

		17.10.23			18.10.23			19.10.23		
		Room 2	Room3	Auditorium B	Room 2	Room3	Auditorium B	Room 2	Room3	Auditorium B
08:00	08:30	Registration								
08:30	- 09:00									
09:00	09:15	<i>Welcome and introduction (M. Fossati, K. Kontis, I.M. Viola)</i>			<i>Plenary 03 - T. Magin</i>			<i>Plenary 05 - E. Lauga</i>		
09:15	- 09:30									
09:30	- 09:45	<i>Plenary 01 - E. Johnstone/R. Doran</i>								
09:45	- 10:00				ACS-001	HTP-001	CFD-021	GAG-001	FIT-017	SSD-001
10:00	- 10:15				ACS-002	HTP-002	CFD-022	GAG-003	FIT-018	SSD-003
10:15	- 10:30	Poster Setup	AER-002	CFD-001	ACS-003	HTP-003	CFD-023	GAG-004	FIT-019	SSD-004
10:30	- 10:45		AER-003	CFD-002	ACS-005	HTP-004	CFD-024	GAG-005	FIT-020	SSD-005
10:45	- 11:15	<i>Coffee Break</i>			<i>Coffee Break</i>			<i>Coffee Break</i>		
11:15	- 11:30	BFD-001	AER-004	CFD-003	CFL-007	FIT-001	CFD-025	GAG-006	FIT-022	SSD-006
11:30	- 11:45	BFD-002	AER-005	CFD-004	CFL-008	FIT-002	CFD-026	GAG-007	FIT-023	SSD-007
11:45	- 12:00	BFD-003	AER-006	CFD-005	CFL-009	FIT-003	CFD-027	GAG-008	FIT-024	SSD-008
12:00	- 12:15	BFD-004	AER-007	CFD-006	CFL-010	FIT-004	CFD-028	GAG-009	FIT-025	SSD-009
12:15	- 12:30	BFD-005	AER-008	CFD-007	CFL-011	FIT-005	CFD-029	GAG-010	FIT-026	SSD-010
12:30	- 13:30	<i>Lunch</i>			<i>Lunch</i>			<i>Lunch</i>		
13:30	- 14:15	<i>Plenary 02 - S. Shahpar</i>			<i>Plenary 04 - P. Angeli</i>			<i>Plenary 06 - A. Clarke</i>		
14:15	- 14:30	BFD-006	AER-009	CFD-008	CFL-012	FIT-006	CFD-030	Posters	FIT-027	SSD-011
14:30	- 14:45	BFD-007	AER-010	CFD-009	CFL-013	FIT-007	CFD-031		FIT-028	SSD-012
14:45	- 15:00	BFD-008	AER-011	CFD-010	CFL-014	FIT-008	CFD-032		FIT-029	SSD-013
15:00	- 15:15	BFD-009	AER-012	CFD-011	CFL-015	FIT-009	CFD-033		FIT-030	SSD-014
15:15	- 15:30	BFD-012	AER-013	CFD-012	CFL-016	FIT-011	CFD-034		FIT-031	SSD-016
15:30	- 16:00	<i>Coffee Break</i>			<i>Coffee Break</i>			<i>Coffee Break</i>		
16:00	- 16:15	CFL-001	AER-014	CFD-013	CSF-001	FIT-012	CFD-035	GAG-015	FIT-032	SSD-017
16:15	- 16:30	CFL-002	AER-015	CFD-014	CSF-002	FIT-013	CFD-036	GAG-016	FIT-033	SSD-018
16:30	- 16:45	CFL-003	AER-016	CFD-015	CSF-003	FIT-014	CFD-037	GAG-018	FIT-034	SSD-019
16:45	- 17:00	CFL-004	AER-017	CFD-016	CSF-005	FIT-015	CFD-038	GAG-019	FIT-035	SSD-020
17:00	- 17:15	CFL-005	AER-018	CFD-017	CSF-006	FIT-016	CFD-039	GAG-020	FIT-036	
17:15	- 17:30	CFL-006	AER-019	CFD-019			CFD-040	<i>Closing remarks and farewell</i>		
17:45	- 18:00									
18:00	18:30	<i>Civic reception</i>								
19:00	-				<i>Conference Dinner</i>					

ACS - Acoustics	FIT - Fluid dynamic instabilities and turbulence
AER - Aerodynamics	GAG - Geophysical and Astrophysical flows
BFD - Biological Fluid Dynamics	HTP - Heat Transfer and Thermal Processes
CFD - Computational Fluid Dynamics	PLN - Plenary Talks
CSF - Compressible and Supersonic Flows	PST - Poster Presentation
CFL - Complex Fluids	SSD - Smart Surfaces and Droplets

PLN-01a	E. Johnstone	The use of asymptotic methods in boundary-layer and interfacial phenomena
PLN-01b	R. Doran	Rotation, vortex dynamics and disorder in non-equilibrium Bose gases
PLN-02	A. Clarke	Sedimenting-Particle Redistribution in a Horizontal Couette
PLN-03	T. Magin	Modeling and numerical simulation of plasma flows for hypersonic applications
PLN-04	P. Angeli	Drop coalescence phenomena and the effects of surfactants
PLN-05	E. Lauga	Active Biological Flows
PLN-06	S. Shahapar	Role of AI in CFD Simulation
ACS-001	E. Ekici	Adjoint Based Shape Optimization for Thermoacoustic Stability of Combustors using NURBS
ACS-002	E.J.G. Arcondoulis	Modelling high-frequency noise generated by structured porous coated cylinders subject to uniform flow
ACS-003	E.J.G. Arcondoulis	Near-wake and internal flow fields of a blunt structured porous trailing edge via tomographic PIV
ACS-005	J. Zheng	Data assimilation in Thermoacoustics
AER-002	A. Lang	Flow Characteristics of a Hyperloop System
AER-003	B. Irwin	Cyclorotor aerodynamics for advanced aerial mobility
AER-004	B. Thornber	Immersed Boundary Method-Actuator Surface Model Solver for Wind Farm Detached-Eddy Simulations
AER-005	B. Jones	Aerodynamic analysis of conceptual ultra high aspect ratio strut braced wing aircraft with distributed hybrid electric propulsion configurations
AER-006	C. Bose	Effect of avian-feather-inspired flexible flaps on the aerodynamic characteristics of low Reynolds number airfoils
AER-007	C. Jane-ppel	Bayesian optimisation of a two-turbine layout around a 2D hill using Large Eddy Simulations
AER-008	D.J. Pickles	The Vortex Ring State Of Quadcopters
AER-009	D. Zagaglia	Experimental Investigation into the Stall Boundary of Tilt-Rotor Blades
AER-010	D. Huang	Aerodynamics of porous disks at an incidence
AER-011	Y. Chen	Aerodynamic Analysis of Morphing Aerofoils via Computational Fluid Dynamics and Structural Modelling
AER-012	F. Jiang	Impact of the front and aft extensions length of the suction-type S-duct on the inside flow physics
AER-013	F. Gori	Wake steering for wind farm power maximisation: a Gaussian Process-based yaw-dependent parameter tuning approach
AER-014	H.D. Lim	Scalar dispersion in indoor spaces
AER-015	N. Copssey	Assessing the hydrodynamic loads on a swimmers arm
AER-016	O. Bidar	Machine learning enhancement of turbulence models for aerodynamic shape optimisation
AER-017	P. Nagy	A comparative sensitivity study of the aerodynamics of high aspect ratio strut-braced and cantilever wing configurations
AER-018	V. Shah	Experimental investigation on the directional and longitudinal stability and control authority of V-tails
AER-019	W. Preamsakul	The influence of two- and three-dimensional sinusoidal roughness on the aerodynamic characteristics of a wind turbine blade
BFD-001	A. Herale	A minimal continuum model of clogging in spatio-temporally varying channels
BFD-002	C. Higham	COVID-19 transmission risks associated with environmental contamination in workplace and public toilets
BFD-003	M. Dvoriashyna	Oscillatory Flow of Cranial Cerebrospinal Fluid
BFD-004	E.P.F. Barton	In-vitro anatomical comparison of healthy and treated aortic branches
BFD-005	E. Butler	An investigation of the fluid structure interaction in articular cartilage across disparate scales
BFD-006	F. Shone	Deep Physics-informed Super-resolution of 4D-flow MRI Data in the Left Ventricle
BFD-007	G.R. McNicol	Non-modal growth in a collapsible channel flow with a heavy wall
BFD-008	J.Y. Frank	CFD Modelling of Covid-19 transmission in public transport in developing countries
BFD-009	J.A. Lowe	An In-Vitro Study on Non-Newtonian Blood Modelling and its effect on Arterial Haemodynamics in the Carotid Bifurcation
BFD-012	R. Mcnair	Confinement-induced drift and optimal Marangoni-driven transport of surfactant: a Lagrangian perspective
CFD-001	A. Arredondo-Galeana	Hydrodynamic modelling of very large hinged floating structures with elasticity considerations
CFD-002	A. Alghamdi	Direct Numerical Simulation of Linear Shear Flow Past a Spherical and Cube-shaped Particle Near a Wall
CFD-003	A. Gaur	Hydrodynamics and settling velocities of single and dual microplastic particle systems in a quiescent fluid using Direct Numerical Simulations
CFD-004	A. Kamal	A coupled CFD-DSMC approach for modelling low-speed rarefied gas flows in confinement
CFD-005	B. Santhosh	Vibrationally-driven solid particle attractors in non-uniformly heated systems
CFD-006	B. Chen	Efficient Finite Element Solution Methods formed from Artificial Neural Networks for Solving Complex Fluid Dynamics Problems
CFD-007	F. Ruano-Neto	Numerical verification of sharp corner behavior for Giesekus and Phan-Thien-Tanner fluids
CFD-008	H. Fatahian	CFD modeling and body cone shape optimization of a square gas cyclone separator for dispersed particle removal
CFD-010	E. Oran	Design and Optimisation of an Intra-Aortic Axial Pump for Heart Assist
CFD-011	F. Mirghaderi	Effect of channel geometry on particle migration in inertial particle microfluidics
CFD-012	G. Huang	Numerical modelling for the steady solution of Navier-Stokes equations using orthogonal decompositions
CFD-013	H. Fadhila	DNS of microflow in a reverse osmosis membrane channel
CFD-014	I.F. Latimer	Towards modelling gas migration through particle suspensions: LBM-DEM-FSLBM
CFD-015	I. Mohammed	Influence of Elbow Orientation and Particle Size Distribution on Erosion Characteristics in Dilute Gas-Solid Flow System
CFD-016	J.P. Anderson	Nonspherical Particle Interactions in Turbulence
CFD-017	J.D. Bennett	Polymer Melt Flow Through a Screen Changer Filter
CFD-019	J. Devlin	Direct Flux via Virtual Faces: Conservative interpolation-free overset CFD for OpenFOAM
CFD-021	J. Dees	Random quantum networks as an unsupervised PDE solver
CFD-022	J.S.J. Davis	Constructing Lagrangians for Dissipative Systems: Application to Hydrodynamics
CFD-023	J. Graham	A Comparison of Reduced Order Modelling Methods for the Prediction of Destructive Atmospheric Re-entry Aerothermodynamics
CFD-024	K.K. Maskey	High Fidelity Simulation of Atmospheric Dispersion
CFD-025	K. Georgoulas	Modelling the effects of turbulence in secondary nucleation
CFD-026	K. Thota	Numerical investigation of the migration of a particle in a microchannel with cylindrical obstacles in inertial microfluidics
CFD-027	M. Diessner	A Machine Learning Framework for the Optimisation of Experiments and Simulations in Fluid Dynamics
CFD-028	S. Owens	uDALES v2.0: towards exascale simulation of urban airflow, heat transfer, and pollutant dispersion
CFD-029	M. Ashar	Characterisation of Villermaux-Dushman Reaction in Vortex Mixer
CFD-030	M. Sororo	Numerical Optimization of a Vortex T-Mixer for Stop Flow Device: Maximizing Mixing Index and Minimizing Deadtime
CFD-031	M.-S.-C.-A. Seshasayee	Towards bespoke wall functions for heterogeneous roughness
CFD-032	N. Alsulaiman	Investigating the impact of spatiotemporal scales in data assimilation of seawater temperature for tidal waters
CFD-033	R. Abid	Computational study of Airborne Disease Spread in Classrooms
CFD-034	R. Liu	Numerical Analysis of Single-step Simplified Lattice Boltzmann Method
CFD-035	S.A. Ajah	Corium Interface Flow Dynamics Investigation During Severe Accidents in Pressurised Water Reactors Using CAICM
CFD-036	T.A. Onimisi	Rank Estimation for Reduced-Order Permeability Tensor Representation Using a Machine Learning Algorithm
CFD-037	A.E.E. Handy	Does mixing the air in a room reduce the exposure of occupants to airborne contaminants?
CFD-038	W. Mallik	A novel parametric level set-based shape optimisation in fluid flow with convolutional encoder-decoder network
CFD-039	X. Li	Spectral Proper Orthogonal Decomposition for Chaotic Flow in a Lid-Driven Cavity
CFD-040	B. Evans	On the subsonic and low transonic aerodynamic performance of the land speed record car: Bloodhound LSR
CFL-001	J. Cummings	Flow of non-Newtonian fluids through planar sudden expansions with one or more inlets
CFL-002	C. Duan	Liquid-liquid dispersions within milli-scale symmetric confined impinging jets
CFL-003	D. Fairhurst	The Ouzo Effect: adding a splash of dynamics to the oil/water/ethanol phase diagram
CFL-004	D. Craig	Evaporation of a droplet on a porous substrate
CFL-005	D. Roughton-Reay	Bio-Inspired Electrodes for Energy Transport Applications in Renewable Energy Devices
CFL-006	E.T. Cook	Applications and limitations in modelling purely thixotropic fluid dynamics
CFL-007	E. Chaparian	Localised percolation of viscoplastic fluids
CFL-008	E. Istenic	Viscoelastic flows during phase change due to photopolymerization
CFL-009	F. Hossein	Application and development of ultrasound techniques to liquid-liquid dispersed flows
CFL-010	I.K. Joseph	Instabilities in active nematic liquid crystals subject to an applied orienting field
CFL-011	J.A. Richards	Anomalous Scaling for Hydrodynamic Lubrication of Conformal Surfaces
CFL-012	J.R.L. Cousins	Viscosity-controlled free surface morphology
CFL-013	J. Shi	Jetting and droplet formation of aqueous inks containing particles
CFL-014	L.J. Escott	Stability of two-phase fluid system with injected shear-thinning lower layer
CFL-015	D. Vedeniapina	In-vitro eye surgery studied with Particle Image Velocimetry
CFL-016	X. Ji	Theoretical analysis of viscous and viscoelastic flow through a cross-slot

CSF-001	C. Garbacz	Nonequilibrium ionized reentry flows on ice-giants
CSF-002	G. Kumar	Effect of Mach number on supersonic cylinder wake instability
CSF-003	L. Fossa	Compressible laminar boundary layers over isotropic porous surfaces
CSF-005	S. Subramanian	Study of under-expanded jet impingement on a flat surface in the Lunar environment
CSF-006	U.R. Mohammad	Investigation of Non-Newtonian Viscosity Effects on Instability Growth and Shock Dynamics in a Conical Fusion Target
FIT-001	M. Jaidi	Pulsation in Turbulent Flow over Stochastic Metal Foam at the Pore Level
FIT-002	A. Musawi	Thermal non-equilibrium breakdown to turbulence of high enthalpy mixing layer
FIT-003	A. Aljanadi	Buoyancy-driven flow instabilities in liquid bridges
FIT-004	S. Bennie	Investigation of Lagrangian Coherent Structures in Aircraft Wake Vortex Systems
FIT-005	B. Thornber	Transitional and Self Similar Shock-Induced Mixing
FIT-006	B. Vincent	Stability of acoustic streaming jets
FIT-007	A. Cavanagh	Leading-edge vortex dynamics of plunging swept wings
FIT-008	C. Scholes	Richtmyer-Meshkov instability in a linear and convergent geometry with planar and cylindrical shock environments
FIT-009	C. Stafford	Closure modelling of inertial particle-pair behaviour using the kinetic PDF approach
FIT-011	G. Hunt	Multiphase Flow Induced Vibration in Energy Infrastructure
FIT-012	H. Yang	Viscous fingering instabilities of free-surface flows
FIT-013	J. Barrow	On the development and characterisation of optical Micro-Electro-Mechanical-Systems (MEMS) sensors for measurements of instantaneous wall-shear stress in wall-turbulent air flows
FIT-014	J. Mifsud	Better Bubbles: Jet impingement within a dead-end channel
FIT-015	J. Ferguson	Boundary layer flows over rough surfaces
FIT-016	J.N. Samson	Experimental study of interfacial waves in oil-water two-phase flow across a large diameter slightly inclined pipe
FIT-017	J. Skipp	An effective semilocal model for wave turbulence in 2D liquid light
FIT-018	J.C. Bilbao-Ludena	Structure of the Lamb vector and its divergence in a separated flow around a finite wing
FIT-019	K. Zhu	Nonlinear evolution of vortical disturbances entrained in the entrance region of a circular pipe
FIT-020	K. Henze	Flow field-induced variations in the swimming behavior of microswimmer
FIT-022	L. Milne	Instabilities of thin-film flow over a spinning disk
FIT-023	N. Hanevy	Stability of Stretching Sheets using Linear Theory and Direct Numerical Simulations
FIT-024	O. Zhdanov	Asymmetric secondary currents induced by scalene triangular ridges
FIT-025	P.M. Mannix	The probability density behind thermal stratifications sustained by uncertain and heterogeneous forcing
FIT-026	P.S. Stewart	Nonlinear Rayleigh–Taylor instability in aqueous foam fracture
FIT-027	P. Ricco	Decomposition of the skin-friction coefficient of incompressible and compressible boundary layers
FIT-028	R. Raj	Experimental Study of Transition to Turbulence in Particulate Pipe Flow
FIT-029	S. Rezaeiravesh	Advances in the quantification of time-averaging uncertainties of turbulence statistics
FIT-030	S.O. Stephen	Effects of surface roughness on the stability of rotating disc flow
FIT-031	S. Lu	Flow reconstruction around a surface-mounted prism from sparse velocity and/or scalar measurements using a combination of POD and a data-driven estimator
FIT-032	T. Liu	Detection and characterisation of hibernating turbulence in boundary-layer flows
FIT-033	T. Burton	Modelling Rotating Channel Flow using Resolvent Analysis
FIT-034	T. Rich	Scale model experiments of urban aerodynamics and air pollution dispersion using PIV-PIUF in a water tunnel
FIT-035	X. Jiang	Geometry of stratified turbulent mixing
FIT-036	X. Chen	Using an intelligent machine learning framework to optimize for skin-friction drag reduction using low-amplitude wall-normal blowing techniques
GAG-001	A.R. Roy	Reduced-order models for magnetoconvection in 2D
GAG-003	B. Davy	The effect of hyperdiffusion on rotating convection
GAG-004	D.G. Lemasquerier	A quasi-linear wave-mean flow interaction approach to modelling zonal jets
GAG-005	D.V. Bullamore	On smooth reaction fronts in a reactive porous medium
GAG-006	D. Muchiri	Mathematical modelling and simulation of Shallow Water flows of viscoplastic fluids
GAG-007	D. Clements	Simulation of atmospheric boundary layer flow in a water tunnel with comparison to CFD
GAG-008	G. Fedrizzi	Two-Phase Flow in Rock-Melt Mixtures: Exploring Geometrical Patterns with Numerical Experiments
GAG-009	J.J. Taylor-West	Lava entering water: continuum modelling of lava delta formation
GAG-010	J.P. Webb	Turbulent plumes above a heated surface
GAG-015	M. Durey	Resonant free-surface water waves in closed basins
GAG-016	O.C. Jackson	Experiments Investigating the Dynamics of Vortex Rings in a Rotating Fluid
GAG-018	R. Campbell	A 1-D model of melt-pond drainage on Arctic sea ice
GAG-019	P. Watson	Convective States and Patterning Behaviour in Lunar Regolith Under the Effect of Vertical Vibrations
GAG-020	S. Biswas	Experimentally simulating flow through an isolated hollow building in an urban environment: towards understanding indoor-outdoor exchange of pollutants
HTP-001	D. Jalili	A systematic development of physics-informed neural networks (PINN) for bubble dynamics
HTP-002	I. Qureshi	3D-printable Gyroid Heat Exchangers
HTP-003	J. Frank	New methodology for initial sizing of PCM Compact Heat Exchanger
HTP-004	R. Pillai	Surface Wettability Effects on Heterogeneous Inertio-Thermal Vapour Bubble Growth
PST-001	B. Ling	Numerical investigation of flow in 3D printed lattice structures
PST-002	E. Essmann	Generalising the Lattice Boltzmann and Immersed Boundary Methods for Curvilinear Coordinate Systems
PST-003	D. Xu	Excitation and evolution of compressible Gortler vortices induced by free-stream vortical disturbances
PST-004	L. Driver	A Universal Design Optimisation Framework for Chemical Sensing Apparatus in Supersonic Flows (Accept)
PST-005	A.B. Thompson	Feedback control and continuation for deformable bubbles
PST-006	J. Keeler	Putting the micro into the macro: a molecularly augmented hydrodynamic model of dynamic wetting applied to flow instabilities during forced dewetting
PST-007	L. Fang	An Augmented Shadowing Method for Sensitivity Analysis of Chaotic Fluid Systems
PST-009	W. Mao	Numerical Study of Axial-Flow-Induced Vibrations for Nuclear Reactor Applications
PST-011	M.C. Sadino-Riquelme	Virtual prototyping of antibloom systems: evaluation of curtain and upwelling effects for a marine aquaculture farming site in Chile
PST-012	M.K. Richards	POSTER: Theoretical analysis of fluid flow in microfluidic biomedical devices
PST-014	G. Wells	Wetting Transitions on an Auxetic Metamaterial
PST-015	C. Teleaun	In silico assessment of native stenotic aortic valves; a fluid-structure interaction approach validated against In vivo measurements
PST-016	R. Nicholls	The Formation of Large-Scale Vortices on Jupiter and Saturn
PST-017	A. Mohamadiyeh	Erosion of Sediment Beds Using Impinging Jets: Application to Nuclear Waste Mixing
PST-018	U.A. Adia	Machine learning based intelligent CFD simulation for interactive design exploration of built environments
PST-019	M.S.N. Oliveira	Rheology of Ophthalmic Viscoelastic Devices (OVDs)
PST-020	K. Nowakowska	Short-Term Forecasting of Atmospheric Convection using Simplified Models
PST-021	J. Florido	Adaptive Sampling for Physics Informed Neural Networks in Fluid Dynamics
PST-022	J. Kershaw	Bridging the Gap: Rotating Convection Dynamics in Earth's Outer Core
PST-023	B. Yang	Optimising the performance of the computational fluid dynamics (CFD) applications written in domain-specific languages (DSLs)
PST-024	M. Horne	Hard Constraint Projection in a Physics Informed Neural Network
PST-025	C.J. Naicker	Large-eddy simulation of a structured porous coated cylinder in uniform flow
SSD-001	D. Abdi Lanbaran	Experimental and Numerical Investigation of Drop Coalescence in a Dielectric Liquid under the Influence of an Electric Field
SSD-003	H. Barrio-Zhang	Contact-Angle Hysteresis and Contact-Line Friction on Slippery Liquid-like Surfaces
SSD-004	H.T. Sharp	Evaporation of Sessile Droplets according to the One-Sided Model
SSD-005	H. Zhang	Exploring the viscous froth model in 3D: An evolving-boundary surface energy minimization problem
SSD-006	J. To	Effect of Needle and Dosing Parameters on Contact Angle Hysteresis
SSD-007	J. Zhang	Superhydrophobic ZnO nanoneedles for anti-biofouling applications
SSD-008	J.J. Kilbride	Evaporation dynamics of multiple sessile droplets
SSD-009	K.N. Kowal	Generating slip in the laboratory for geophysical and industrial applications
SSD-010	L. Bisquert	Modelling of sessile droplet condensation on patterned surfaces
SSD-011	M. Wittmann	Rolling of micro rods in shear flow
SSD-012	M.A. McDougall	Electrohydrodynamic interactions of leaky dielectric droplet pairs
SSD-013	M. Pelizzari	Drop Self-Propulsion on Low Friction Lubricant Surfaces
SSD-014	N. Gao	Droplet impact on doubly re-entrant surfaces
SSD-016	R. Ledesma-Aguilar	Capillary flow in lubricant impregnated channels
SSD-017	G. Wells	Superhydrophobicity of Auxetic Metamaterials
SSD-018	S.K. Wilson	The effect of the spatial variation of the evaporative flux on the deposition from a thin sessile droplet
SSD-019	T. Srivastava	An Experimental Study of droplets colliding with airborne particles
SSD-020	Y. Darbar	Quantifying the Importance of Diffusive Mixing in Impacting and Coalescing Droplets