award
   Teaching Activities
- ? 2024-ongoing. University of L?Aquila, Instructor, Vehicle Aerodynamics (Master course of Mechanical Engineering), 60h
- ? 2024-ongoing. University of L?Aquila, Instructor, Computational Fluid Dynamics (Master course of Mathematical Engineering), 60h
- ? 2021
- : Lecture on ?Computational Fluid Dynamics of Active Fluids? on the workshop ?Training on Numerical Method s in Active Matter? in the framework of the European Training Network, ?Active Matter: From Fundamental Science to Technological Applications? (2 hours).
- ? 2018-2023: Bilkent University, Instructor, Thermo-Fluids I (Undergraduate course of Mechanical Engineering, 56h)
- ? 2017-2023: Bilkent University, Instructor, Principles of Turbomachinery (Undergraduate course of Mechanical Engi-

neering, 42h)

- ? 2017-2023: Bilkent University, Instructor, Thermo-Fluids II (Undergraduate course of Mechanical Engineering, 56h)
   ? 2016-2023: Bilkent University, Instructor, Fluid Mechanics (Master course of Mechanical Engineering, 42h)
- ? 2016-2023: Bilkent University, Instructor, Introduction to CFD (Undergraduate course of Mechanical Engineering, 42h)
- ? 2015-2016: Imperial College London, Tutorials Fluid Mechanics II (Undergraduate course of Mechanical Engineering 30h)
- ? 2008-2011: University of Nice, Tutorials Probability/Statistics (Undergraduate course of the Business school 66h), Mathematics (Undergraduate course of the Business school 96h), Calculus (Undergraduate course of Chemistry/Biology degree 36h), Algebra (Undergraduate course of Computer Science degree 64h)

### Graduate students and postdocs

- ? M.Sc.
- ? Hammam Mohamed (09/2016-08/2019). Linear stability analysis of evaporating falling liquid films.
- ? Humayun Ahmed (09/2017-08/2019). Non-linear modelling of non-Newtonian hydrodynamic lubrication.
- ? Omair Mohamed (09/2017-11/2019). Spatio-temporal evolution of evaporating falling liquid films sheared by a gas.
- ? Samuel Shari Gamaniel (01/2018-11/2020). Viscoelastic effects in lubricated contacts in the presence of cavitation.

- ? Solmaz Khoshavaz (09/2017-12/2020). A spectral vanishing viscosity method for large-eddy simulations of two- fluid flow.
- ? Mert Yusuf C?am (02/2019-01/2022). A numerical algorithm to model wall slip and cavitation in t wo-dimensional hydrodynamically lubricated contacts.
- ? Ali Kerem Erdem (09/2019-09/2022). Numerical study on the dispersion and deposition of particles in evaporating sessile droplets.
- ? Umar Rauf (09/2020-09/2023). Modelling a Janus particle activated by an optical potential
- ? S?arp Ilgaz Koc? (09/2021-ongoing). Optimisation of surface textured contacts with non-Newtonian lu bricants. ? Ahmet Burak Y?ld?r?m (09/2021-ongoing). Molecular dynamics of polymeric lubricants. ? Mehmet Hakan Sar? (09/2021-ongoing). Viscoelastic films squeezed by viscoelastic walls.
  - ? Ph.D.
    - ? Humayun Ahmed (08/2019-ongoing). Modelling thermal effects in viscoelastic lubricants.
  - ? Omair Mohamed (11/2019-ongoing). Evolution of a liquid film flowing on an irradiated surface. ? Ayten Gu?lce Bayram (01/2020-ongoing). Crystallisation of active colloidal s uspensions.
  - ? Postdocs
  - ? Iryna Kasianiuk (09/2020-08/2022). Trapping Janus particles with a focused optical potential
  - ? Denis Kasyanyuk (09/2020-08/2022). Clustering of non-spherical Janus particles with optical potentials ? Aida Abdallah (10/2022-ongoing). Modelling particle flocculation in evaporating sessile droplets

#### Evidence of esteem

- ? 08/2023: Keynote lecture at the 19th International Congress of Rheology in Athens, Session Microfluidics, nanoflu- idics, thin films and confined flows.
- ? 05/2022-08/2022: Visiting Professor at Polytechnic University of Bari (Italy)
- ? 02/2022: Abilitazione Scientifica Nazionale in Aerospace and Naval Engineering 09/A1 (Qualification to become

Associate Professor in Italy)

- ? 08/2019: Docentlik in Mechanical Engineering (Qualification to become Associate Professor in Turkey)
- ? 09/2017-ongoing: Visiting academic researcher at Imperial College London (UK)
- ? 09/2013-10/2013: Invited researcher at EPFL (Lausanne, Switzerland)
- ? Editorial Duties. Referee: (i) Journal of Fluid Mechanics, (ii) Physics of Fluids, (iii) Computers & Fluids, (iv) Journal of Turbulence, (v) European Journal of Mechanics B/Fluids, (vi) Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering, (vii) Meccanica, (viii) International Journal of Heat and Fluid Flow, (ix) Fluid Dynamics Research, (x) Engineering Science and Technology, an International Journal, (xi) Journal of Applied Physiology, (xii) Tribology International, (xiii) Proceedings of the Institution of Mechanical Engineering Science, (xiv) Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, (xv) Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering, (xvi) Physical Review Letters
- ? Workshop & Symposium: Organisation of the Minisymposium ?About the modelling of lo w-Reynolds number fluid- structure interactions? at 6th ECCM- 7th ECFD, 11-15 June, 20 18, Glasgow, UK.

#### **Invited seminars**

? 12/2023: Improving tribological performance in hydrodynamically lubricated contacts: the	ne
role of polymer additives, University of Naples - Federico II (Italy)	

- ? 05/2023: Improving tribological performance in hydrodynamically lubricated contacts: the role of polymer additives, University of Modena and Reggio Emilia (Italy)
- ? 01/2023: Heated confined falling liquid films, University College Dublin (Ireland)
- ? 10/2022: Improving tribological performance in hydrodynamically lubricated contacts: the role of polymer additives,

University of L?Aquila (Italy)

- ? 07/2022: Heated confined falling liquid films, Polytechnical University of Bari (Italy)
- ? 06/2022: Improving tribological performance in hydrodynamically lubricated contacts: the role of engineered surfaces and polymer additives, Polytechnical University of Bari (Italy)
- ? 10/2021: The kernel wave perspective: from geophysics to engineering, Bayreuth University (Germany)
- ? 11/2019: The kernel wave perspective: from geophysics to engineering, UC-Merced (CA, USA)

? 09/2019: The kernel wave perspective: from geophysics to engineering, Otto Von Guericke University - Magdeburg (Germany)

- ? 06/2019: The kernel wave perspective: from geophysics to engineering, University of Genoa (Italy)
- ? 01/2019: The kernel wave perspective: from geophysics to engineering, ETH-Zurich (Switzerland)
- ? 07/2018: The kernel wave perspective: from geophysics to engineering, ISSI Bern (Switzerland).
- ? 06/2018: The kernel wave perspective: from geophysics to engineering, University of Rome - La Sapienza (Italy)
- ? 12/2017: The kernel wave perspective: from geophysics to engineering, Technion, Israel Institute of Technology (Haifa, Israel)
- ? 12/2017: Fluid dynamics modelling in an optical manipulated environment, Weizmann Institute of Science (Rehovot, Israel) in the occasion of Israel-Turkey workshop on Nanoscience & Nanotechnology
- ? 10/2017: The kernel wave perspective: from geophysics to industry, Gotheborg University (Sweden)
- ? 09/2015: Why confinement and surface tension destabilise shear flows?, Bilkent University (Ankara, Turkey)
- ? 05/2015: Capillary effect in planar shear flows, LHEEA, Ecole Centrale Nantes (France)

- ? 02/2015: Why confinement and surface tension destabilise shear flows?, Koc? U niversity (Istanbul, Turkey) ? 11/2014: Capillary effect in planar shear flows, LMSC, Paris 7-Diderot (France) ? 05/2014: 2D vs 3D turbulence in shear flows, LMFA (Lyon, France) ? 11/2013: Confined turbulent wakes, LIMSI (Orsay, France) ? 11/2013: Influence of confinement on spatially evolving wakes IRPHE (Marseille, France) ? 07/2013: Interaction between counterpropagating Rossby waves and capillary waves in planar jets and wakes, Weiz- mann Institute of Science (Rehovot, Israel) ? 05/2013: Influence of confinement on spatially evolving wakes, IMFT (Toulouse, France) ? 10/2012: Confined turbulent wakes, KTH (Stockholm, Sweden) Administrative tasks ? 08/2017-06/2018: Departmental exchange program coordinator Tasks and achievements: ? Manage all the activities connected to the exchange programs (i.e. Erasmus)
  - ? 07/2017-09/2023: Departmental seminar coordinator Tasks and achievements:

? Organising the seminar series of the Mechanical Engineering Department ? Invited speakers are world-renown researchers in their fields

? 10/2020-04/2021: Member of the Faculty Search and Hiring Committee of the Nanotechnology Research Center at Bilkent.

#### Scientific interests

? Lubrication approximation, shear flows, CFD (DNS, LES), polymer flows, hydrodynamic stability, multiphase flows, capillarity, phase-change, active matter.

Publications

?
30) G. K?l?c?alan, S. Musacchio & L. Biancofiore, Learning capability of micro-swimmers exposed to forced two- dimensional turbulence, Phys. Rev. Fluids., preprint, 2024.

? 29) D. O?zev, F. Gallaire & L. Biancofiore, The Effect of a Non-Uniform Heating in the Axisymmetric Rayleigh- Be?nard Instability, Phys. Rev. Fluids., preprint, 2024

? 28) M. H. Sari, C. Putignano, G. Carbone & L. Biancofiore, The effect of fluid viscoelasticity in soft lubrication, Tribol. Int., submitted, 2023.

? 27) A. B. Yildirim, A. Erbas? & L. Biancofiore, Molecular Rheology of Nanoconfined Polymer Melts, J. Rheol., accepted, 2024.

? 26) A. K. Erdem, F. Denner & L. Biancofiore, Numerical simulations of the dispersion and deposition of particles in evaporating sessile droplets, Langmuir,

? 25) H. Ahmed & L. Biancofiore, Modeling polymeric lubricants with non-linear stress constitutive relations J. Non- Newton. Fluid, 321, 105123, 2023.

•

? 24) D. B. Ciriza, A. Callegari, M. G. Donato, B. C?ic?ek, A. Ma gazzu?, I. Kasianiuk, D. Kasianiuk, F. Schmidt, A. Foti, P. G. Gucciardi, G. Volpe, M. Lanza, L. Biancofiore, O. M. Marago?, Optically Driven J anus Micro Engine with Full Orbital Motion Control. ACS Photonics, 10, 9, 3223?3232, 2023

? 23) A.G. Bayram, F. J. Schwarzendahl, H. Lo?wen & L. Biancofiore, Rheology of Dense Active Colloidal Suspensions, Soft Matter, 19 (24), 4571-4578, 2023.

? 22) H. Mohamed, J. Sesterhenn & L. Biancofiore, The effect of side walls on the stability of falling films, J. Fluid Mech., 964, A40, 2023.

? 21) M. Y. C?am, M. Giacopini, D. Dini & L. Biancofiore, A numerical algorithm to model wall slip and cavitation in two-dimensional hydrodynamically lubricated contacts, Tribol. Int., 184, 108444, 2023

•

? 20) H. Ahmed & L. Biancofiore, A modified viscosity approach for shear thinning lubricants, Phys. Fluids, 34, 103103, 2022.

•

? 19) O. A. A. Mohamed, M. C. Dallaston & L. Biancofiore, Spatiotemporal evolution of evaporating liquid films sheared by a gas, Phys. Rev. Fluids., 6, 114002, 2021.

•

? 18) S. S. Gamaniel, D. Dini & L. Biancofiore, The effect of fluid viscoelasticity in lubricated contacts in the presence of cavitation, Tribol. Int., 160, 107011, 2021

•

? 17) H. Ahmed & L. Biancofiore, A new approach for modelling viscoelastic thin film lubrication, J. Non-Newton. Fluid, 292, 104524, 2021

•

? 16) T. Zaqarashvili, M. Albekioni, J. L. Ballester, Y. Bekki, L. Biancofiore, et al., Rossby waves in Astrophysics, Space Science Reviews, 217, 15, 2021

•

? 15) H. Mohamed & L. Biancofiore, Linear stability analysis of evaporating falling liquid films, International Journal of Multiphase Flow , 130, 103354, 2020.

? 14) S. M. Mousavi, I. Kasaniuk, D. Kasanyuk, S. K. P. Velu, A. Callegari, L. Biancofiore & G. Volpe, Clustering of Janus Particles in Optical Potential Driven by Hydrodynamic Fluxes, Soft Matter, 15, 5748-5759, 2019

•

? 13) L. Biancofiore, M. Giacopini & D. Dini, Interplay between wall slip and cavitation: A complementary variable approach, Tribol. Int., 137, 324-339, 2019.

•

? 12) L. Biancofiore & O. M. Umurhan, Linear and nonlinear stability of a quasi-geostrophic mixing layer subject to a uniform background shear, Phys. Rev. Fluids., 4, 013803, 2019.

•

? 11) F. Schmidt, A. Magazzu?, A. Callegari, L. Biancofiore, F. Cichos & G. Volpe, Microscopic engine powered by critical demixing, Phys. Rev. Let.,

? 10) L. Biancofiore, E. Heifetz, J. Hoepffner & F. Gallaire, Understanding the destabilizing role for surface tension in planar shear flows in terms of wave interaction, Phys. Rev. Fluids., 2, 103901, 2017.

•

? 9) L. Biancofiore, L. Brandt & T. A. Zaki, Streaks instability in viscoelastic Couette flow, Phys. Rev. Fluids., 2. 043304, 2017.

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? 8) L. Biancofiore, F. Gallaire & E. Heifetz, Interaction between counterpropagating Rossby waves and capillary waves in planar shear flows, Phys. Fluids, 27, 044104, 2015.

•

? 7) L. Biancofiore, F. Gallaire, P. Laure & E. Hachem, Direct numerical simulations of two-phase immiscible wakes, Fluid Dyn. Res., 46, 041409, 2014.

•

? 6) L. Biancofiore, Crossover between two- and three-dimensional turbulence in spatial mixing layers, J. Fluid Mech., 745, 164-179, 2014.

•

? 5) L. Biancofiore & F. Gallaire, Counterpropagating Rossby waves in confined plane wakes, Phys. Fluids , 24, 074102, 2012.

•

? 4) L. Biancofiore, F. Gallaire & R. Pasquetti, Influence of confinement on obstacle-free turbulent wakes, Comp.& Fluids, 58, 27-44, 2012.

•

? 3) L. Biancofiore, F. Gallaire & R. Pasquetti, Influence of confinement on a two-dimensional wake, J. Fluid Mech., 688, 297-320, 2011.

•

? 2) L. Biancofiore & F. Gallaire, The influence of shear layer thickness on the stability of confined two-dimensional wakes, Phys. Fluids 23, 034103, 2011

•

? 1) L. Biancofiore & F. Gallaire, The influence of confinement on temporal stability of plane jets and wakes, Phys. Fluids 22, 014106, 2010.

### **Proceedings**

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? 3) F. Schmidt, A. Magazzu?, A. Callegari, L. Biancofiore, F. Cichos, G. Volpe, A Critical Microscopic Engine in an Optical Tweezers, Latin America Optics and Photonics Conference, 2018.

(

? 2) L. Biancofiore, F. Gallaire & R. Pasquetti, Large eddy simulations of confined turbulent wake flows, J. Phys. Conf. Ser., 318, 042044, 2011.

•

? 1) L. Biancofiore, F. Gallaire & R. Pasquetti, Influence du confinement sur un sillage bi-dimensionnel, 19e?me Congre?s Franc?ais de Me? canique, Marseille, 2009.

## Conference presentations

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? 39) L. Biancofiore & H. Ahmed, Modeling polymeric lubricants with non-linear stress constitutive relations, 76th Annual Meeting of APS Division of Fluid Dynamics, 19-21 November, 2023, Washington, DC, USA.

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? 38) A.G. Bayram, F. J. Schwarzendahl, H. Lo?wen & L. Biancofiore, Motility-induced shear thickening in dense colloidal suspensions, 76th Annual Meeting of APS Division of Fluid Dynamics, 19-21 November, 2023, Washington, DC, USA.

? 37) A.G. Bayram, F. J. Schwarzendahl, H. Lo?wen & L. Biancofiore, Rheology of Dense Active Colloidal Suspensions, 31 July - 4 August 2023, Athens, Greece.

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? 36) A. B. Yildirim, A. Erbas? & L. Biancofiore, Molecular Rheology of Nanoconfined Polymer Melts, 31 July - 4 August 2023, Athens, Greece.

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? 35) H. Ahmed & L. Biancofiore, Understanding viscoelastic effects in thin-film lubrication, 19th International Congress of Rheology, 31 July - 4 August 2023, Athens, Greece (KEYNOTE LECTURE).

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? 34) D. O?zev, F. Gallaire & L. Biancofiore, The Effect of a Non-Uniform Heating in the Axisymmetric Rayleigh- Be?nard Instability, 1 1th International Marangoni Association Conference, 19-22 June, Bordeaux, France.

•

? 33) O. A. A. Mohamed, C. Ruyer-Quil & L. Biancofiore, Stability analysis of volatile liquid films in different evapor ration regimes,11th International Marangoni Association Conference, 19-22 June, Bordeaux, France.

•

? 32) A. K. Erdem, F. Denner & L. Biancofiore, Particle dispersion and deposition in evaporating two-dimensional sessile droplets, 11th International Marangoni Association Conference, 19-22 June, Bordeaux, France.

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? 31) L. Biancofiore, H. Mohamed & J. Sesterhenn, The effect of side walls on the stability of falling films, 75th Annual Meeting of APS Division of Fluid Dynamics, 20-22 November, 2022, Indianapolis, IN, USA.

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? 30) H. Ahmed & L. Biancofiore, A modified viscosity approach for shear thinning lubricants, 14th Euromech Fluid Mechanics Conference, 13-16 September 2022, Athens, Greece.

? 29) U. E. Arun, H. Ahmed & L. Biancofiore, Understanding the effects of viscoelasticity in lubricants, 14th Euromech Fluid Mechanics Conference, 13-16 September 2022, Athens, Greece.

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? 28) A. G. Bayram & L. Biancofiore, Mesoscopic simulations of the phase transition in active colloidal suspensions, 14th Euromech Fluid Mechanics Conference, 13-16 September 2022, Athens, Greece.

? 27) H. Mohamed, J. Sesterhenn & L. Biancofiore, The effect of side walls on the stability of falling films, 14th Euromech Fluid Mechanics Conference, 13-16 September 2022, Athens, Greece.

? 26) O. A. A. Mohamed, M. C. Dallaston & L. Biancofiore, Spatio-temporal evolution of evaporating liquid films sheared by a gas, 9th International Symposium ?Bifurcations and In stabilities in Fluid Dynamics?, 15-19 August, 2022, Gr oningen, Netherlands.

? 25) O. A. A. Mohamed, M. C. Dallaston & L. Biancofiore, Spatio-temporal evolution of evaporating liquid films sheared by a gas, 74th Annual Meeting of APS Division of Fluid Dynamics, 21-23 November, 2021, Phoenix, AZ, USA.

? 24) H. Ahmed & L. Biancofiore, The effect of viscoelasticity in lubricated contacts, 25th ICTAM 2020+1, August 22-27, 2021, Milan, Italy

? 23) L. Biancofiore, M. Giacopini & D. Dini, Interplay between wall slip and surface texturing: a novel algorithm based on variational inequalities, 25th ICTAM 2020+1, August 22-27, 2021, Milan, Italy

? 22) L. Biancofiore & H. Ahmed, A novel non-linear onedimensional model for viscoelastic lubricants, 72nd Annual Meeting of APS Division of Fluid Dynamics, 23-26 November, 2019, Seattle, WA, USA.

•

? 21) H. Mohamed & L. Biancofiore, Stability analysis of evaporating falling liquid films, 8th International Symposium ?Bifurcations and Instabilities in Fluid Dynamics?, 16-19 July, 2019 , Limerick, Ireland.

•

? 20) L. Biancofiore, S. M. Mousavi, S. K. P. Velu, A. Callegari & G. Volpe, Hydrodynamic flux induced clustering of Janus colloids under optical potential, 71st Annual Meeting of APS Division of Fluid Dynamics, 18-20 November, 2018, Atlanta, GA, USA.

•

? 19) H. Mohamed, M. Muradoglu & L. Biancofiore, Stability analysis of evaporating falling liquid films, 71st Annual Meeting of APS Division of Fluid Dynamics, 18-20 November, 2018, Atlanta, GA, USA.

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? 18) L. Biancofiore & O. M Umurhan, Quasi-geostrophic effects on the stability of the Rayleigh model subject to a uniform shear, 12th Euromech Fluid Mechanics Conference, 9-13 September 2018, Vienna, Austria

•

? 17) L. Biancofiore, L. Brandt & T. A. Zaki, Streaks instability in viscoelastic Couette flow, 6th ECCM- 7th ECFD, 11-15 June, 2018, Glasgow, UK.

•

? 16) S. S. Eren, D. Dini & L. Biancofiore, Influence of the viscoelasticity on cavitation in bearings, 6th ECCM-7th ECFD, 11-15 June, 2018, Glasgow, UK.

? 15) L. Biancofiore, M. Giacopini & D. Dini, A novel algorithm based on variational inequalities to model surface textured contacts with slip at the walls, 6th ECCM- 7th ECFD, 11-15 June, 2018, Glasgow, UK.

•

? 14) L. Biancofiore & O. M Umurhan, Quasi-geostrophic effects on the stability of the Rayleigh model subject to a uniform shear. 7th International Symposium ?Bifurcations and In stabilities in Fluid Dynamic?, 11-14 July, 2017, Houston, TX, US A.

•

? 13) L. Biancofiore, F. Gallaire, E. Heifetz & J. Hoepffner, The role of surface tension in planar shear flows, 7th International Symposium ?Bifurcations and Instabilities in Fl uid Dynamics?, 11-14 July, 2017, Houston, TX, USA.

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? 12) L. Biancofiore, Crossover between two- and three-dimensional turbulence in spatial mixing layers, 69th Annual Meeting of APS Division of Fluid Dynamics, 20-22 November, 2016, Portland, OR, USA.

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? 11) L. Biancofiore, F. Gallaire, E. Heifetz & J. Hoepffner, A new pure capillary instability in shear flows, 11th Euromech Fluid Mechanics Conference 12-16 September 2016, Seville, Spain.

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? 10) L. Biancofiore, L. Brandt & T. A. Zaki, Streaks instability in viscoelastic Couette flow, 11th Euromech Fluid Mechanics Conference 12-16 September, 2016, Seville, Spain.

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? 9) L. Biancofiore, L. Brandt & T. A. Zaki, Streaks instability in viscoelastic Couette flow, 66th Annual Meeting of APS Division of Fluid Dynamics, 22-24 November, 2015, Boston, MA, USA.

? 8) E. Heifetz, L. Biancofiore & F. Gallaire, On the destabilising influence of the surface tension in planar wakes, 67th Annual Meeting of APS Division of Fluid Dynamics, 23-25 November, 2014, San Francisco, CA, USA.

•

? 7) L. Biancofiore, F. Gallaire, P. Laure & E. Hachem, Direct numerical simulations of two-phase immiscible wakes, 5th International Symposium, ?Bifurcations and Instabilities in Fl uid Dynamics?, 8-11 July, 2013, Haifa, Israel.

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? 6) L. Biancofiore, F. Gallaire & P. Laure, Interaction between counterpropagating Rossby and capillary waves in planar jets and wakes, 65th Annual Meeting of APS Division of Fluid Dynamics, 18-20 November, 2012, San Diego, CA, USA.

•

? 5) L. Biancofiore & S. Musacchio, Growth in 2D and 3D turbulent mixing layers, 9th Euromech Fluid Mechanics Conference, 9-13 September 2012, Rome, Italy.

•

? 4) L. Biancofiore, F. Gallaire & R. Pasquetti, Large eddy-simulations of confined turbulent wake flows, 13th European Turbulence Conference, 12 -15 September 2011, Warsaw, Poland.

•

? 3) L. Biancofiore, F. Gallaire & R. Pasquetti, The influence of shear layer thickness in the stability of confined 2D wakes, 63rd Annual Meeting of APS Division of Fluid Dynamics, 21-23 November, 2010, Long Beach, CA, USA.

? 2) L. Biancofiore, F. Gallaire & R. Pasquetti, Stability of confined two-dimensional wakes by means of DNS, 8th Euromech Fluid Mechanics Conference 2010, 13-16 September, Bad Reichenhall, Germany.

•

? 1) L. Biancofiore, F. Gallaire & R. Pasquetti, Influence du confinement sur un sillage bidimensionnel, XIX Congre?s Franc?ais de Me ?canique 2009, 24-28 August, Marseille, France.