Prof. EUR ING dott. ing. Ignazio Maria VIOLA, PhD, CEng, FRINA
School of Engineering, Institute for Energy Systems, University of Edinburgh
The King's Buildings, Faraday Building, Room 3.093, Edinburgh, EH9 3DW, UK
Email: i.m.viola@ed.ac.uk | Telephone: +44 (0) 131 650 5622 | Website: VOILAb.eng.ed.ac.uk
ORCID ID: orcid.org/0000-0002-3831-8423 | Web of Science ID: P-9483-2017
Scopus ID: 26645213500 | Google Scholar: https://edin.ac/38uwKez

OVERVIEW (Italian)

Nel 2001 si laurea in Ingegneria Navale presso l'Università di Genova con la prima tesi in Italia in Ingegneria Navale su una imbarcazione a vela. Dopo tre anni in un cantiere nautico, MAS, dove diventa direttore della produzione dei motoscafi di serie del cantiere, persegue un Dottorato di Ricerca con una scholarship offerta dal team di Coppa America Luna Rossa. Nel 2008 consegue il Dottorato con una tesi dal titolo "Numerical and Experimental Aerodynamics of Yacht Sails". Supervisore: Prof. Fabio Fossati. Successivamente si trasferisce all'Università Auckland, Nuova Zelanda, per una borsa di post dottorato per studiare le vele del team di Coppa America, Team New Zealand. Nel 2010 consegue l'incarico di Lecturer (Professore Associato) presso School of Marine Science and Technology, Newcastle University, UK. Si trasferisce all'Università di Edimburgo nel 2013 dove nel 2020 diventa Reader (Professore Ordinario) nell'Institute for Energy Systems, School of Engineering.

Attualmente ha il titolo di Professore di Meccanica dei Fluidi e Ingegneria Bioispirata presso la School of Engineering dell'Università di Edimburgo; Distinguished Visiting Professor presso l'Università di Tsinghua (Cina); e Fellow della Royal Institution of Naval Architects. È autore di oltre 300 pubblicazioni scientifiche, tra cui 67 articoli su riviste, contributi a convegni, interviste e invited lectures. Ha pubblicato su Nature, Nature Communication, eLife, Renewable Energy, Journal of Fluid Mechanics, etc. per i quali ha ricevuto numerosi premi internazionali. Scopus lo identifica come il secondo autore piu' pubblicato sul tema Yacht dal 2009.

È Editore del Journal of Sailing Technology della Society of Naval Architects and Marine Engineers, società di cui è membro del Consiglio. È anche Associate Editor del Journal of Offshore Mechanics and Arctic Engineering (ASME) e del Journal of Ocean Engineering and Marine Energy (Springer). È membro del comitato direttivo del gruppo sulla ricerca e le applicazioni energetiche dell'American Physical Society, membro del comitato direttivo dello UK Fluids Network, presidente del comitato per il premio di migliore tesi in fluido meccanica del UK Fluids Network.

Complessivamente Viola ha contribuito ad ottenere assegni di ricerca per oltre 20 milioni di euro, di cui 7 milioni di euro come ricercatore principale, incluso un ERC Consolidator Grant.

1 agosto 2024, Edimburgo

EDUCATION

05/2008 'Dottore di Ricerca,' PhD in Mechanical Systems Engineering
'Dipartimento di Meccanica, Politecnico di Milano,' Milan, Italy
Thesis: Numerical and Experimental Aerodynamics of Yacht Sails. Supervisor: Prof. Fabio Fossati

04/2001 'Laurea in Ingegneria Navale,' 5-year master-level degree in Ship Science
'Dipartimento di Ingegneria Navale, Università degli Studi di Genova,' Genoa, Italy

APPOINTMENTS AND AFFILIATIONS

08/23-date Distinguished Visiting Professor, Tsinghua University, China
08/22-date Professor of Fluid Mechanics and Bioinspired Engineering, University of Edinburgh, UK
08/22-08/23 Deputy Head of Institute for Energy Systems, School of Engineering, University of Edinburgh, UK
08/20-07/22 Reader, Institute for Energy Systems, School of Engineering, University of Edinburgh, UK
08/16-07/20 Senior Lecturer, Institute for Energy Systems, School of Engineering, University of Edinburgh, UK
03/17-06/17 Visiting Scholar, School of Eng. & Applied Science, George Washington University, DC, USA
08/13-07/16 Lecturer, Institute for Energy Systems, School of Engineering, University of Edinburgh, UK
09/10-08/13 Lecturer in Naval Architecture, School of Marine Science and Tech., Newcastle University, UK
01/09-10/10 Postdoctoral Fellow, Department of Mechanical Engineering, University of Auckland, NZ
04/05-05/08 PhD student, Dipartimento di Meccanica, Politecnico di Milano, Italy
01/04-06/05 Research & Teaching Assistant, Dipartimento di Meccanica, Politecnico di Milano, Italy
06/03-12/03 Director of Mass Production, MAS yacht yard (www.mas-yacht.com), Italy
05/02-06/03 R&D Consultant, PRIMA Research & Development (www.primaricerca.it), Italy
08/01-04/02 Project Manager Consultant, MAS yacht yard, Italy

FELLOWSHIPS, HONOURS AND AWARDS

ERC Consolidator Grant 'Dandidrone: a Dandelion-Inspired Drone for Swarm Sensing' (2021-2026)
Fellow, Royal Institution of Naval Architects (2015)
Covid-19 Hero Medal of the School of Eng. (U. Edi) for significant contribution to solving Covid-19 challenges (2021)
Gold Rating for the Best Journal Article, Viola et al, *IJME* 2023; 5(2):183-193
Medal of Distinction for the journal article Viola et al, *IJSCT* 2013; 155(2):81-93
Medal of Distinction for the journal article Viola et al, *IJSCT* 2011; 153(1):47-58
Medal of Exceptional Merit for journal article paper Viola and Flay, *IJSCT* 2009; 151(2):31-40
OpenFOAM Cover Contest 2022, 1st place
UK Fluids Network Photo Competition 2018, 1st place
`Image du Mois` (Dec. 2018) of the French science magazine La Recherche
Teacher of the Year Award 2022, Edinburgh University Student's Association (EUSA), nominated
Teacher of the Year Award 2021, EUSA, two nominations
Teacher of the Year Award 2020, EUSA, nominated
Best Supervisor Award 2018, EUSA, nominated
Best Overall Teacher Award 2018, EUSA, nominated
PhD Scholarship funded by Luna Rossa Challenge for the 32nd America's Cup (ranked 1st of 23 applicants)

PROFESSIONAL TITLES

CEng, Chartered Engineer Registered by the Engineering Council (UK), no. 584133 (2010)
Dott. ing., Italian State Examination to practice as 'Ingegnere' (engineer) (2001)
EUR ING, European Federation of National Engineering Associations, no. 31153 (2010)
FRINA, Fellow of the Royal Institution of Naval Architects, no. 00174260 (member since 2009)

PROFESSIONAL SOCIETIES MEMBERSHIPS

'Albo degli Ingegneri di Milano,' Member of the Professional Body of Engineers, no. A22092 (2001)
AIAA, Member of the American Institute of Aeronautics and Astronautics, no. 488312 (2020)
APS, Member of the American Physical Society, Division of Fluid Dynamics, no. 61177987 (2014)
ASME, Member of the American Society of Mechanical Engineering, no. 000103762573 (2013)
PIANC, Member of the Permanent International Association of Navigation Congresses (2002)
RINA, Member of the Royal Institution of Naval Architects, no. 00300035 (2009)
SNAME, Member of the Society of Naval Architects and Marine Engineers, no. 2003765 (2010)

EDITORSHIPS

Editor-in-Chief, Journal of Sailing Technology, SNAME (2016-date)
Associate Editor, Journal of Offshore Mechanics and Arctic Engineering, ASME (2023-date)
Associate Editor, Journal of Ocean Engineering and Marine Energy, Springer (2023-date)
Editorial Board Member, Ocean Engineering, Elsevier (2015-date)
Editorial Board Member, International Journal of Maritime Engineering, RINA (2020-date)
Editorial Board Member, Journal of Marine Science and Engineering, Ocean Engineering Sec., MDPI (2018-2023)
Editorial Board Member, International Journal of Small Craft Technology, RINA (2012-2021)
Issue Editor, Special Issue on Ship Hydrodynamics, J of Ocean Engineering and Marine Energy, Springer (2022)
https://doi.org/10.1007/s40722-022-00265-8

INTERNATIONAL COMMITTEES

Council Member, Society of Naval Architects and Marine Engineers (governing body, ~10k members) (2019-date)
Steering Comm. Member-at-Large, Group on Energy Res. and Applications., American Physical Society (2023-date)
Featured Papers Committee, SNAME (selects outstanding publications between 200+ articles/y) (2016-date)
Chair, SC-2 Sailing Craft Panel, SNAME (delivers industrial guidelines and advises classification soc.) (2016-2022)
NATO Applied Vehicle Tech. Research Task Group 413 on separation around smoothly-curved bodies (2024-2027)
NATO Applied Vehicle Tech. Exploratory Team 247 3D aspects of gust interactions with rigid wings (2024-2024)
NATO Applied Vehicle Tech. Research Task Group 347 on gust mitigation strategies for rigid wings (2021-2023)
NATO Applied Vehicle Tech. Exploratory Team 234 on separated flows around smoothly-curved bodies (2023-2023)
NATO Applied Vehicle Tech. Research Task Group 349 on non-equilibrium turbulent boundary layers (2022-2023)
NATO Applied Vehicle Tech. Research Task Group 282 on the rigid wing response in gust encounters (2018-2019)
CFD Specialist Committee, ITTC (delivered CFD guidelines for industry, edin.ac/3zoOljG) (2011-2014)

INTERNATIONAL CONFERENCE COMMITTEES

Steering Committee, ECCOMAS Int. Conf. on Comp. Methods in Marine Eng. (MARINE), conf. series since 2005
Steering Committee, Innovation in High Performance Sailing Yachts (InnovSail), conf. series since 2008
Chair, ECCOMAS 11th Int. Conf. on Comp. Methods in Marine Eng. (MARINE2021), 2025, Edinburgh
Chair, ECCOMAS 9th Int. Conf. on Comp. Methods in Marine Eng. (MARINE2021), June 2021, Edin. (200+ attendees)
Chair, 29th Scottish Fluid Mechanics Meeting, 20 May 2016, Edinburgh (100+ attendees)
Co-Chair with K Ramesh, Vortex Hydrodynamics Workshop, 19-20 Sep. 2019, Edinburgh
Co-Chair with R Willden, 1st UK-China Tidal Stream Collaboration Workshop, 29-10 Jan 2015, Dalian
Co-Organiser with M Giacomini and M Garcia-Villalba, Symposium on Low Reynolds Number Flows: From Microswimmers To Microdrones, ECCOMAS ECCM & ECFD, 5-9 June 2022, Oslo
Co-Organiser with E Balaras, Symposium on the Unsteady Aerodynamics of Small Wings at Moderate Reynolds Numbers, ECCOMAS ECCM & ECFD, 11-15 June 2018, Edinburgh (14 papers)
Organising Committee, ECCOMAS ECCM & ECFD, 11-15 June 2018, Edinburgh (2000+ attendees)

Scientific Committee, 6th Innovation in High Performance Sailing Yachts (INNOVSAIL6), 15-17 June 2023, Lorient
Scientific Committee, 5th Innovation in High Performance Sailing Yachts (INNOVSAIL5), 15-17 June 2020, online
Scientific Committee, 4th Innovation in High Performance Sailing Yachts (INNOVSAIL4), 28-30 June 2017, Lorient
Scientific Committee, 3rd Innovation in High Performance Sailing Yachts (INNOVSAIL3), 26-28 June 2013, Lorient
Scientific Committee, 25th Chesapeake Sailing Yacht Symposium (25CSYS), March 2025, Annapolis
Scientific Committee, 24th Chesapeake Sailing Yacht Symposium (24CSYS), March 2022, Annapolis
Scientific Committee, 23rd Chesapeake Sailing Yacht Symposium (23CSYS), March 2019, Annapolis
Scientific Committee, 8th High Performance Sailing Yacht Conference (HPYD8), 21-22 March 2024, Annapolis
Scientific Committee, 7th High Performance Sailing Yacht Conference (HPYD7), 11-12 March 2021, online
Scientific Committee, 5th High Performance Sailing Yacht Conference (HPYD5), 9-11 March 2015, Auckland
Scientific Committee, 4th High Performance Sailing Yacht Conference (HPYD4), 12-14 March 2012, Auckland
Scientific Committee, Oxford Tidal Energy Workshop, 8-9 April 2019, Oxford

NATIONAL COMMITTEES

Director of Responsible Research and Innovation, Co-I, EPSRC CDT in Wind & Marine [EP/S023801/1] (2019-date)
Chair UK Fluids Network Thesis Prize Committee (2022-date)
Chair Field Robotics theme of the National Robotarium (2024-date)
Steering Committee, UK Fluids Network (∼1k members) (2020-date)
Executive Committee, Academic Board, National Robotarium (2024-date)
Research Advisory Board, EPSRC Supergen Offshore Renewable Energy Hub (2018-date)
Research Alignment Group, EPSRC Supergen Offshore Renewable Energy Hub (2020-date)
Co-Director, EPSRC Centre for Doctoral Training (CDT) in Wind & Marine [EP/L016680/1] (2016-2022)
Advisory Board, EPSRC Supergen Wind (2016-2019)
Engineering Early Career Forum, EPSRC (informal advisory board) (2016-2019)
Roadmap Element Coordinator, Offshore Wind Innovation Hub (2018-2019)
Special Interest Group in Marine Hydrodynamics, EPSRC UK Fluids Network (2016-date)
Special Interest Group in Boundary Layers and Complex Rotating Flows, EPSRC UK Fluids Network (2018-date)

SCHOOL AND UNIVERSITY LEADERSHIP – UNIVERSITY OF EDINBURGH

Founding Coordinator, Edinburgh Fluid Dynamics Group, www.efdg.ed.ac.uk (2014-date)
Convenor, Mechanical Engineering Board of Examiners (2015-2020)
Deputy Head, Institute for Energy Systems (2022-date)
Deputy Convenor Mechanical Engineering Resource Allocation Committee (2014-2015)
Theme Leader Fluid Mechanics, Institute for Energy Systems (2022-date)
Theme Leader Naval Architecture, Institute for Energy Systems (2014-2022)
Academic Lead, Institute for Energy Systems Seminar Series (2014-2018)
Senatus Academicus (2014-2017 elected, 2022-date ex officio)
Sabbatical Committee, School of Engineering (2019)
Mechanical Engineering Academic Committee (2015-2018)
Mechanical Engineering Discipline Committee (2013-date elected member)
Mechanical Engineering Board of Examiners (Convenor 2015-2020, 2013-date ex officio)
MSc Sustainable Energy Systems Board of Examiners (2013-date ex officio)

SCHOOL AND UNIVERSITY LEADERSHIP – NEWCASTLE UNIVERSITY

Academic Supervisor, Sailing Yacht Facility, School of Marine Science and Technology (2011-2013)
Research Committee, School of Marine Science and Technology (2010-2013)
Board of Studies, School of Marine Science and Technology (2010-2013)
Teaching and Learning Committee, School of Marine Science and Technology (2010-2013)

CONTINUING PROFESSIONAL DEVELOPMENT

Edinburgh Leaders Programme, 6-month course by nomination only for U. of Edinburgh staff, 2023-2024
Advanced Course in Wall-Bounded Flow, Int. Centr. for Mech. Sc. (Prof. Sergio Pirozzoli), Udine, IT, 18-22 Jul 2016
Certificate in Advanced Studies in Academic Practice, Newcastle University, Newcastle, 23 May 2012
Lecture Series on Large Eddy Simulation and Related Techniques, von Karman Inst., Belgium, 13-16 March 2006
Master in Wind Engineering (attendance only), Politecnico di Milano (Prof. Giorgio Diana), Italy, AY 2003/2004
Advance Course in Comp. Fluid Dynamics, Politecnico di Milano (Prof. Alfio Quarteroni), Italy, 2-5 May 2005
Advanced Course on Finite Element Method, Politecnico di Milano (Prof. Alfio Quarteroni), Italy, 26-30 Jan 2004

ASSESSOR APPOINTMENTS

EXTERNAL EXAMINER OF RESEARCH DEGREES

PhD	KTH Royal Institute of Technology, School of Engineering Sciences. Candidate: Ulysse Dhomé. Thesis: TBC. Supervisor: Prof Jakob Kuttenkeuler (2024)
PhD	University of South Florida, Mechanical Engineering, USA. Candidate: David Williams. Thesis: The Kinematics and Aerodynamics of Freely Flying Tiny Insects. Supervisor: Prof David Murphy (2024)
PhD	University of Cambridge, Engineering, UK. Candidate: Ignacio Andreu-Angulo. Thesis: Mitigation of Gust Loads Through Pitching. Supervisor: Prof Holger Babinsky (2022)
PhD	University of Bath, Mechanical Engineering, UK. Candidate: Quian Yuanzhi. Thesis: Fluid Structure Interaction in Bioinspired Locomotion Problems. Supervisors: Prof Ismet Gursul, Dr Zhijin Wang (2022)
PhD	Universidad Carlos III de Madrid, Bioingeniería e Ingeniería Aeroespacial, Spain. Candidate: Gonzalo Arranz. Thesis: Fluid structure interaction in bioinspired locomotion problems. Supervisors: Prof. Oscar Flores, Prof. Manuel García-Villalba (2021)
DPhil	University of Oxford, Department of Engineering Science. Candidate: Bowen Cao. Thesis: Hydrodynamic Design of Multi-Rotor Tidal Array. Supervisor: Prof. Richard Willden (2020)
PhD	University of Southampton, Faculty of Engineering and Physical Sciences. Candidate: Nikolaos Lagopoulos. Thesis: Investigation of Single and Tandem Flapping Hydrofoils. Supervisors: Prof. Bharathram Ganapathisubramani, Dr Gabriel Weymouth (2020)
PhD	University of Trieste, Department of Engineering and Architecture. Candidate: Andrea Rocca. Thesis: Computational Hydroacoustic Analysis of the BB2 Submarine Using the Advective Ffowcs Williams and Hawkings Equation with Wall-Modeled LES. Supervisors: Prof. Vincenzo Armenio, Dr Riccardo Broglia (2020)
PhD	Delft University of Technology, Mechanical, Maritime and Materials Engineering. Candidate: Nico van der Kolk. Thesis: Sailing Efficiency and Course Keeping Ability of Wind Assisted Ships. Supervisor: Prof. Rene' Huijsmans (2020)
Licentiate	External Examiner, Chalmers University, Department of Mechanics and Maritime Sciences. Candidate: Adam Persson. Thesis: Dynamic Effects on Yacht Sails and Rudders. Supervisor: Prof. Lars Larsson (2019)
PhD	Australian Maritime College, National Centre for Maritime Engineering and Hydrodynamics. Candidate: Gregory Atkinson. Thesis: Fuel Oil Consumption Modelling for Eco Ship with Segment Rigid Sails Using CFD Analysis. Supervisors: Prof. Jonathan Binns and Dr. Hung Nguyen (2019)
PhD	Institut Supérieur de l'Aéronautique et de l'Espace (ISAE-SUPAERO, Université de Toulouse), Toulouse (France). Candidate: Alessandro Fiumara. Thesis: Study and Control of the Stall of a Multi-Element Wingsail. Supervisors: Prof. Nicolas Gourdain, Dr Vincent Chapin (2017)
MPhil	University of Strathclyde, Department of Design, Manufacture and Engineering Management. Candidate: Robert MacDonald. Thesis: Feasibility Study into a Novel Vessel Design for Accessing Offshore Wind Turbines. Supervisors: Prof. Jonathan Corney and Dr. Hilary Grierson (2014)
PhD	University of Southampton, School of Engineering Sciences. Candidate: Thomas Spenkuch. Thesis: A Bayesian Belief Network Approach for Modelling Tactical Decision Making in a Multiple Yacht Race Simulator. Supervisor: Prof. Stephen Turnock (2013)

INTERNAL EXAMINER OF RESEARCH DEGREES

PhD Non-Examining Chair, University of Edinburgh, School of Engineering. Ben Mcgilton: Magnetic Gear Design for Wave Energy Converters (2019)

PhD Internal Examiner, University of Edinburgh, School of Engineering. Latha Sethuraman: Hydrodynamics and Drive-Train Dynamics of a direct-Drive Floating Wind Turbine (2014)

REVIEWER APPOINTMENTS BY FUNDING BODIES

Carnegie Trust (Research Assessor)
European Commission (FP7, H2020, incl. ERC)
EPSRC (Engineering Prioritisation Panel Member, and Full-Member of the College of Peer Reviewers)
Italian National Research Assessments VQR 2011-2014 (equivalent to the UK REF)
Israel Science Foundation
Leverhulme Trust
National Agency for Research and Development (ANID - Chile)
Natural Sciences and Engineering Research Council of Canada
Netherlands Organisation for Scientific Research
NHS Assure
Romanian Executive Agency for Higher Education, Research, Development and Innovation Funding
Royal Academy of Engineering
Royal Society

REVIEWER APPOINTMENTS BY JOURNALS

Referee for 40+ international journals, including:
Aerospace Science and Technology (IF≅5, Elsevier)
Alexandria Engineering Journal (IF≅4, Elsevier)
AIAA Journal (IF≅2, AIAA)
Applied Energy (IF≅10, Elsevier)
Applied Ocean Research (IF≅3, Elsevier)
Biofouling (IF≅3, Taylor & Francis)
Bioinspiration & Biomimetics (IF≅3, IOPScience)
Environmental Technology & Innovation (IF≅8, Elsevier)
Experiments in Fluids (IF≅3, Springer)
Experimental Thermal and Fluid Science (IF≅3, Elsevier)
Flow (companion journal to the Journal of Fluid Mechanics, Cambridge Core)
Forests (IF≅2, MDPI)
International Journal of Heat and Fluid Flow (IF≅3, Elsevier)
International Journal of Naval Architecture and Ocean Engineering (IF≅3, De Gruyter)
International Journal of Maritime Engineering (RINA)
iScience (IF≅5, Cell Press)
Journal of Aeronautics & Aerospace Engineering (OMICS)
Journal of Applied Fluid Mechanics (JAFM)
Journal of Control Science and Engineering (Hindawi)
Journal of Fluids and Structures (IF≅3, Elsevier)
Journal of Fluids Engineering (IF≅2, ASME)
Journal of Fluid Mechanics (IF≅4, Cambridge Core)
Journal of Ocean Engineering and Marine Energy (IF≅2, Springer)
Journal of Hydrodynamics (IF≅3, Elsevier)
Journal of Marine Science and Engineering (IF≅3, MDPI)
Journal of the Royal Society Interface (IF≅4, The Royal Society)
Journal of Sound and Vibration (IF≅4, Elsevier)
International Journal of Small Craft Technology (RINA)
Journal of Thermal Biology (IF≅3, Elsevier)
Journal of Wind Engineering and Industrial Aerodynamics (IF≅4, Elsevier)

Journal of Zhejiang University-Science A, Applied Physics & Engineering (IF≅2, Springer)
Measurement (IF≅3, Elsevier)
Methods in Ecology and Evolution (IF≅6, Wiley)
Nature Communications (IF≅16, Springer)
Naval Engineers Journal (Wiley)
Ocean Engineering (IF≅4, Elsevier)
Part C: Journal of Mechanical Engineering Science (SAGE)
Part M: Journal of Engineering for the Maritime Environment (IMEchE)
PLOS One (IF≅3, PLOS)
Physical Review Fluids (IF≅3, APS)
Physics of Fluids (IF≅4, AIP Publishing)
Renewable Energy (IF≅8, Elsevier)
Scientific Reports (IF≅5, Nature Research)
Sensors (IF≅4, MDPI)
The Science of Nature (IF≅2, Springer)
Turbulence and Combustion (IF≅2, Springer)
Wind Energy (IF≅3, Wiley)

RANKING EVALUATIONS ASSESSOR

QS Global Academic Survey
Shanghai Ranking

KNOWLEDGE EXCHANGE

INDUSTRIAL CONSULTANCIES

CNC Marine and Della Rosa (Italy), fin stabilisers, SilverioDellaFosa@tiscali.it (2008-2009)
Frers Naval Architects and Engineering (Argentina), Hydro-Optimisation of 100' Sailing Yacht Y3K (2010-2013)
Hydrotec and Della Rosa (Italy), power yacht hydrodynamics, SCutolo@hydrotec.it (2008-2009)
Italian Olympic Star-class 2008 (Italy), design of new sails, Guido.Cavalazzi@northsails.com (2008)
Michelin (France), morphing blades, Bertrand.Daval@michelin.com (2022-date)
SMAR Azure (UK), wind-assisted ship propulsion, Dr Malpede, Sabrina@smar-azure.com (2018-2019)
Venezia Challenge (Italy), America's Cup team, Senior Design Team Member, DimitriVlc@gmail.com (2011)
Zephir (France), world sailing speed record challenge, Marc.Amerigo@zep-hir.com (2020-date)

INDUSTRIAL COLLABORATIONS

AkzoNobel International Paint (Gateshead), ship coating hydrodynamics (2013-date)
ACT Blade (Edinburgh), fluid-structure-interaction of morphing blades for wind turbines (2021-date)
Airborne Energy (Edinburgh), aerodynamics of vertical axis wind turbine (2014-2016)
Ansys Fluent (Milan, IT), America's Cup yacht sail aerodynamics (2008-2012)
CD-adapco (Singapore), America's Cup yacht hydrodynamics (2009-2010)
CINECA (Milan, IT), HPC for sailing yacht aero- and hydrodynamics (2008-2013)
Emirates Team New Zealand (Auckland), America's Cup yacht sail aerodynamics (2009-2011)
Frers Naval Arch. And Eng. (Milan, IT), yacht hydrodynamics and performance optimisation (2010-2013)
Leonardo MW Innovation & Technology Group, passive flying sensor systems (2021-date)
Luna Rossa (Milan, IT), America's Cup yacht sail aerodynamics (2003-2013)
Michelin, rubber-based morphing blades for tidal turbines (2021-date)
Nautricity (Glasgow), fluid-structure-interaction of morphing blades for tidal turbines (2021-2022)
Nova Innovation (Edinburgh), fluid-structure-interaction of morphing blades for tidal turbines (2016-date)
Orbital Marine Power (Orkney), fluid-structure-interaction of morphing blades for tidal turbines (2021-date)
Ovington Boats (North Shields), towing tank tests of Olympic dinghies (2011-2013)
Owen Clarke Design (Dartmouth), America's Cup wing sail aerodynamics (2012-2013)

Proteus Marine Renewables (2022-date)
RBF-Morph (Rome), grid morphing for CFD in marine applications (2011-2018)
Scottish Association for Marine Science (Oban), kite-based tidal energy converter hydrodynamics (2016-2020)
SIMEC Atlantis Energy (Bristol), fluid-structure-interaction of morphing blades for tidal turbines (2020-date)
SMAR Azure (Edinburgh), yacht sail aerodynamics (2012-2019)
SRI International (Menlo Park, CA), fluid-structure-interaction of morphing blades for tidal turbines (2016-2019)
SCHOTTEL GmbH (Rhein, GER) fluid-structure-interaction of morphing blades for tidal turbines (2021-date)
Zyba Renewables (London), wave energy converter hydrodynamics (2015-2016)
Wood Group (Glasgow), fluid-structure-interaction of morphing blades for wind turbines (2021-date)

Continued on the next page.

RESEARCH INCOME

RESEARCH CONTRACTS AS PRINCIPAL INVESTIGATOR (ordered by contribution to the School of Engineering, SoE)

Source	PI@	Total award	To the School	Title	From	To
ERC Consolidator Grant 2020 [H2020 ERC-2020-COG 101001499]	PI	£1.6M €2M	£1.6M €2M	Dandidrone: a Dandelion-Inspired Drone for Swarm Sensing	7/21	6/26
EPSRC Standard Proposal [EP/V009443/1]	PI	£1.1M	£1.1M	Morphing Blades: New-Concept Turbine Blades for Unsteady Load Mitigation	6/21	5/24
ARIA Scoping our Planet	PI	£500k	£250k	SEED: Self-degrading Environmental Exploration Drones	1/25	12/27
Leverhulme Trust [RPG-2015-255]	PI@ SoE	£341k	£176k	The Form & Function of the Dandelion Fruit	9/15	8/18
Michelin [WT 13794349]	PI	£233 €273k	£233 €273k	Flexible trailing edges for tidal and wind turbines - Phase 2	4/24	8/25
EPSRC UKCMER Flex Fund Call [EP/P008682/1]*	PI	£158k	£158k	MetaTide: A New Meta-Material for Enhanced Fatigue Life of Tidal Energy Converters	09/18	05/19
EPSRC [EP/M02038X/1]	PI	£120k	£120k	FLEX-BLADES: Mitigate Fatigue Load with Flexible Tidal Turbine Blades	10/14	06/15
AkzoNobel International Paint	PI	£100k	£100k	REAL-FLUIDS: Roughness Effects on Boundary Layer Flows	12/13	12/16
ICASE voucher [220154, £88862] with AkzoNobel [£29621]	PI	£118k	£118k	The Resistance of Ships with Multiscale Roughness	10/22	09/26
EPSRC Core Equipment Grant	PI@ SoE	£800k	£100k	MPIP: Multi-Purpose Imaging Platform for Volumetric Velocity Measurements	01/23	N.A.
NHS Scotland Assure [13750708]	PI@ SoE	£353k	£82k	Quantifying Exhaled Aerosolised Respiratory Virus In Acutely Hospitalised Patients	04/24	02/26
Michelin [WT: 13319274]	PI	£81k	£81k	Flexible trailing edges for tidal and wind turbines	12/22	11/23
AkzoNobel (R83392, £22.5k) & ETP (R43302, £30k) [ETP106b]	PI	£52k	£52k	SOFT-BLADES: Compliant Coatings for Tidal Turbine Blades	09/14	03/18
Airborne Energy (R83393, £20k) & ETP (R43512, £30k) [ETP125]	PI	£50k	£50k	CFD Based Optimisation of Vertical Axis Wind Turbines (AirborneCFD)	11/14	05/18
EU FP7 IRSES (37%) [PIRSES-GA-2012-318924] & RSNZ (63%)	PI	£202k €230k	£37k €42k	SAILING-FLUIDS: An EU – NZ Research Collaboration in Yacht Engineering	10/12	10/16
Air Force Office of Scientific Research [13208938]	PI@ UoE	£150k	£16k	Boundary-Layer Control	10/21	09/25
Carnegie Trust [50349]	PI@ UoE	£50k	£13k	Investigation of Flapping Wings as a Means of Hydroelectric Power Generation	10/16	12/17

Royal Society - International Exchanges 2022 Round 3 [13324749]	PI	12k	12k	CaviTidal: A UK-China Collaboration on Tidal Turbine Cavitation Control	04/23	04/25
EU Social Fund, awarded while at Politecnico Milano	PI	£8k €9k	£8k €9k	BILLION-CELLS: High Grid Resolution CFD for Yacht Sails	05/08	10/08
EPSRC Decarbonising Transport Networks + [EP/S032061/1]	PI@ UoE	£842k	N.A.	Decarbonising the UK's Freight Transport (network grant)	04/19	12/23
TOTAL		£7M	£3.4M			

* Awarded through a national open call of the EPSRC centre UKCMER, which is based at UoE

RESEARCH CONTRACTS AS CO-INVESTIGATOR (ordered by contribution to the School)

Source	Total award	To the School	Title	From	To
EPSRC CDT [EP/S023801/1]	£6.4M	£1.1M	EPSRC CDT in Wind and Marine Energy Systems and Structures	04/19	10/27
EPSRC Global [EP/K004689/1], awarded while at U. Newcastle	£500k	£500k	SECURE: Sustainable Energy Through China-UK Research Engagement	03/12	03/13
EU FP7 Transport [FP7-SST-2012-RTD-1], awarded while at U. Newcastle	£3.7M €4.2M	£308k €350k	SONIC: Suppression of Underwater Noise Induced by Cavitation	10/12	09/13
EPSRC ORE Hub Flex Fund	£125k	£125k	Permeable Tip: New-concept Control on Tip Vortex and Cavitation	03/24	02/25
EPSRC CAMREG Open Flex Fund Call [EP/P007805/1] (PI@SoE: Cheung)	£50k	£50k	QUANTBLADE: Wireless Quantum Pressure Mapping	5/19	11/19
TOTAL	£11M	£2M			

CONSULTANCIES THROUGH THE UNIVERSITY (ordered by contribution to the School)

Source	PI/Co-I	Total award	To the School	Title	From	To
SMAR Azure (£12k) & Scottish Funding Council (£5k) [H08009]	PI	£17k	£17k	A velocity prediction programme for wind-assisted ship propulsion (WindshipVPP)	05/18	03/19
Michelin	PI	£15k	£15k	Flexible trailing edges for tidal and wind turbines	12/22	11/23
Frers Naval Architects and Engineering	PI	£13k	£13k	Performance optimisation of the 100' sailing yacht Y3K (Y3K)	07/12	09/12
TOTAL		£30k	£30k			

KNOWLEDGE EXCHANGE AWARDS (ordered by contribution to the School)

Source	PI/Co-I	Total award	To the School	Title	From	To
EPSRC Impact Acc. Account	Co-I	£25k	£25k	Fatigue modelling/testing of morphing tidal turbine blades	6/24	10/24
EPSRC Impact Acc. Account Data Showcase Fund	PI	£30k	£30k	Flexible Blades to Mitigate Power Fluctuations	7/19	01/20

EPSRC Impact Acc. Account	PI	£24k	£24k	OPTIMA-TACTICA: Software Application to Support Decision Making in Yacht Races	03/15	08/15
EPSRC Impact Acc. Account	PI	£16k	£16k	Impact Accelerator of Edinburgh Fluid Research	11/16	03/17
Academic Networking Fund	PI	£2.5k	£2.5k	FLUID-NET: Research Coordination and Leadership in Fluid Dynamics at Edinburgh	07/14	07/15
EPSRC Impact Acc. Account	PI	£1k	£1k	Development of a Website for the FLUID-NET Project	04/15	-
Institutional Strategic Support Fund (ISSF3)	Co-I	£25k	N.A.	The deactivation of viruses at air-water interfaces	03/21	08/21
TOTAL		£124k	£99k			

COMPUTATIONAL TIME AWARDS (ordered by contribution to my research group)

Source	PI/Co-I	Total award	To my group	Title	From	To
EPSRC Access to HPC, Main Stream (Cirrus)	Co-I	£28k	£28k	Fluid-structure interaction and effect of gust on dandelion seed flight (3M core.h)	01/24	12/24
EPSRC CIRRUS Tier-2	Co-I	£28k	£28k	Fluid-Structure Interaction and wake dynamics of dandelion seed flight under gust (3M core.h)	03/22	02/23
EPSRC ARCHER2 Class 1a [e696]	PI	£15k	£15k	Morphing-Blades: New-Concept Turbine Blades for Unsteady Load Mitigation (26 819 kAU)	04/21	04/24
EPSRC ARCHER RAP [e484]	PI	£10k	£10k	Compliant Coatings for Friction Drag Reduction (18 259 kAU)	08/17	07/18
EPSRC ARCHER RAP [e484]	PI	£7k	£7k	Compliant Coatings for Friction Drag Reduction (12 442 kAU)	04/16	03/17
EPSRC Access to HPC, Main Stream (ARCHER2) [e854]	PI	£6k	£6k	Wall Models for Heterogeneous Roughness (30 912 CU)	01/24	12/24
EPSRC ARCHER2 Pump Priming [e792]	PI	£1k	£1	Three-dimensional flow around porous disks at different incidences (3984 CU)	04/23	10/23
EPSRC ARCHER Instant Access [e633]	PI	-	-	Fatigue Loading Reduction of Horizontal Axis Tidal Turbines (1200 kAU + 2k kAU)	04/19	10/19
EPSRC CIRRUS RAP [e792]	PI	-	-	Fatigue Loading Reduction of Horizontal Axis Tidal Turbines with Passive Pitch Control (14k CPU.h + 14k CPU.h)	05/20	04/21
EPSRC CIRRUS Instant Access	CO-I	-	-	Fluid-structure interaction and effect of gust on dandelion seed flight (20k CPU.h)	11/23	10/24
EPSRC CIRRUS Instant Access [e633]	PI	-	-	Fluid Mechanics of Small Flyers (21k CPU.h)	10/21	09/22
TOTAL		£95k	£95k			

INTERNAL FUNDS

Source	Total award	Costs associated to my contribution	Title	From	To
Keystone project leader in EPSRC CAMREG [EP/P007805/1]	£2M	£50k	Morphing Aero- and Hydro-Dynamic Working Surfaces	10/19	03/20

RESEARCH SUPERVISION

DIRECTED POSTDOCTORATE RESEARCH FELLOWS AND RESEARCH ASSISTANTS

Start-end	Researcher	Title	Research field (and method*)
08/24-date	Ahmet Gungor	PDR-Associate	Insect-scale flying sensors (CFD)
07/24-date	Aditya Potnis	PDR-Associate	Insect-scale flying sensors (CFD)
04/24-date	Junchen Tan	PDR-Associate	Tidal turbine blade hydrodynamics (EFD, Th)
01/24-date	Soumarup Bhattacharyya	PDR-Associate	Insect-scale flying sensors (CFD)
11/23-date	Jawahar Sivabharathy	PDR-Associate	Insect-scale flying sensors (EFD)
09/23-date	Puja Sunil	PDR-Associate	Tidal turbine blade hydrodynamics (EFD, Th)
05/23-10/23	Xi Deng	PDR-Associate	Insect-scale flying sensors (CFD)
12/21-04/23	Stefano Gambuzza	PDR-Associate	Tidal turbine blade hydrodynamics (EFD, Th)
09/21-08/23	Chandan Bose	PDR-Associate	Insect-scale flying sensors (CFD)
09/21-09/23	Yabin Liu	PDR-Associate	Tidal turbine blade hydrodynamics (CFD)
10/20-01/24	Shūji Ōtomo	PDR-Associate	Energy harvester hydrodynamics (EFD, Th)
09/18-07/20	A. Arredondo-Galeana	PDR-Associate	Tidal turbine blade hydrodynamics (EFD, Th)
02/16-04/18	Cathal Cummins	PDR-Associate	Dandelion seed aerodynamics (CFD, EFD)
10/14-07/15	Susan Tully	PDR-Assistant	Tidal turbine blade hydrodynamics (EFD)
10/14-02/15	Jean-Baptiste Richon	PDR-Assistant	Tidal turbine blade hydrodynamics (EFD)
09/12-01/13	Mohammad S Arafin	PDR-Associate	Windships aerodynamics (CFD)

CURRENT POSTGRADUATE STUDENTS AS FIRST SUPERVISOR

Start	Researcher	Degree	Research field (and method)
10/22	Mridu A. Seshasayee	PhD	Rough walls hydrodynamics (CFD, Th)
08/22	Doudoud Huang	PhD	Insect-scale flying sensors (CFD, Th)
08/22	Bappa Mitra	PhD	Insect-scale flying sensors (design/manufact.)
09/21	Kuba Frankowski	PhD	Wind turbine blade aerodynamics (Th)

GRADUATED POSTGRADUATE STUDENTS AS FIRST SUPERVISOR

Submission	Researcher	Degree	Research field (and method)
10/23	Jean-Baptiste Souppez	PhD viva passed	Yacht sails aerodynamics (EFD)
02/22	Callum Bruce	MRes awarded	Insect-scale flying sensors (CFD)
02/22	Daniele Certini	PhD awarded	Alsomitra seed aerodynamics (EFD)
10/21	Gabriele Pisetta	PhD awarded	Tidal turbine blade hydrodynamics (Th, EFD)
09/21	Shūji Ōtomo	PhD awarded	Pitching foil aerodynamics (Th, EFD)

* CFD: computational fluid dynamics; EFD: experimental fluid dynamics; Th: theoretical

09/20	Weidong Dai	PhD awarded	Tidal turbine blade hydrodynamics (CFD)
08/20	Nicola Speranza	PhD awarded	Marine coatings hydrodynamics (CFD)
08/20	Kristin Luttik	EngD awarded	Kite-based energy harvesters hydrodn. (Th)
10/18	Gabriel T. Scarlett	PhD awarded	Tidal turbine hydrodynamics (Th)
09/18	A. Arredondo-Galeana	PhD awarded	Yacht sail aerodynamics (EFD)
04/18	Tamás István Józsa	PhD awarded	Drag reduction by compliant walls (CFD)
03/18	Rowan Eveline Muir	MRes awarded	Swift wing aerodynamics (EFD)
05/15	Francesca Tagliaferri	PhD awarded	Optimum yacht race routing (machine learning)

CURRENT POSTGRADUATE STUDENTS AS SECOND SUPERVISOR

Start	Researcher	Degree	Research field	Principal Supervisor
09/24	Calum Arnott	PhD	Drones	Dr F. M. Hergueta
09/22	Kolin Kessler	PhD	Small flyers	Dr E. Komendantskaya
09/22	Panagiotis Alexandrou	PhD	Small flyers	Dr A. Attili
09/20	Peter Elrick	PhD	Tidal Energy	Prof. V. Venugopal
11/19	Ruby Marshall	PhD	Underwater vehicles	Dr F. Giorgio-Serchi
10/19	Geethanjali Pavar	PhD	Tidal Energy	Prof. A. McDonald
09/19	Frederick Arrigo Starkey	PhD	Systems Biology	Prof. F. Menolascina

GRADUATED POSTGRADUATE STUDENTS AS SECOND SUPERVISOR

Submission	Researcher	Degree	Research field	Principal Supervisor
09/20	Vlad Aparece-Scutariu	PhD awarded	Turbulent jets	Dr B. Peterson
02/20	Paul Lien	MScR awarded	Gas turbines	Dr B. Peterson
12/18	Monika Kreitmair	PhD awarded	Tidal energy	Prof. A. Borthwick
10/18	R.A. Martinez MeJia	PhD awarded	Tidal energy	Prof. T. Bruce
05/18	Emmanouil Falagkaris	PhD awarded	Wind energy	Prof. D. Ingram
07/17	Mark McAllister	PhD awarded	Wave energy	Prof. V. Venugopal
09/15	Duncan R. J. Sutherland	PhD awarded	Tidal energy	Prof. G. Harrison
09/15	S. Maldonado-Villanueva	PhD awarded	Tidal energy	Prof. A. Borthwick
08/15	Claudio A. Sandoval	MPhil awarded	Costal engineering	Prof. T. Bruce

ADVISOR FOR EXTERNAL POSTGRADUATE STUDENTS

Start-award	Researcher	Degree	Research field	Institution
10/23-date	Jianfeng Yang	PhD student	Small flyers	Tampere University, FI
11/13-11/16	Nicolas Aubin	PhD awarded	Sail aerodynamics	Ecole Navale, Brest, FR

VISITING RESEARCHERS AND STUDENTS

Period	Researcher	Title	Research field	Institution
11/23-01/24	Jianfeng Wang	PhD student	Small flyers	Ecole Navale, Brest, FR
10/23-12/23	Lucy Desmulliez	High school grad	Small flyers	-
08/23-09/23	Hawa Sidat	MPhys graduate	Small flyers	-
03/23-18/23	Evan Williams	PhD student	Insect aerodynamics	U. South Florida
10/16-06/17	Robin LeMestre	Master student	Tidal energy	Ecole Norm Paris-Saclair
10/14-12/15	Richard Flay	Professor	Naval Architecture	U. of Auckand

TEACHING & LEARNING

PROGRAMMES DEVELOPED AND DIRECTED

Period	Course	Credits
2019-date	PhD with Integrated Studies in Wind and Marine Energy Systems and Structures	720
2019-date	EngD in Wind and Marine Energy Systems and Structures	720

COURSES DEVELOPED (DE) AND DIRECTED (DI)

Period	Course	Stage	Credits
2019-date	Core Modules in Wind and Marine Energy, Edinburgh (DE,DI)	PhD	60
2019-date	Specialist Modules in Wind and Marine Energy, Edinburgh (DE,DI)	PhD	60
2019-date	Group Project on Wind and Marine Energy, Edinburgh (DE,DI)	PhD	60
2013-2021	Fluid Mechanics 4 (MECE10004/PGEE11054), Edinburgh (DI)	4th UG	10
2014-2015	Professional Issues for Mechanical Engineers 3 (SCEE09001), Edinburgh (DI)	3rd UG	10
2013-2014	Mechanical Engineering Design 2 (MECE08010), Edinburgh (DI)	2nd UG	10
2011-2013	Engineering Applications (MAR2012), Newcastle University (DI)	2nd UG	10
2010-2013	Ship Resistance (MAR2010), Newcastle University (DI)	2nd UG	10
2010-2013	Ship Resistance (MAR2110), Newcastle Univ., delivered in Singapore (DI)	2nd UG	10
2010-2013	Physics of Yacht Design (MAR2011), Newcastle University (DI)	2nd UG	10
2010-2013	Computational Fluid Dynamics (MAR3024), Newcastle University (DE,DI)	3rd UG	10
2005-2006	Yacht Design, Lombardia Regional Council, Italy (DE,DI)	MSc	10

COURSES DELIVERED

Taught years	Course	Stage	Taught Hours	No in class
2020-2023	Wind and Tidal Energy Harvesting Technology	PhD	4	10
2019-2022	Wind, Waves and Tides in Offshore Renewable Energy	PhD	12	12
2017-2021	Marine Energy 5 (MECE11009), Edinburgh	5th UG	15	30
2017-2021	Marine Energy (MECE11001), Edinburgh	MSc	15	30
2013-2021	Fluid Mechanics 4 (MECE10004/PGEE11054), Edinburgh	4th UG	33	94
2017-2019	Energy Resources, CDT course, Strathclyde University	PhD	12	10
2016-2017	Computational Fluid Dynamics 5 (MECE11004), Edinburgh	5th UG	16	26
2016-2017	Computational Fluid Dynamics (PGEE11055), Edinburgh	MSc	16	15
2014-2015	Professional Issues for Mech. Eng. 3 (SCEE09001), Edinburgh	3rd UG	2	88
2013-2014	Mechanical Engineering Design 2 (MECE08010), Edinburgh	2nd UG	22	83
2012-2013	Marine Fluid Dynamics (MAR8002), Newcastle University	MSc	2	14
2011-2013	Engineering Applications (MAR2012), Newcastle University	2nd UG	3	60
2010-2013	Fluid Mechanics (MAR1003), Newcastle University	1st UG	14	60
2010-2013	Ship Resistance (MAR2010), Newcastle University	2nd UG	32	60
2010-2013	Physics of Yacht Design (MAR2011), Newcastle University	2nd UG	19	6
2010-2013	Computational Fluid Dynamics (MAR3024), Newcastle University	3rd UG	30	30
2006-2007	Sailing Yacht Aerodynamics, University of Genoa	Master	30	30
2006-2007	Mechanical System Dynamics, Politecnico di Milano	Master	37	30
2005-2006	Yacht Design, Lombardia Regional Council, Italy	Master	40	30

POSTGRADUATE TAUGHT COURSE PROJECT SUPERVISION

Period	Course	Stage	No of projects
2013-2015	MSc Sustainable Energy Systems Dissertations, Edinburgh	MSc	2
2010-2013	MSc Dissertations (MAR8096), Newcastle University	MSc	7
2004-2007	'Laurea Specialistica,' Thesis Supervisor, Politecnico di Milano	Master	8

UNDERGRADUATE TAUGHT COURSE PROJECT SUPERVISION

Period	Course	Stage	No of projects
2013-date	MEng Projects 5 (MECE11006), Edinburgh	5th UG	17
2016-2017	Industrial-European Placement 4 (MECE11007), Edinburgh	4th UG	4
2013-2015	BEng Projects 4 (MECE10008), Edinburgh	4th UG	5
2010-2013	BEng Projects (MAR3098), Newcastle University	3rd UG	10

Continued on the next page.

PUBLICATIONS

Students and Postdoctoral Scholars underlined.

SELECTED ARTICLES

1. Cummins, C, Seale, M, Macence, A, Certini, D, Matropaolo, E, **Viola, IM** & Nakayama, N, 2018, 'A separated vortex ring underlies the flight of the dandelion,' *Nature*, vol 562, pp. 414–418. https://doi.org/10.1038/s41586-018-0604-2 - see also Editorial article https://doi.org/10.1038/d41586-018-07032-6
2. Seale, M, Kiss, A, Bovio, S, **Viola, IM**, Mastropaolo, E, Boudaoud A & Nakayama, N, 2022, 'Dandelion pappus morphing is actuated by radially patterned material swelling,' *Nature Communications*, vol. 13, no. 2498, pp. 14. https://doi.org/10.1038/s41467-022-30245-3
3. Seale, M, Zhdanov, O, Soon, MB, Cummins, C, Kroll, E, Blatt, MR, Zre-Bethtash, H, Busse, A, Mastropaolo, E, Bullock, JM, **Viola, IM**, Nakayama, N, 2022, 'Environmental morphing enables informed dispersal of the dandelion diaspore,' *eLife*, 11:e81962. https://doi.org/10.7554/eLife.81962 - see also Insight article https://doi.org/10.7554/eLife.85477
4. Seale, M, Cummins, C, **Viola, IM**, Mastropaolo, E & Nakayama, N, 2018, 'Design principles of hair-like structures as biological machines,' *Journal of the Royal Society Interface*, vol 15, no. 142, 20180206. http://dx.doi.org/10.1098/rsif.2018.0206
5. Cummins, C, **Viola, IM**, Mastropaolo E, and Nakayama, N, 2017, 'The effect of permeability on the flow past permeable disks at low Reynolds numbers,' *Physics of Fluids*, vol 29, pp. 097103. https://doi.org/10.1063/1.5001342

PATENTS

1. **Viola, I.M.** and Gambuzza, S. (2024) *Passively Pitching Turbine Blades for Unsteady Load Mitigation.* International Patent Application No. PCT/GB2024/050216. Available at: https://edin.ac/3Dew24k
2. **Viola, I.M.**, McCarthy, E. and Gambuzza. S. (2024) *Blade with Flexible Trailing Edge.* International Patent Application PCT/GB2024/050899. Available at https://edin.ac/48QENPC

PREPRINTS AVAILABLE ON ARCHIVES

1. Bose, C and **Viola, IM**, 2023, ` Gust Response of Free-Falling Permeable Plates,` *arXiv*, https://doi.org/10.48550/arXiv.2304.04317
2. Bose, C, Bruce C, and **Viola, IM**, 2023 ` Porous Plates at Incidences,` *arXiv*, https://doi.org/10.48550/arXiv.2303.13296

JOURNAL ARTICLES – PEER REVIEWED

1. Ōtomo, S, Gambuzza, S, Liu, Y, Young, AM, Broglia, R, McCarthy, ED & **Viola, IM**, 2024, 'A General Framework for the design of efficient passive pitch systems,' *Physics of Fluids*, vol. 36, no. 6. https://doi.org/10.1063/5.0212626
2. Posa, A, **Viola, IM** & Broglia, R, 2024, 'Influence of the tip speed ratio on the wake dynamics and recovery of axial-flow turbines,' *Physics of Fluids*, Vol.36, Issue 5. https://doi.org/10.1063/5.0203285
3. Souppez, JB & **Viola, IM**, 2024, 'Water Tunnel Testing of Downwind Yacht Sails,' *Experiments in Fluids*, vol. 65, no. 65, pp. 19. https://doi.org/10.1007/s00348-023-03752-2
4. Marshall, R, Souppez, JB, Khan, M, **Viola, IM**, Nabae, H, Suzumori, K, Stokes, AA and Giorgio-Serchi, F, 2023, 'Mechanical Characterisation of Woven Pneumatic Active Textile,' *IEEE Robotics and Automation Letters*, vol. 8, no. 5, pp. 2804-2811. https://doi.org/10.1109/LRA.2023.3262177

5. Gambuzza, S, Pisetta, G, Davey, T, Steynor, J & **Viola, IM**, 2023, 'Model-scale experiments of passive pitch control for tidal turbines,' *Renewable Energy*, vol. 205, March 2023, pp. 10-29. https://doi.org/10.1016/j.renene.2023.01.051
6. Arredondo-Galeana, A, Babinsky, H & **Viola, IM**, 2023, 'Vortex flows of downwind sails,' *Flow*, vol. 3, no. E8. https://doi.org/10.1017/flo.2023.1
7. Seale, M, Zhdanov, O, Soon, MB, Cummins, C, Kroll, E, Blatt, MR, Zre-Bethtash, H, Busse, A, Mastropaolo, E, Bullock, JM, **Viola, IM**, Nakayama, N, 2022, 'Environmental morphing enables informed dispersal of the dandelion diaspore,' *eLife*, 11:e81962. https://doi.org/10.7554/eLife.81962 - see also Insight article https://doi.org/10.7554/eLife.85477
8. Souppez, J-BRG & **Viola, IM**, 2022, 'High-blockage corrections for circular arcs at transitional Reynolds numbers,' *Journal of Wind Engineering & Industrial Aerodynamics*, vol. 229, no. 105139. https://doi.org/10.1016/j.jweia.2022.105139
9. **Viola, IM**, Pisetta, G, Dai, W, Arredondo-Galeana, A, Young A & Smyth, A, 2022, 'Morphing Blades: Theory and Proof of Principles,' *International Marine Energy Journal* (invited), vol. 5, no. 2, pp. 183-193. https://doi.org/10.36688/imej.5.183-193
10. **Viola, IM**, Gao, Z & Smith, J, 2022, 'Use of streamnormal forces within an array of tidal power harvesters,' *PLoS ONE* 17(7): e0270578. https://doi.org/10.1371/journal.pone.0270578
11. Seale, M, Kiss, A, Bovio, S, **Viola, IM**, Mastropaolo, E, Boudaoud A & Nakayama, N, 2022, 'Dandelion pappus morphing is actuated by radially patterned material swelling,' *Nature Communications*, vol. 13, no. 2498, pp. 14. https://doi.org/10.1038/s41467-022-30245-3
12. Dai, W, Broglia, R & **Viola, IM**, 2022, 'Mitigation of Rotor Thrust Fluctuations through Passive Pitch,' *Journal of Fluids and Structures*, vol. 112, no. 103599, pp 23. https://doi.org/10.1016/j.jfluidstructs.2022.103599
13. **Viola, IM**, Nila, A, Davey & T, Gabl, R, 2022, 'Underwater LED-based Lagrangian Particle Tracking Velocimetry,' *Journal of Visualisation*, pp. 12. https://doi.org/10.1007/s12650-022-00832-z
14. Souppez, JB, Bot, P & **Viola, IM,** 2022 'Turbulent Flow Around Circular Arcs,' *Physics of Fluids*, vol. 34(1), no. 77, pp. 14. https://doi.org/10.1063/5.0075875
15. Arredondo-Galeana, A, Kiprakis, A & **Viola, IM,** 2022, 'A low cost oscillating membrane for underwater applications at low Reynolds numbers,' *Journal of Marine Science and Engineerin*g, vol. 10, no. 1, 77. https://doi.org/10.3390/jmse10010077
16. Pisetta, G, LeMestre, R & **Viola, IM**, 2022, 'Morphing Blades for Tidal Turbines: a Theoretical Study,' *Renewable Energy*, vol. 183, pp. 802-819. https://doi.org/10.1016/j.renene.2021.10.085
17. Bird, H, Ramesh, KK, Ōtomo, S & **Viola, IM**, 2022, 'Usefulness of inviscid linear unsteady lifting-line theory for viscous large-amplitude problems,' *AIAA Journal*, pp. 12. https://arc.aiaa.org/doi/10.2514/1.J060808
18. **Viola, IM**, Arredondo-Galeana, A & Pisetta, G, 2021, 'The Force Generation Mechanism of Lifting Surfaces with Flow Separation,' *Ocean Engineering*, vol. 239, no. 109749. https://doi.org/10.1016/j.oceaneng.2021.109749
19. Arredondo-Galeana, A, Young, AM, Smyth, ASM & **Viola, IM**, 2021, 'Unsteady load mitigation through a passive trailing-edge flap,' *Journal of Fluids and Structures*, vol. 106, no. 103352. https://doi.org/10.1016/j.jfluidstructs.2021.103352
20. Smith, AJ, Pisetta, G & **Viola, IM**, 2021, 'The Scales of the Leading-Edge Separation Bubble,' *Physics of Fluids*, vol. 33, no. 4, 045101. https://doi.org/10.1063/5.0045204
21. Goodwin, L, Hayward, T, Krishan, P, Nolan, G, Nundy, M, Ostrishko, K, Attili, A, Barranco Cárceles, S, Epelle, EI, Gabl, R, Pappa, E, Stajuda, M, Zen, S, Dozier, M, Anderson, N, **Viola, IM** & McQuillan, R, 2021, 'Which factors influence the extent of indoor transmission of SARS-COV-2? A rapid evidence review,' *Journal of Global Health*, vol. 11, no. 10002, pp. 1-26. https://doi.org/10.7189/jogh.11.10002
22. **Viola, IM**, Peterson, B, Pisetta, G, Pavar, G, Akhtar, H, Menolascina, F, Mangano, E, Dunn, K, Gabl, R, Nila, A, Molinari, E, Cummins, C, Thompson, G, Lo M, Denison, F, Digard, P, Malik, O, Dunn, MJG & Mehendale, F, 2021, 'Face Coverings, Aerosol Dispersion and Mitigation of Virus Transmission Risk,' *IEEE Open Journal of Engineering in Medicine and Biology*, vol. 2, pp. 26-35. https://doi.org/10.1109/OJEMB.2021.3053215
23. Ōtomo, S, Mulleners, K, Ramesh, K & **Viola, IM**, 2021. 'Unsteady lift on a high-amplitude pitching aerofoil,' *Experiments in Fluids*, vol. 62, no. 6, pp. 18. https://doi.org/10.1007/s00348-020-03095-2

24. Certini, D, Fazan, L, Nakayama, N, **Viola, IM** & Kozlowski. G, 2020, 'Velocity of the falling dispersal units in Zelkova abelicea: remarkable evolutionary conservation within the relict tree genus,' *American Journal of Botany*, vol. 107, no. 12, pp. 1-8. https://doi.org/10.1002/ajb2.1581
25. Jozsa, TI, Balaras, E, Kashtalyan, M, Borthwick, AGL & **Viola, IM**, 2020, 'On the friction drag reduction mechanism of streamwise wall fluctuations,' *International Journal of Heat and Fluid Flow*, vol. 86, 108686. https://doi.org/10.1016/j.ijheatfluidflow.2020.108686
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121. Fossati, F, Muggiasca, S, Martina, F, Nazareth, A, Vallicelli, A & **Viola, IM**, 2008, 'Wind tunnel and CFD investigation of unconventional rigs,' in the proceedings of The 3rd High Performance Yacht Design Conference (HPYD), Auckland, New Zealand, 2/12/08 - 4/12/08, pp. 91-100.
122. **Viola, IM** & Fossati, F, 2008, 'Downwind sails aerodynamic analysis,' in the proceedings of The 6th International Colloquium on Bluff Bodies Aerodynamics and Applications (VI BBAA), Milan, Italy, 20/07/08 - 24/07/08.
123. Fossati, F, Martina, F, Muggiasca, S & **Viola, IM**, 2008, 'Studio numerico e sperimentale dell'aerodinamica dell'imbarcazione in andatura di bolina,' in the proceedings of The X Convegno Nazionale di Ingegneria del Vento (IN-VENTO), Cefalu, Italy, 8/06/08 - 11/06/08.
124. **Viola, IM**, Ponzini, R, Rocchi, D & Fossati, F, 2008, 'Analysis of aerodynamic indices for racing sailing yachts: a computational study and benchmark on up to 128 CPU,' in the proceedings of The 20th International Conference on Parallel Computational Fluid Dynamics (ParCFD), Lyon, France, 19/05/08 - 22/05/08.
125. Cheli, F, **Viola, IM**, Rocchi, D & Ripamonti, F, 2007, 'CFD analysis for the ballast projection on high speed trains,' in the proceedings of The Calcolo ad Alte Prestazioni in Italia, Computational Fluid Dynamics, Italy, 15/10/07 - 16/10/07.

126. Fossati, F, Muggiasca, S & **Viola, IM**, 2006, 'An investigation of aerodynamic force modelling for IMS rule using wind tunnel techniques,' in the proceedings of The 19th HISWA Symposium on Yacht Design and Yacht Construction, Amsterdam, Netherland, 13/11/06 - 14/11/06, pp. 49-90.
127. Fossati, F, Zasso, A & **Viola, IM**, 2006, 'Realizzazione di un dispositivo per la generazione di "twisted flow" per prove su imbarcazioni a vela in galleria del vento,' in the proceedings of The IX Convegno Nazionale di Ingegneria del Vento (IN-VENTO), Pescara, Italy, 18/06/06 - 21/06/06.
128. Fossati, F, Muggiasca, S, Vallicelli, A & **Viola, IM**, 2006, 'Caratterizzazione dell'aerodinamica di imbarcazioni a vela con prove in galleria del vento,' in the proceedings of The IX Convegno Nazionale di Ingegneria del Vento (IN-VENTO), Pescara, Italy, 18/06/06 - 21/06/06.
129. Fossati, F, Muggiasca, S & **Viola, IM**, 2006, 'Wind tunnel techniques for investigation and optimization of sailing yachts aerodynamics,' in the proceedings of The 2nd High Performance Yacht Design Conference (HPYD), Auckland, New Zealand, 14/02/06 - 16/02/06, pp. 105-113.
130. Zasso, A, Fossati, F & **Viola, IM**, 2005, 'Twisted flow wind tunnel design for yacht aerodynamic studies,' in the proceedings of The 4th European and African Conference on Wind Engineering (EACWE), Prague, Czech Republic, 11/07/05 - 15/07/05, pp. 350-351.
131. Zasso, A, Fossati, F, **Viola, IM** & Catena, P, 2004, 'Analisi delle caratteristiche del flusso per prove di imbarcazioni a vela in galleria del vento su modello in scala,' in the proceedings of The VIII Convegno Nazionale di Ingegneria del Vento (IN-VENTO), Reggio Calabria, Italy, 21/06/04 - 23/06/04.

COMMITTEE REPORTS

132. **Viola IM**, Young, AM, Gementzopoulos, A, and Yuan, W , 2023, *Chapter 6: Parametrising the Gust Mitigation Problem*, STO-TR-AVT-347, NATO Science and Technology Organisation, pp. 1-10.
133. Gopalarathnam, A, Taira, K, Mulleners, K, **Viola, IM**, Andreu-Angulo, I, Vader, P and Babinsky, H, 2023, *Chapter 4: Low Order Modelling for Large-Amplitude Gust Encounters*, STO-TR-AVT-347, NATO Science and Technology Organisation, pp. 1-26.
134. Babinsky, H, Andreu-Angulo, I, Vader, P, Mulleners, K, **Viola, IM**, Cetiner, O and Jones, AR, 2023, *Chapter 3: Physics of Flow Recovery*, STO-TR-AVT-347, NATO Science and Technology Organisation, pp. 1-7.
135. Jaworski, JW, Mulleners, K, Andreu-Angulo, I, Vader, P and Babinsky, H, Gementzopoulos, A, Jones, AR, Lagor, FD, Ringuette, M, Bonohrey, RJ, **Viola, IM**, Semaan, R and Young, AM, 2023, *Chapter 8: Strategies for Gust Mitigation*, STO-TR-AVT-347, NATO Science and Technology Organisation, pp. 1-47.
136. Hino, T, Rhee, SH, Wan, D, Kim, SE, Carrica, PM, Broglia, R, Bull, P, **Viola, IM**, Li, DQ and Saisto, I, 2011, *ITTC - Recommended Procedures and Guidelines: Practical Guidelines for Ship CFD Applications*, 7.5-03, 02-03, Specialist Committee on CFD in Marine Hydrodynamics, Committee of the 27th ITTC, pp. 1-18.

INVITED LECTURES

137. Water Brainstorming Ring seminar series, School of Engineering of the Swansea University. 'Power and thrust control by passive pitch for tidal turbines' (online, 06/24).
138. Experiments in Fluid Seminar Series (10.52843/cassyni.xm7j2b). 'Combining Theodorsen's and Impulse Theories to Predict the Lift of Large-Amplitude Pitching Foils' (online, 12/2023).
139. Department of Energy and Power Engineering, Tsinghua University, Beijing, China. Inaugural Lecture, Distinguished Visiting Professor: 'Bioinspired Research in Unsteady Fluid Mechanics' (08/2023).
140. China Three Gorges Corporation, Beijing, China. Invited Lecture: 'Fluid Mechanics for Wind and Tidal Energy' (08/2023).
141. Shanghai KaiQuan Pump Co., Shanghai, China. Invited Lecture: 'Morphing Blades for Wind and Tidal Energy' (08/2023).
142. InnovSail Conference, Lorient, France. Keynote lecture: 'Sail aerodynamics: from fundamental research to translation' (05/2023).
143. Intelligent and Bio-inspired Mechanics (IBiM) Seminars Series (hosted by Dr Juan Li, King's College London). Invited talk: 'How plant seeds scavenge energy from the wind to remain airborne' (online, 04/2023).

144. Department of Civil, Maritime and Environmental Engineering, University of Southampton, Southampton, UK. Research Seminar: 'My research on Aerodynamics and Hydrodynamics' (01/2023).
145. Combustion & Flow Diagnostics symposium (CFiD, hosted by Prof. Chong Pan, Beihang, and Prof. Deanna Lacoste, KAUST). Invited talk: 'Learning to Fly from Plant Seeds' (online, 01/2023).
146. School of Engineering & Physical Sciences, Heriot-Watt University, Edinburgh, UK. Christmas Lecture: 'Learning to Fly from Plant Seeds' (12/2022).
147. Zhejiang Ocean University, Zhoushan, China. Research Seminar (online, 05/2022).
148. RoboSoft 2022, Soft Aerial Robotics Workshop, Edinburgh, UK. Keynote Panel Talk: 'A Dandelion-Inspired Drone for Swarm Sensing' (04/2022).
149. Transformative Science and Technology Lecture Series, Mechanical Engineering Department, Temple University, PE, USA. 'Aerodynamics of Plant Seeds' (online, 03/2022).
150. Primary school 'Scuole Paritarie San Giuseppe', Bassano del Grappa, Italy. Invited Lecture: 'Il Volo dei Semi delle Piante' (online, 03/2022).
151. MechSE Fluid Mechanics Seminar Series, University of Illinois at Urbana-Champaign, Champaign, IL, USA. 'Aerodynamics of Plant Seeds' (online, 02/2022).
152. Aerodynamics of Insect Flight in Turbulent Flow (AIFIT), Biolocomotion Seminar Series, Aix-Marseille Université, Marseille, France, and University of Rostock, Rostock, Germany. 'Aerodynamics of Plant Seeds' (online, 02/2022).
153. Universidad Carlos III de Madrid, UC3M PhD Programme, Spain. Research Seminar: 'How Nature Flies' (online, 04/2021).
154. Usher Network for COVid-19 Evidence Reviews Conference, Edinburgh, UK. Keynote Lecture (~240 attendees): 'Respiratory Droplet Dispersion and How Face Coverings Mitigate Virus Transmission Risk' (online, 09/2020).
155. InnovSail Conference, Göteborg, Sweden. Keynote Lecture: 'How Sails Generate Forces (06/2020).
156. University of Cambridge, Engineering Department, Cambridge, UK. Research Seminar: 'Finding the Halo: a Separated Vortex Ring Underlies the Flight of the Dandelion' (11/2019).
157. VIII International Conference on Computational Methods in Marine Engineering, Marine 2019, Göteborg, Sweden. Plenary Lecture: 'Downwind Sails: Thin Wings That Suck' (05/19).
158. SSPA, Göteborg, Sweden. Invited Lecture: 'Yacht Sail Aerodynamics' (04/2019).
159. University of Auckland, Mechanical Engineering, Auckland, NZ. Research Seminar: 'Finding the Halo' (12/2018).
160. University of Washington, Department of Mechanical Engineering, Seattle, WA, USA. Research Seminar: 'Unsteady Hydrodynamics of Tidal Turbines' (11/2018).
161. University of California Santa Barbara, Department of Mechanical Engineering, Santa Barbara, CA, USA. Research Seminar: 'Finding the Halo: a Separated Vortex Ring Underlies the Flight of the Dandelion' (11/2018).
162. GALCIT Seminar Series (www.galcit.caltech.edu/seminars), Graduate Aeronautics Laboratory, Caltech, Pasadena, CA, USA. 'Finding the Halo: a Separated Vortex Ring Underlies the Flight of the Dandelion' (11/2018).
163. University of Warwick, Fluid Dynamics Research Centre, Warwick, UK. Research Seminar: 'Stories of Vortices that do Not Fly Away' (06/2018).
164. AkzoNobel International Paint, Gateshead, UK. Invited Lecture: 'Fundamentals of Boundary Layer Flow and Guidelines for Friction Measurement of Marine Coatings' (02/2018).
165. EPFL, School of Engineering, Lausanne, Swiss. Research Seminar: 'Stories of Vortices that do Not Fly Away' (10/2017).
166. United States Naval Academy, Naval Architecture & Ocean Engineering, Annapolis, MD, USA. Research Seminar: 'Bio-Inspired Flexible Surfaces for Flow Control' (04/2017).
167. Pennsylvania State University, School of Engineering, Erie, PA, USA. Research Seminar: 'Morphing Tidal Turbine Blades Inspired by America's Cup Sail Technology' (04/2017).
168. George Washington University, School of Engineering & Applied Science, Washington DC, USA. Research Seminar: 'Fluid Dynamics Research on America's Cup Yacht Sails and Applications in Marine Energy' (04/2017).

169. University of California San Diego, Jacobs School of Engineering, San Diego, CA, USA. Research Seminar: 'Fluid Dynamics Research on Tidal Turbine Blades Inspired by America's Cup Yacht Sails' (03/2017).
170. Stanford University, School of Earth, Energy and Environmental Sciences, Stanford, CA, USA. Research Seminar: 'Fluid Dynamics Research on Tidal Turbine Blades Inspired by America's Cup Yacht Sails' (03/2017).
171. SRI International, Melno Park, CA, USA. Invited Lecture 'Bio-Inspired Fluid Dynamics Research on Morphing Surfaces' (03/2017).
172. VII International Conference on Computational Methods in Marine Engineering, Marine 2017, Nantes, France. Invited Lecture, declined (05/2017).
173. University of Southampton, Aerodynamics and Flight Mechanics Group, Southampton, UK. Research Seminar: 'Fluid Dynamics Research for Marine Technology' (10/2016).
174. Aberdeen Renewable Energy Group Members Meeting, Aberdeen, UK. Invited Lecture: 'Reducing the Fatigue Load of Tidal Turbine Blades Exploiting Blade Flexibility' (08/2016).
175. University of Glasgow, Aerospace Sciences Division, Glasgow, UK. Research Seminar: 'Unsteady Hydrodynamics of Submerged Flexible Foils' (01/2016).
176. VI International Conference on Computational Methods in Marine Engineering, Marine 2015, Rome, Italy. Invited Lecture: 'Yacht Sail Flow: Recent Findings and Unanswered Questions' (06/2015).
177. University of Aberdeen, School of Engineering, Aberdeen, UK. Research Seminar: 'On the Fluid Dynamics of America's Cup Yachts and Applications in Renewable Energy' (12/2014).
178. IncrediblEdge Summit, Auckland, NZ. Invited Lecture: 'Stealing the Secret of Small Flyers' (02/2014).
179. AkzoNobel International Paint, Gateshead, UK. Invited Lecture: 'Principles of Hydrodynamics of Ship Hull Coatings' (02/2014).
180. Institut Supérieur de l'Aéronautique et de l'Espace (ISAE), Toulouse, France. Research Seminar: 'Computational Sail Aerodynamics' (01/14).
181. AkzoNobel International Paint, Gateshead, UK. Invited Lecture: 'Sailing Yacht Research' (4/2013).
182. Ravenswood Primary School, Newcastle, UK. Invited Lecture: 'Passions and Challenges that have driven my Career' (06/2013).
183. Lloyd's Register Newcastle Marine Alumni, London, UK. Invited Lecture: 'Sail Aerodynamics: Current Status and Perspectives' (01/2013).
184. School of Engineering, Computing and Mathematics, University of Plymouth, Plymouth , UK. Research Seminar (05/2012)
185. IncrediblEdge Summit, Auckland, NZ. Invited Lecture: 'Yacht Design: Achievements and Perspectives of Sail Propulsion' (03/2012).
186. Research Institute of the Ecole Navale, Brest, France. Research Seminar: 'Sail Aerodynamics: Current Status and Perspectives' (11/2011).

COMMENTS AND DEBATES

187. **Viola, IM** & Nakayama, N, 2022, 'Flying Seeds,' Quick guide, *Current Biology Magazine*, vol. 32, R197-R212. https://doi.org/10.1016/j.cub.2022.02.029
188. **Viola, IM**, 2021 (3 Feb). Value of Masks. Letter to The Times.
189. **Viola, IM**, 2016. Discussion on 'Aerodynamic force deduction on yacht sails using pressure and shape measurements in real time,' Transactions of the Royal Institution of Naval Architects Part B: International Journal of Small Craft Technology, vol. 158, no. 2.
190. **Viola, IM** & Flay, RGJ, 2015. Discussion on 'Pressure distributions on modern asymmetric spinnakers,' Transactions of the Royal Institution of Naval Architects Part B: International Journal of Small Craft Technology, vol. 157, no. 2.
191. **Viola, IM**, 2014. Discussion on 'Fluid structure interaction simulation of spinnakers – getting closer to reality,' Transactions of the Royal Institution of Naval Architects Part B: International Journal of Small Craft Technology, vol. 156 no. 2.
192. **Viola, IM**, 2014. Discussion on 'Experimental assessment of mega-yacht aerodynamic performance and characteristics,' Transactions of the Royal Institution of Naval Architects Part B: International Journal of Small Craft Technology, vol. 156 no. 2.

193. **Viola, IM** & Flay, RGJ, 2010. Discussion on 'Forces and pressure investigation of modern asymmetric spinnakers,' Transactions of the Royal Institution of Naval Architects Part B: International Journal of Small Craft Technology, vol 152, no. 1, pp. 51-53.

MEDIA INTERVIEWS (RADIO AND/OR VIDEO)

194. **Viola, IM**, 2021 (7 Aug), Titanic sub: the search for the OceanGate submersible, Interview to BBC Radio 5
195. **Viola, IM**, 2021 (7 Aug), Swarm Sensing. Interview to Robo Talk, UK-RAS Network (edin.ac/3YHnT0Y)
196. **Viola, IM**, 2021 (7 Aug), Ask the Experts: Masks. Interview to NCB Global Hangout (edin.ac/3zgvCXD)
197. **Viola, IM**, 2021 (3 Feb), Which face coverings are most effective, Interview to ITV News at 6
198. **Viola, IM**, 2021 (24 Aug), Face masks mitigate droplet dispersion, Interview to BBC Breakfast
199. **Viola, IM**, 2021 (15 Feb), One mask or two?, Interview to ITV News (edin.ac/38j3gAi)
200. **Viola, IM**, 2020 (23 Dec), Face masks mitigate droplet dispersion, Interview to ABC News Channel (Australian national broadcaster)
201. **Viola, IM**, 2021 (19 Aug), Face masks mitigate droplet dispersion, Interview to BBC Radio Manchester
202. **Viola, IM**, 2021 (19 Aug), Face masks mitigate droplet dispersion, Interview to NBC Universal
203. **Viola, IM**, 2020 (27 June), Effectiveness of face masks, BBC News Arabic
204. **Viola, IM**, 2020 (5 June), Effectiveness of face masks, Interview to 5 News
205. **Viola, IM**, 2020 (26 May), Effectiveness of face masks, Interview to BBC World
206. **Viola, IM**, 2020 (21 May), Face coverings mitigate aerosol dispersal, Interview to Channel 5 News
207. **Viola, IM**, 2020 (21 May), Face coverings mitigate aerosol dispersal, Interview to Sky News (edin.ac/3jkh9o7)
208. **Viola, IM**, 2020 (20 May), Face coverings mitigate aerosol dispersal, Interview to Sky News
209. **Viola, IM**, 2020 (1 May), Interview to ITV News (edin.ac/3mH8r5v)
210. **Viola, IM**, 2017 (23 Aug), Interview to BBC Radio (edin.ac/3kJAw9J)

ARTICLES ON SPECIALISED MAGAZINES

211. Biancolini, ME, 2023, 'Face to face with **Ignazio Maria Viola** and Ubaldo Cella,' *Futurities*, EnginSoft (Autumn).
212. Biancolini, ME, 2023, 'CASE STUDY The growing importance of numerical simulation in the nautical sector,' *etSNE*, ANZINE (etsne.com/dataCenter/anzine/view/79). South Korea Ansys distributor reprinting Biancolini (2023).
213. Bartesaghi, S & **Viola, IM**, 2012, 'STAR-CCM+ used to design high performance dinghy,' *CD-adapco STAR Academic Newsletter*, 10 CD-adapco.
214. **Viola, IM**, Flay, RGJ & Ponzini, R, 2011, 'Chasing the wind: the new state-of-the-art in the America's Cup design,' pp. 55-58, *Dynamics – Engineering Success*, 3 3 CD-adapco.
215. **Viola, IM** & Ponzini, R, 2009, 'One billion cells: yes we can,' pp. 64-70, *Nautech*, 11 Tecniche Nuove.
216. **Viola, IM** & Ponzini, R, 2009, 'Sailing past a billion,' pp. 47-48, *Ansys Advantage*, 3 2 Ansys.
217. **Viola, IM**, 2007, 'I nuovi piani velici della 32a Coppa America,' pp. 120-125, *Mondobarca*, 5 Editoriale Olimpia.
218. **Viola, IM**, Muggiasca, S & Fossati, F, 2006, 'Lo studio di piani velici mediante prove in galleria del vento,' pp. 112-118, *Nautech*, 1 Tecniche Nuove.
219. **Viola, IM** & Fossati, F, 2005, 'La ricerca scientifica nella nautica,' pp. 106-110, *Nautech*, 4 Tecniche Nuove.

MASTER AND DOCTORAL THESES

220. **Viola, IM**, 2008, 'Fluidodinamica numerica e sperimentale applicata alla dinamica dell'imbarcazione,' PhD Thesis, Politecnico di Milano, Milan, Italy.
221. **Viola, IM** 2001, 'Ketch di 15m per la navigazione d'altura,' Master Thesis, Università degli Studi di Genova, Genoa, Italy.

CONFERENCE POSTERS

222. Huang, D, Bose, C & **Viola, IM**, 2024, 'On the flow around 3D porous disks at an incidence,' The 37th Scottish Fluid Mechanics Meeting, Edinburgh, 29/05/24.
223. Liu, Y, Willden, RHJ, Tucker, PG & **Viola, IM**, 2024, 'Controlling turbine tip vortices and cavitation through local permeability,' The 7th Supergen ORE Hub Early Career Researchers Forum, Plymouth, UK, 23/04/24.
224. Bose, C, Bappa, M, Desmulliez, M & **Viola, IM,** 2022, 'Dandelion-Inspired Insect-Scale Drones Dandelion-Inspired Insect-Scale Drones,' Third International Workshop on Insect Bio-inspired Technologies, Edinburgh, UK, 17/11/22 - 18/11/22.
225. Bose, C, Bruce, C & **Viola, IM,** 2022, 'Separated vortex ring and vortex dipole past inclined porous discs and plates,' First Direct In-Person Colloquium on Vortex Dominated Flows (DisCoVor), Villars-sur-Ollon, Switzerland, 17/05/22 - 10/05/22.
226. Bose, C, Bruce, C & **Viola, IM,** 2022, 'Gust response of free-falling bodies,' First Direct In-Person Colloquium on Vortex Dominated Flows (DisCoVor), Villars-sur-Ollon, Switzerland, 17/05/22 - 10/05/22.
227. Bruce, C, Bose, C & **Viola, IM**, 2022, 'Aerodynamics of 2D porous plates,' Future Wind and Marine Conference, Strathclyde, United Kingdom, 18/02/22-19/02/22.
228. **Viola, IM**, Pisetta, G, Dai, W, Arredondo-Galeana, A, Young A & Smyth, A, 2021, 'Morphing Blades: Theory and Proof of Principles,' 14th European Wave and Tidal Energy Conference, Plymouth, UK, 05/09/21 - 09/09/21.
229. Pavar, A & **Viola, IM**, 2020, 'Improved physical understanding of gust-wing interaction using the impulse method,' Future Wind and Marine Conference, Strathclyde, United Kingdom, 05/03/20.
230. Certini, D, Cummins, C, Mastropaolo, E, Nakayama, N & **Viola, IM**, 2019, 'On the aerodynamics of the gliding seeds of Javan cucumber,' Scottish Fluid Mechanics Meeting 2019, Dundee, United Kingdom, 30/05/19.
231. Arredondo-Galeana, A, Dai, W, Pisetta, G, Young, A & **Viola, IM**, 2018. 'Morphing blades for fatigue load alleviation of wind and tidal turbines. CAMREG Project Factory - Industry Engagement. Edinburgh, United Kingdom, 12/12/18.
232. Arredondo-Galeana, A, Dai, W, Pisetta, G, Young, A & **Viola, IM**, 2018. 'Morphing blades for fatigue load alleviation of wind and tidal turbines. Wave Energy Scotland Third Annual Conference. Edinburgh, United Kingdom, 6/12/18.
233. Arredondo-Galeana, A, Dai, W, Pisetta, G, Young, A & **Viola, IM**, 2018. 'Morphing blades for fatigue load alleviation of wind and tidal turbines. SuperGen UK Centre for Marine Energy Research (UKCMER) Annual Assembly 2018. Edinburgh, United Kingdom, 5/12/18.
234. Scarlett, GT, Sellar, B, van den Bremer, T & **Viola, IM**, 2018. 'Unsteady Hydrodynamics of Tidal Turbine Blades,' SuperGen UK Centre for Marine Energy Research (UKCMER) Annual Assembly 2018. Edinburgh, United Kingdom, 5/12/18.
235. Scarlett, G, van den Bremer, T, Sellar, B & **Viola, IM**, 2018, 'Unsteady hydrodynamics of full-scale tidal turbines,' Scottish Fluid Mechanics Meeting 2018, Aberdeen, United Kingdom, 29/05/18.
236. Pisetta, G, Le Mestre, R & **Viola, IM**, 2018, 'Passive load control of a tidal turbine,' Scottish Fluid Mechanics Meeting 2018, Aberdeen, United Kingdom, 29/05/18.
237. Weidong, D & **Viola, IM**, 2018, 'Pitching foils at moderate Reynolds numbers,' Scottish Fluid Mechanics Meeting 2018, Aberdeen, United Kingdom, 29/05/18.
238. Pisetta, G & **Viola, IM**, 2018, 'Fatigue loads alleviation by morphing blades for tidal turbines,' Future Wind and Marine Conference, Strathclyde, United Kingdom, 22/03/18.
239. Jozsa, TI, **Viola, IM**, Kashtalyan, M, Balaras, E & Kidd, B, 2017, 'Smart coatings for drag reduction in yachts,' 4th International Conference on Innovation in High Performance Sailing Yachts (Innov'Sail 2017), Lorient, France, 28/06/17 - 30/06/17.
240. Speranza, N, **Viola, IM** & Kidd, B, 2017, 'Modelling of hull roughness,' 4th International Conference on Innovation in High Performance Sailing Yachts (Innov'Sail 2017), Lorient, France, 28/06/17 - 30/06/17.
241. Le Mestre, R & **Viola, IM**, 2017, 'Passive pitch control for gust alleviation of tidal turbine blades,' Scottish Fluid Mechanics Meeting 2017, Glasgow, United Kingdom, 19/05/17.
242. Certini, D, Cummins, C, **Viola, IM**, Seale, M, Mastropaolo, E & Nakayama N, 2017, 'The Stokes-flow parachute of the dandelion fruit,' Scottish Fluid Mechanics Meeting 2017, Glasgow, United Kingdom, 19/05/17.

243. Wang, E, Ramesh, K, Killen, S & **Viola, IM**, 2017, 'Numerical investigation of power extraction from a flapping wing at low Reynolds number,' Scottish Fluid Mechanics Meeting 2017, Glasgow, United Kingdom, 19/05/17.
244. Jozsa, TI, **Viola, IM**, Kashtalyan, M, Kidd, B & Balaras, E, 2016, 'Compliant coating for drag reduction,' Energy Technology Partnership Annual Conference, Aberdeen, United Kingdom, 03/11/16 (Best Poster Award).
245. Luttik, KN, Anderson, P, **Viola, IM** & Parish, D, 2016, 'Ocean-current power generation using an underwater kite carousel,' The Commercial UAV Show, London, United Kingdom, 19/10/16-20/10/16.
246. Muir, RE & **Viola, IM**, 2015, 'The leading edge vortex: a bio-inspired design enhancement for marine current turbines,' 2015 European Symposium of the International Network on Offshore Renewable Energy (INORE), Vico Equense (Naples), Italy, 23/05/15-29/05/15.
247. Tully, S, **Viola, IM**, Muir, RE & Arredondo-Galeana, A, 2015, 'Flexible Blades for tidal turbines,' 2015 INORE Symposia, Vico Equense (Naples), Italy, 23/05/15-29/05/15.
248. Tulli, S & Ingram, D & **Viola, IM**, 2016, 'A novel method to generate inflow turbulence for LES simulations,' The Scottish Fluid Mechanics Meeting 2016, Edinburgh, United Kingdom, 20/05/16.
249. McAlister, M, Venugopal, V & **Viola, IM**, 2014, 'The classification and characterisation of extreme waves and their impact on marine energy device development,' 2014 Symposium of the International Network on Offshore Renewable Energy (INORE), Cantabria, Spain, 11/05/14 - 17/05/14.
250. Biancolini, ME, **Viola, IM** & Riotte, M, 2011, 'Sail trim optimisation using mesh morphing,' 2011 Ansys UK Conference, Gaydon, United Kingdom, 9/11/11 - 9/11/11.
251. **Viola, IM** & Ponzini, R, 2010, 'One billion cell CFD study of an American's Cup sailing yacht model,' 2010 EnginSoft International Conference & ANSYS Italian Conference, Brescia, Italy, 21/10/10 - 22/10/10.
252. **Viola, IM**, Ponzini, R & Passoni, G, 2009, 'CFD vs. wind tunnel for an ACC sailing yacht: a turbulence modelling and grid resolution study,' 3rd International Conference on Advanced Computational Engineering and Experimenting (ACE-X-2009), Rome, Italy, 22/06/09 - 23/06/09.

CONFERENCE ABSTRACTS WITH PRESENTATIONS

253. Souppez,J-BRG & **Viola, IM,** 2024, 'Water Tunnel Testing of Downwind Yacht Sails,' The 77th Annual American Physical Society Division of Fluid Dynamics Meting (APS-DFD), Salt Lake City, UT, USA, 24/11/24 - 26/11/24.
254. Williams, E, **Viola, IM**, Ross, L, Baird, R & Murphy, DR, 2024, 'The Kinematics and Flight Behaviors of Fruit Flies and Fungus Gnats in a Vertical Wind Tunnel,' The 77th Annual American Physical Society Division of Fluid Dynamics Meting (APS-DFD), Salt Lake City, UT, USA, 24/11/24 - 26/11/24.
255. Mitra, B, Desmulliez, M & **Viola, IM**, 2024, 'Drag of ammonite shell models,' UK Fluids Conference, Swansea, UK, 09/09/24-11/09/24.
256. Arukalava Seshasayee, MSC, Liu, Y, Ganapathisubramani, B, Schultz, MP, Hamblett, P & **Viola IM**, 2024, 'Wall function modifications in OpenFOAM for heterogeneous roughness modelling,' UK Fluids Conference, Swansea, UK, 09/09/24-11/09/24.
257. Bhattacharyya, S, Mitra B, Desmulliez, M & **Viola, IM**, 2024, 'Dynamics of flow around wind-dispersed dandelion-inspired polyimide flyers,' The 37th Scottish Fluid Mechanics Meeting, Edinburgh, 29/05/24.
258. Liu, Y, Willden, RHJ, Tucker, PG & **Viola, IM**, 2024, 'Controlling turbine tip vortices and cavitation through local permeability,' The 7th Supergen ORE Hub Early Career Researchers Forum, Plymouth, UK, 23/04/24.
259. Alexandrou, P. **Viola, IM**, Bose, C & Attili, A, 2024, 'Direct numerical simulations of free-falling discs in turbulence,' The 1st European Fluid Dynamics Conference (EFDC1), Aachen, Germany, 16/09/24 - 20/09/24.
260. Liu, Y, Willden, R, Tucker, P & **Viola, IM,** 2024, 'Controlling tip vortices and cavitation through local permeability,' The 1st European Fluid Dynamics Conference (EFDC1), Aachen, Germany, 16/09/24 - 20/09/24.
261. Huang, D, Bose, C & **Viola, IM**, 2023, 'On the flow around porous disks at an incidence,' The 3rd Colloquium on Vortex Dominated Flow (DisCoVor), Delft, Netherlands, 16/04/24-19/04/24.
262. Bose, C & **Viola, IM,** 2023, 'The effect of transverse gusts on free-falling plates,' The 76th Annual American Physical Society Division of Fluid Dynamics Meting (APS-DFD), Washington, DC, USA, 19/11/23 - 21/11/23.
263. Huang, D, Bose, C, Deng, X & **Viola, IM**, 2023, 'On the wake and forces of porous disks at an incidence,' The UK Fluids Network Conference 2023, Glasgow, UK, 17/10/23-19/10/23.

264. Arukalava Seshasayee, MSC, Liu, Y & Viola IM, 2023 'Towards bespoke wall functions for heterogeneous roughness,' The UK Fluids Network Conference 2023, Glasgow, UK, 17/10/23-19/10/23.
265. Mitra, B, **Viola, IM**, Cummins, C, Stoyanov, S & Desmulliez, M, 2023, 'Measurement of drag coefficients of 3D printed inflated ammonite shells,' International Symposium on Palaeo-Bioinspiration, Paris, France, 13/09/23-15/09/23.
266. Mitra, B, Bose, C, Desmulliez, M & **Viola, IM**, 2023, 'Dandelion-Inspired Insect-Scale Drones,' Scottish Fluid Mechanics Meeting 2023, Glasgow, United Kingdom, 24/05/23.
267. Alexandrou, P, Bose, C, **Viola, IM** & Attili, A, 2023, 'Realistic turbulence generation for simulations of free-falling discs in turbulence,' Scottish Fluid Mechanics Meeting 2023, Glasgow, United Kingdom, 24/05/23.
268. Frankowski, K, Gambuzza, S, Young, AM, Broglia, R, McCarthy, E & **Viola, IM**, 2023, 'Passively Pitching Blades for Wind Turbine,' Scottish Fluid Mechanics Meeting 2023, Glasgow, United Kingdom, 24/05/23.
269. Huang, D, Bose, C & **Viola, IM**, 2023, 'On the wake and forces of porous discs at an incidence,' Scottish Fluid Mechanics Meeting 2023, Glasgow, United Kingdom, 24/05/23.
270. Bose, C & **Viola, IM,** 2023, 'Vortex Dynamics of Free-Falling Porous Plates and Discs in Discrete Transverse Gust,' Second Direct In-Person Colloquium on Vortex Dominated Flows (DisCoVor), Breckenridge, Co, USA 16/05/23-19/05/23.
271. Bose, C & **Viola, IM,** 2022, 'Gust response of free-falling porous disks,' The 75th Annual American Physical Society Division of Fluid Dynamics Meting (APS-DFD), Indianapolis, IN, USA, 20/11/22 - 22/11/22.
272. Liu, Y, Gambuzza, S, Ōtomo, S, McCarthy, E, Young, AM, Broglia, R & **Viola, IM,** 2022, 'Gust response and mitigation through passive pitching,' The 75th Annual American Physical Society Division of Fluid Dynamics Meting (APS-DFD), Indianapolis, IN, USA, 20/11/22 - 22/11/22.
273. Liu, Y, Ōtomo, S, Gambuzza, S, Broglia, R, McCarthy, E, Young, A & **Viola, IM,** 2022, 'Gust mitigation through passive pitching,' The 14th European Fluid Mechanics Conference (EFMC14), Athens, Greece, 13/09/22 - 16/09/22.
274. Bose, C & **Viola, IM,** 2022, 'Dynamics of freely falling porous bodies,' The 14th European Fluid Mechanics Conference (EFMC14), Athens, Greece, 13/09/22 - 16/09/22.
275. Gambuzza, G, Pisetta, G & **Viola, IM**, 2022, 'An experimental investigation into passive pitch systems for tidal turbines,' UK Fluids Conference, Sheffield, UK, 06/09/22 - 08/09/22.
276. Bose, C, Bruce, C & **Viola, IM,** 2022, 'Flow past stationary and freely falling porous bodies,' The 17th OpenFOAM Workshop (OFW17), Cambridge, UK, 11/07/22 - 14/07/22.
277. Ōtomo, S, Mullener, K, Ramesh, K & **Viola, IM,** 2022, 'Low-order modelling of lift on pitching aerofoils,' First Direct In-Person Colloquium on Vortex Dominated Flows (DisCoVor), Villars-sur-Ollon, Switzerland, 17/05/22 - 10/05/22.
278. Certini, D, Cummins, C, Giorgio-Serchi, F, Yang, Y, Nakayama, N & **Viola, IM**, 2022, 'The flight of Alsomitra macrocarpa,' The 8th European Congress on Computational Methods in Applied Sciences and Engineering (ECCOMAS Congress 2022), Oslo, Norway, 05/06/22 - 09/06/22.
279. **Viola, IM,** Smith, AJ & Pisetta, G, 2021, 'The Scales of the Leading-Edge Separation Bubble,' The 74th Annual American Physical Society Division of Fluid Dynamics Meting (APS-DFD), Phoenix, AZ, USA, 21/11/21 - 23/11/21.
280. Arredondo-Galeana, A, Kiprakis, A & **Viola, IM,** 2021, 'Smart Blades with actively controlled compliant blades,' Wind Energy Science Conference, Hannover, Germany, 25/05/21 - 28/05/21.
281. Souppez, J-BRG & **Viola, IM**, 2021, 'Circular arc aerodynamics and applications to downwind yacht sails and wind assisted ships,' The 9th International Conference on Computational Methods in Marine Engineering (MARINE 2021), online, 02/06/21 - 04/06/21.
282. Pavar, G, Cummins, CP & **Viola, IM**, 2020, 'Impulse theory applied to low Reynolds number flows, including viscous diffusion of vorticity,' The 73rd Annual American Physical Society Division of Fluid Dynamics Meting (APS-DFD), Chicago, IL, USA, 22/11/20 - 24/11/20.
283. Cummins, CP, Ajayi, OJ, Mehendale, FV, Gabl, R & **Viola, IM**, 2020, 'A mathematical model for multi-modality in droplet dispersion,' The 73rd Annual American Physical Society Division of Fluid Dynamics Meting (APS-DFD), Chicago, IL, USA, 22/11/20 - 24/11/20.

284. Souppez, J-BRG & **Viola, IM**, 2020, 'Aerodynamics of highly cambered circular arcs with a sharp leading edge at low Reynolds numbers,' The 73rd Annual American Physical Society Division of Fluid Dynamics Meting (APS-DFD), Chicago, IL, USA, 22/11/20 - 24/11/20.
285. Certini, D, Fazan, L, Nakayama, N, Kozlowski, G & **Viola, IM**, 2020, 'The branch-aided chaotic dispersal of Zelkova abelicea,' The 73rd Annual American Physical Society Division of Fluid Dynamics Meting (APS-DFD), Chicago, IL, USA, 22/11/20 - 24/11/20.
286. Otōmo, S, Mulleners, K, Ramesh, K & **Viola, IM**, 2020, 'Prediction of unsteady lift on a pitching foil,' The 73rd Annual American Physical Society Division of Fluid Dynamics Meting (APS-DFD), Chicago, IL, USA, 22/11/20 - 24/11/20.
287. Arredondo-Galeana, A, Young, A & **Viola, IM**, 2020, 'Passively morphing blades for load alleviation of tidal turbines,' Scottish Fluid Mechanics Meeting 2020, Edinburgh, United Kingdom, 28/05/20.
288. Pisetta, G & **Viola, IM**, 2019, 'Unsteady loads mitigation using flexible wings,' 72nd Annual American Physical Society Division of Fluid Dynamics Meting (APS-DFD), Seattle, WA, USA, 23/11/19 - 26/11/19.
289. Otōmo, S, Mulleners, K, Ramesh, K & **Viola, IM**, 2019, 'On the lift and vortices of an asymmetrically pitching foil,' The 72nd Annual American Physical Society Division of Fluid Dynamics Meting (APS-DFD), Seattle, WA, USA, 23/11/19 - 26/11/19.
290. Dai, W, Broglia, R & **Viola, IM**, 2019, 'Numerical simulation of a horizontal axis tidal turbine with a passive load-control system,' The 72nd Annual American Physical Society Division of Fluid Dynamics Meting (APS-DFD), Seattle, WA, USA, 23/11/19 - 26/11/19.
291. Otōmo, S, Mulleners, K, Ramesh, K & **Viola, IM**, 2019, 'On the lift augmentation mechanism of an asymmetrically pitching foil,' The 3rd UK Fluids Network Conference, Cambridge, UK, 27/08/19.
292. Certini, D, Cummins, C, Mastropaolo, E, Nakayama, N & **Viola, IM**, 2019, 'On the aerodynamics of the gliding seeds of Javan cucumber,' The 3rd UK Fluids Network Conference, Cambridge, UK, 27/08/19.
293. Józsa, TI, Balaras, E, Kashtalyan, M, Borthwick, AGL & **Viola, IM**, 2019, 'On active and passive streamwise wall fluctuations in turbulent channel flows: a DNS study,' The 11th International Symposium on Turbulence and Shear Flow Phenomena (TSFP11), Southampton, United Kingdom, 30/07/19 - 02/08/19 (peer-reviewed 2pp extended abstract).
294. Otōmo, S, Mulleners, K, Ramesh, K & **Viola, IM**, 2019, 'On the lift of an asymmetrically pitching foil,' The 32nd Scottish Fluid Mechanics Meeting, Dundee, United Kingdom, 30/05/19.
295. Certini, D, Cummins, C, Mastropaolo, E, Nakayama, N & **Viola, IM**, 2019, 'On the aerodynamics of the gliding seeds of Javan cucumber,' The 32nd Scottish Fluid Mechanics Meeting, Dundee, United Kingdom, 30/05/19.
296. Cummins, C, Seale, M, Mastropaolo, E, Nakayama, N & **Viola, IM**, 2018, 'How the dandelion stabilises a drag-enhancing vortex ring,' The 71th Annual American Physical Society Division of Fluid Dynamics Meting (APS-DFD), Atlanta, GA, USA, 18/11/18 - 20/11/18.
297. Souppez, J-BRG & **Viola, IM**, 2018. 'On highly cambered thin circular arcs at low Reynolds numbers,' The UK Fluids Conference. Manchester, UK, 04-06/09/18.
298. Scarlett, G, van den Bremer, T, Sellar, B & **Viola, IM**, 2018, 'Tidal turbine hydrodynamics,' The UK Fluids Conference 2018, Manchester, United Kingdom, 04/09/18 - 06/09/18.
299. Weidong, D & **Viola, IM**, 2018, 'Oscillating foils at moderate Reynolds numbers,' The UK Fluids Conference 2018, Manchester, United Kingdom, 04/09/18 - 06/09/18.
300. Wang, E, Ramesh, K, **Viola, IM** & Killen S, 2018, 'Self-sustained limit-cycle oscillations in a flapping-foil energy harvester. The European Conference on Computational Mechanics (Solids, Structures and Coupled Problems) (ECCM 6) and the European Conference on Computational Fluid Dynamics (ECFD 7), Glasgow, United Kingdom, 11/06/18 - 15/06/18.
301. Weidong, D, Balaras, E & **Viola, IM**, 2018, 'Wang, E, Ramesh, K, **Viola, IM** & Killen S, 2018, 'Self-sustained limit-cycle oscillations in a flapping-foil energy harvester,' The European Conference on Computational Mechanics (Solids, Structures and Coupled Problems) (ECCM 6) and the European Conference on Computational Fluid Dynamics (ECFD 7), Glasgow, United Kingdom, 11/06/18 - 15/06/18.
302. Souppez, JB & **Viola, IM**, 2018, 'On highly cambered thin circular arcs at low Reynolds numbers,' The Scottish Fluid Mechanics Meeting 2018, Aberdeen, United Kingdom, 29/05/18.

303. Scarlett, G, van den Bremer, T, Sellar, B & **Viola, IM**, 2018, 'Unsteady hydrodynamics of full-scale tidal turbines,' The 6th Oxford Tidal Energy Workshop (OTE2018), Oxford, United Kingdom, 26/03/18 - 27/03/18 (peer-reviewed 2pp extended abstract).
304. Muir, R, Arredondo-Galeana, A & **Viola, IM**, 2017, 'The leading-edge vortex of swift-wing shaped delta wings,' The 70th Annual American Physical Society Division of Fluid Dynamics Meting (APS-DFD), Denver, CO, USA, 19/11/17 - 21/11/17.
305. Arredondo-Galeana, A & **Viola, IM**, 2017, 'The leading-edge vortex of yacht sails,' The 70th Annual American Physical Society Division of Fluid Dynamics Meting (APS-DFD), Denver, CO, USA, 19/11/17 - 21/11/17.
306. **Viola, IM**, Cummins, C, Mastropaolo, E & Nakayama, N, 2017, Permeable disks at low Reynolds numbers,' The 70th Annual American Physical Society Division of Fluid Dynamics Meting (APS-DFD), Denver, CO, USA, 19/11/17 - 21/11/17.
307. Cummins, C, **Viola, IM**, Seale, M, Mastropaolo, E & Nakayama, N, 2017, 'The miniature parachute of the dandelion fruit,' The 70th Annual American Physical Society Division of Fluid Dynamics Meting (APS-DFD), Denver, CO, USA, 19/11/17 - 21/11/17.
308. Józsa, TI, **Viola, IM**, Balaras, E, Kashtalyan, M & Kidd, B, 2017, 'Passive in-plane wall deformations for turbulent drag reduction,' The Energy Technology Partnership Annual Conference, Edinburgh, United Kingdom, 10/10/17.
309. Cummins, C, **Viola, IM**, Seale, M, Certini, D, Macente, A, Mastropaolo, E & Nakayama, N, 2017, 'The Stokes-flow parachute of the dandelion fruit,' Form and Deformation in Solid and Fluid Mechanics, Newton Institute, Cambridge, United Kingdom, 18/09/17 – 22/09/17.
310. Cummins, C, **Viola, IM**, Mastropaolo, E & Nakayama N, 2017, 'The flight of the dandelion fruit,' The Scottish Fluid Mechanics Meeting 2017, Glasgow, United Kingdom, 19/05/17.
311. Arredondo-Galeana, A & **Viola, IM**, 2016, 'On the leading edge vortex of thin wings,' The 69th Annual American Physical Society Division Fluid Dynamics Meeting (APS-DFD), Portland, OR, USA, 20/11/16 - 22/11/16.
312. Arredondo-Galeana, A & **Viola, IM**, 2016, 'Vortex flow of yacht sails,' The UK Fluids Conference, London, United Kingdom, 7/09/16 - 8/09/16.
313. Cummins, C, **Viola, IM** & Nakayama, N, 2016, 'The Stokes-flow parachute of the dandelion fruit,' The UK Fluids Conference, London, United Kingdom, 7/09/16 - 8/09/16.
314. Jozsa, TI, **Viola, IM**, Balaras, E & Kashtalyan, M, 2016, 'Drag reduction by tangential wall velocity control,' The Scottish Fluid Mechanics Meeting 2016, Edinburgh, United Kingdom, 20/05/16.
315. Arredondo-Galeana, A & **Viola, IM**, 2016, 'The leading edge vortex of yacht sails,' The Scottish Fluid Mechanics Meeting 2016, Edinburgh, United Kingdom, 20/05/16.
316. Scarlett, G & **Viola, IM**, 2016, 'Unsteady Tidal Turbine Blade Loading: an Analytical Approach,' The 5th Oxford Tidal Energy Workshop (OTE2016), Oxford, United Kingdom, 21/03/15 - 22/03/16 (peer-reviewed 2pp extended abstract).
317. **Viola, IM**, Tully, S & Scarlett, G, 2016, 'Unsteady hydrodynamics of flexible submerged foils,' The 5th Oxford Tidal Energy Workshop (OTE2016), Oxford, United Kingdom, 21/03/15 - 22/03/16 (peer-reviewed 2pp extended abstract).
318. **Viola, IM**, Tully, S, Ingram, D, 2015, 'Drag reduction through wave-current interactions with a marine hydrofoil,' The 68th Annual American Physical Society Division Fluid Dynamics Meeting (APS-DFD), Boston, Ma, USA, 22/11/15 - 24/12/15.
319. Jozsa, TI, **Viola, IM**, Balaras, E, 2015, 'Streamwise shear stress driven compliant wall for drag reduction,' The 68th Annual American Physical Society Division Fluid Dynamics Meeting (APS-DFD), 22/11/15 - 24/11/15.
320. **Viola, IM**, 2015, 'Yacht sail flow: recent findings and unanswered questions,' The 6th Conference on Computational Methods in Marine Engineering (Marine 2015), 15-17 June, Rome, Italy, 15/06/15 - 17/06/15. Invited Session.
321. **Viola, IM**, Tully, S, Richon, J-B, Arredondo-Galeana, A & Muir, R, 2015, 'Flexible blades for tidal turbines,' The 4th Oxford Tidal Energy Workshop (OTE2015), Oxford, United Kingdom, 23/03/15 - 24/03/15 (peer-reviewed 2pp extended abstract).

322. Richards, PJ & **Viola, IM**, 2015, 'Leading edge vortex dynamics,' The 17th Australasian Wind Engineering Society Workshop (AWES), Wellington, New Zealand, 12/02/15-13/02/15 (peer-reviewed 4pp extended abstract).
323. **Viola, IM**, 2014, 'Aerodynamics of yacht sails: viscous flow features and surface pressure distributions,' The 67th Annual American Physical Society Division Fluid Dynamics Meeting (APS-DFD), 23/11/14 - 25/11/14.
324. Ponzini, R, Bartesaghi, S, Van Renterghem, T & **Viola, IM**, 2012, 'Delayed detached eddy simulation of yacht sails with experimental validation,' The International CAE Conference, Lazise, Italy, 22/10/12 - 23/10/12.
325. **Viola, IM**, Bot, P & Riotte, M, 2013, 'On the uncertainty of CFD in sail aerodynamics,' The Verification and Validation Symposium (V&V 2013), Las Vegas, United States, 22/05/13 - 24/05/13.
326. **Viola, IM** & Flay, RGJ, 2010, 'On-water pressure measurements on a sailing yacht,' The 14th Australasian Wind Engineering Society Workshop (AWES), Australia, 4/08/10 - 6/08/10 (peer-reviewed 4pp extended abstract).
327. **Viola, IM** & Ponzini, R, 2008, 'Sailing yacht computational aerodynamics: an investigation in RANS capabilities with large computational resources,' The International Conference on Simulation Based Engineering and Sciences & Engine Soft Conference 2008, Venice, Italy, 16/10/08 - 17/10/08.