

EFDC2 Parallel Session 1 Programme (as of 18/08/25)

PARALLEL SESSION 1 Tuesday 26 Aug 2025	Breakout Room 01 George Moore Auditorium	Breakout Room 02 ICON Theatre D	Breakout Room 03 Accenture Theatre A	Breakout Room 04 Elan Theatre B	Breakout Room 05 Lynch Theatre F	Breakout Room 06 Intel Theatre E	Breakout Room 07 O'Connor Theatre C	Breakout Room 08 H1.49 ALE room	Breakout Room 09 H2.38 ALE room	Breakout Room 10 E2.16/E2.17 ALE room	Breakout Room 11 E1.17/E1.18 ALE room	Breakout Room 12 H1.51/H1.52 classroom	Breakout Room 13 H1.12 classroom	Breakout Room 14 H2.20 classroom	Breakout Room 15 E1.19 classroom	Breakout Room 16 H2.32 classroom	Breakout Room 17 H2.40/H2.41 classroom	Breakout Room 18 E2.18 classroom
	Cat02. MS on "Data Assimilation in Geophysical Flows, Turbulence, and Nonlinear PDEs"	Cat60. Wind and Water Power	Cat01. MS on "Blood Flow in the Heart"	Cat20. Drops and Bubbles	Cat28. Geophysical and Astrophysical Turbulence	Cat56. Wall-Bounded Flows: Experiment	Cat40. Microscale and Nanoscale Flows	Cat47. Quantum Computing for Fluids	Cat31. Industrial Fluid Dynamics and Applications	Cat30. Heat Transfer and Phase Change	Cat48. Rotating Fluids	Cat25. Fluid-Structure Interaction	Cat34. Jets and Free Shear Flows	Cat39. Magneto-hydrodynamics	Cat54. Transport and Mixing	Cat14. Boundary Layers	Cat44. Non-Newtonian Turbulence	Cat29. Granular Flows
11:15	SPEAKER: Elizabeth Carlson TALK: (YSA) - Local-in-time Global Control of Non-Dissipative Systems with Partial Measurements	SPEAKER: Andrea Torrejón TALK: Evaluating the impact of topographic features on wake recovery in a single turbine located on a hill	SPEAKER: Francesco Tripoli TALK: A combined computational-clinical framework to investigate the impact of lower body negative pressure on the cardiovascular system	SPEAKER: Patricia Pfeiffer TALK: Cavitation inception in binary liquid mixtures	SPEAKER: Colm-cille Caulfield TALK: A Perturbative Connection to the Quasi-Linear Approximation for Stratified Turbulence	SPEAKER: Zefanya Bramantasaputra TALK: (YSA) - Recovery of turbulent boundary layers from pressure gradient history effects	SPEAKER: Dimitrios Papavassiliou TALK: Dynamics of oil-water interfaces with nanoparticles: Drops and menisci	SPEAKER: Chenjia Zhu TALK: Quantum implicit representation of vortex filaments in turbulence	SPEAKER: Suharto Saha TALK: CFD Modelling and Experimental Validation for Turbulence and Process Optimization in Industrial Spray Drying	SPEAKER: Davide Proccacci TALK: (YSA) Heat transfer in an upward bubbly turbulent flow	SPEAKER: Ke Wu TALK: Inertial wave attractors in vibrating cuboids	SPEAKER: Merle Jill Weniger TALK: Mitigation of Discrete Vortex Gusts	SPEAKER: Gabriele Camerlengo TALK: Non-linear transfer dynamics of a jet interacting with a turbulent environment	SPEAKER: Fabian Brughmans TALK: Rapidly rotating MHD dynamos in a full sphere	SPEAKER: Emmanuel Villermaux TALK: Momentum, Vorticity & Scalar transport in turbulence: The Taylor-Prandtl controversy	SPEAKER: Bipin Kumar Mishra TALK: Effects of the propeller slipstream on a laminar boundary layer	SPEAKER: Bilal Khan Yusufi TALK: Rheology-Based Wall Function Approach for Turbulent Flows of Non-Newtonian Fluids	SPEAKER: Douglas Carvalho TALK: (YSA) - The impact of spinning projectiles on granular media: cratering and dynamics
	11:30	SPEAKER: Michael Jolly TALK: A numerical study of the generalized surface quasigeostrophic equation	SPEAKER: Taiga Drucker-Boisvert TALK: Wake Recovery in Downwind Wind Turbines	SPEAKER: Luca Congliu Gallo TALK: Investigating cardiovascular aging through closed-loop multiscale hemodynamic modeling	SPEAKER: Mirko Gallo TALK: The most likely nucleation pathways in multiphase fluctuating hydrodynamics	SPEAKER: John Craske TALK: (YSA) - Modelling stratified turbulence with probability density functions	SPEAKER: Gaoyang Qiu TALK: Experimental investigation on turbulent boundary layers undergoing spanwise wall oscillation	SPEAKER: Daniel Booth TALK: Controllable flow with active droplets	SPEAKER: Hao Su TALK: Quantum state encoding of vortical flows with the spinor field	SPEAKER: Sudharsan Srinivasan TALK: Prediction of liquid surge behaviour in industrial effluent screening systems via computational analysis	SPEAKER: Alessandro Ceci TALK: (YSA) - Heat transfer in radially rotating pinches	SPEAKER: Lyke van Dalen TALK: (YSA) Vortex dynamics in accelerating rotating flow	SPEAKER: Dimitrios Gkiolas TALK: A wind tunnel setup to measure aeroclastic airflow gust response	SPEAKER: Leandro Magalhães TALK: Enstrophy Dynamics at the Edge of Variable Density Turbulent Jets	SPEAKER: Nicolas Brughmans TALK: A visual approach to MHD accretion disk instabilities	SPEAKER: Enrico Stalio TALK: Turbulent scalar transport around a wing section including boundary layer separation	SPEAKER: Stefan Becker TALK: Investigation of the Boundary Layer Flow along a Streamwise Oriented Cylinder	TALK: Turbulence in a shear-thinning fluid
11:45		SPEAKER: Vincent Martinez TALK: Some Principles and Rigorous Results for Parameter Reconstruction in Hydrodynamic Systems	SPEAKER: Nazeem Zehtabiyani Rezale TALK: Investigating the interplay between wake rotation and secondary flows of Prandtl's second kind within wind farms	SPEAKER: Chi Zhu TALK: Reduced-order modeling of trans-stenotic pressure drop in coronary arteries accounting for guidewire influence	SPEAKER: Zehao Li TALK: On-demand nuclei seeding in a Venturi tube - why do nuclei in hydrodynamic process tend to develop to attached cavitation?	SPEAKER: Ilas Sibgatullin TALK: Stratified turbulence driven by three velocity components in pipe flow using LDV	SPEAKER: Marie Ono TALK: Spectrum characteristics for three velocity components in pipe flow using LDV	SPEAKER: Vira Dhalwal TALK: Adhesion and phase separation during cell-cell contact across a viscous channel	SPEAKER: Ziteng Wang TALK: Realization of fluid vortex interactions on a superconducting quantum processor via the quantum vortex method	SPEAKER: Jonathan Neuhauser TALK: Numerical investigation on the performance of nanofibrous air filter media for engine applications	SPEAKER: Danick Lamoureux TALK: Thermal entrance region of laminar and turbulent pipe flows subject to nonuniform heating	SPEAKER: Omar Abukabsha TALK: Collective Flow-Structure Interactions Enhance Directional Fluid Transport in a Bio-Inspired Multi-Leaflet Channel	SPEAKER: Alina Dubovskaya TALK: Paradoxical predictions of swirling jets	SPEAKER: Ali Arslan Ueki TALK: A rigorous study of the Taylor state dynamo	SPEAKER: Yusuhe Kumar TALK: Scale-by-Scale Analysis on Turbulent Diffusion of Passive Scalar in a Turbulent Channel Flow	SPEAKER: Vishal Kumar TALK: Simulations of zero pressure-gradient turbulent boundary layers over riblets	SPEAKER: Shumpei Hara TALK: An experimental model of the bimodal nature of turbulent fluctuation in viscoelastic channel turbulence	SPEAKER: Mickael Bourgain TALK: 2d Magnetic hourglass - controlling the flow of sand
	12:00	SPEAKER: Bernat Font TALK: (YSA) - SINDY-AD: Discovering governing equations from unstructured data using automatic differentiation and sparse regression	SPEAKER: Xiaolei Yang TALK: Impacts of inflow turbulence on the wake dynamics of a permeable disk of a permeable disk	SPEAKER: Stefania Scarsoglio TALK: How does gravity alter wave propagation in the human arterial tree?	SPEAKER: Tobias Bauer TALK: Cavitation bubble-particle interactions induced by shock waves	SPEAKER: HIDESHI HANAZAKI TALK: Friction processes in unsteady stratified turbulence with mean shear	SPEAKER: Patricia Sajar-Garrido TALK: Friction coefficient and flow dynamics of a heterogeneously rough surface	SPEAKER: Claas Willem Visser TALK: Fabrication and modelling of tailored particles for controlled storage and release of CO2	SPEAKER: Zhaoyuan Meng TALK: (YSA) - Simulating unsteady flows on a superconducting quantum processor	SPEAKER: Masahiro Suzuki TALK: Induced higher backpressure on fan-driven pipe flows and effects on convective heat transfer rate	SPEAKER: Lorenzo Testa TALK: Induced higher backpressure on fan-driven pipe flows and effects on convective heat transfer rate	SPEAKER: S WASIQUE Ali TALK: Experimental studies in rotating Rayleigh-Bénard convection over horizontal rough boundaries	SPEAKER: Ehsan Akrami TALK: Stereo tomography of turbulence in air jets	SPEAKER: Tolga Gurcan TALK: Exact Coherent Structures in 2D Magnetohydrodynamics	SPEAKER: John Farnsworth TALK: Unsteady Periodic Forcing of Passive Scalar in Turbulent Boundary Layers	SPEAKER: Madeline Fischer TALK: Effects of Pressure Gradients and Surface Roughness on Turbulent Boundary Layers	SPEAKER: Yasufumi Horimoto TALK: Solid-body rotational structure in high-Reynolds-number viscoelastic Taylor-Couette turbulence between co-rotating cylinders	SPEAKER: Yifeng He TALK: Modelling the external particle jet in the explosive dispersal system
12:15		SPEAKER: Nan Chen TALK: Conditional Gaussian Nonlinear Data Assimilation - Theory and Applications	SPEAKER: Shivam Singh Tomar TALK: Proper Orthogonal Decomposition of Velocity Components in the Wake of Savonius Turbine	SPEAKER: Robin Leister TALK: Pulsatile Jet Characteristics of Mitral Regurgitation Flow Using Particle Image Velocimetry	SPEAKER: Octave Castanedo TALK: Mitigating cavitation erosion with structured surfaces: First experimental results	SPEAKER: Romain Vallon TALK: Interactions between internal gravity waves and turbulent eddies in bidimensional stratified turbulence	SPEAKER: Atilla Freire TALK: Effective Roughness Length for Calcium Carbonate Scale Formation	SPEAKER: Matthew Butler TALK: Slender chemically-active artificial microswimmers	SPEAKER: Nur Haziqah Shaharuddin TALK: Effect of Crosswind on the Aerodynamic Performance of High-Speed Train on Bridge with and without the Wind Barrier	SPEAKER: Alessandro Arguiuolo TALK: Analysis of the Jet Impingement Heat Transfer using Spectral Proper Orthogonal Decomposition	SPEAKER: Kai Wen Lee TALK: Non-Overbeck-Boussinesq Effects in Rapidly Rotating Rayleigh-Bénard Convection with Temperature Dependent Material Properties	SPEAKER: Isabelle Cheylan TALK: An adjoint Lattice Boltzmann solver coupled to a finite element solver with applications to fluid structure interaction	SPEAKER: N. Martin Osman TALK: Three-dimensional and transient effects on the mixing of confined coaxial jets in a non-axisymmetric co-flow	SPEAKER: Welyu Shen TALK: Vortex-magnetic interactions of flux tubes in magnetohydrodynamics	SPEAKER: Huixin Li TALK: Experimental investigation of space-time correlations of the velocity field and passive scalar field in turbulent pipe flow	SPEAKER: Frank Jacobitz TALK: Interaction of a heated boundary layer with a roughness element: a comparison of numerical simulations with experiments using temperature-sensitive paint	SPEAKER: Shoaib Kamil TALK: (YSA) - Scaling of the transition threshold of EIT	SPEAKER: Olivier Poquelin TALK: Flow of sticky particles
	12:30	SPEAKER: Animikh Biwas TALK: Finitely many determining functional, data assimilation and a novel regularity criterion for the 3D Navier-Stokes equations	SPEAKER: Hugh Irving TALK: Experimental study of the effects of leading edge roughness on wind turbine blade flow dynamics.	SPEAKER: Marco Bussolotti TALK: Mesoscale model for cavitation in lipid membranes	SPEAKER: Sébastien Gomé TALK: (YSA) - Rotating turbulence: 2D or not 2D?	SPEAKER: Taejin Kim TALK: Effect of Surface Wettability on Phase Separation of Two-Phase Flow through Multilayer Porous Media	SPEAKER: Hermann Karl Schubert TALK: (YSA) Observation of discrete concentric surface modulation on free-flying liquid tin sheets	SPEAKER: Henry Thomas TALK: Heat transfer around circular cylinder forced by Föppl vortices	SPEAKER: Xinran Li TALK: Analysis of Centrifugal Buoyancy-Driven Flow in a Co-Rotating Disk Cavity with Axial Throughflow	SPEAKER: Peng Li TALK: Fluid-structure interaction in a simplified human upper airway model with relevance to snoring	SPEAKER: Emiliano Renzi TALK: Impact of mean-flow modelling on twin-jet wavepackets predicted by parabolized stability equations	SPEAKER: Ivan Montero TALK: Impact of mean-flow modelling on twin-jet wavepackets predicted by parabolized stability equations	SPEAKER: Fabian Brughmans TALK: Rapidly rotating MHD dynamos in a full sphere	SPEAKER: Nicolas Brughmans TALK: A visual approach to MHD accretion disk instabilities	SPEAKER: Enrico Stalio TALK: Turbulent scalar transport around a wing section including boundary layer separation	SPEAKER: Stefan Becker TALK: Investigation of the Boundary Layer Flow along a Streamwise Oriented Cylinder	SPEAKER: Marco Edoardo Rosti TALK: Turbulence in a shear-thinning fluid	SPEAKER: Herbert Huppert TALK: Buoyant granular column collapses and the propagation of particles in clouds following a volcanic eruption

EFDC2 Parallel Session 2 Programme (as of 18/08/25)

PARALLEL SESSION 2 Tuesday 26 Aug 2025	Breakout Room 01 George Moore Auditorium	Breakout Room 02 ICON Theatre D	Breakout Room 03 Accenture Theatre A	Breakout Room 04 Elan Theatre B	Breakout Room 05 Lynch Theatre F	Breakout Room 06 Intel Theatre E	Breakout Room 07 O'Connor Theatre C	Breakout Room 08 H1.49 ALE room	Breakout Room 09 H2.38 ALE room	Breakout Room 10 E2.16/E2.17 ALE room	Breakout Room 11 E1.17/E1.18 ALE room	Breakout Room 12 H1.51/H1.52 classroom	Breakout Room 13 H1.12 classroom	Breakout Room 14 H2.20 classroom	Breakout Room 15 E1.19 classroom	Breakout Room 16 H2.32 classroom	Breakout Room 17 H2.40/H2.41 classroom	Breakout Room 18 E2.18 classroom
	Cat02. MS on "Data Assimilation in Geophysical Flows, Turbulence, and Nonlinear PDEs"	Cat32. Instability and Transition	Cat01. MS on "Blood Flow in the Heart"	Cat20. Drops and Bubbles	Cat28. Geophysical and Astrophysical Turbulence	Cat57. Wall-Bounded Flows: Simulations	Cat52. Surface Tension Effects and Interfacial Fluid Dynamics	Cat37. Lattice Boltzmann Methods in Fluids	Cat31. Industrial Fluid Dynamics and Applications	Cat30. Heat Transfer and Phase Change	Cat48. Rotating Fluids	Cat25. Fluid-Structure Interaction	Cat34. Jets and Free Shear Flows	Cat38. MHD Turbulence	Cat54. Transport and Mixing	Cat10. Atmospheric Flows	Cat43. Non-Newtonian Flows	MIXED SESSION: Cat53. Suspensions Cat50. Stokes Flow
15:15	SPEAKER: Adam Larios TALK: Data Assimilation adapted to Turbulence Models	SPEAKER: Anna Frishman TALK: Minding the gaps in pipe flow	SPEAKER: Martino Andrea Scarpolini TALK: (YSA) Hemodynamic effects of "intra" and "supra" deployment locations for bio-prosthetic aortic valves	SPEAKER: Qianyi Deng TALK: Burst of Taylor Bubbles at the Top of Vertical Tubes	SPEAKER: Ke-Qing Xia TALK: Energy spectra in thin-layer turbulence with varying system sizes and damping rates	SPEAKER: Yuchen Ge TALK: Constructing wall turbulence using a hierarchy of attached hairpin vortices	SPEAKER: Théo Lenavetier TALK: (YSA) - Surfactant dynamics at liquid-liquid interfaces under shear: experimental study of the kinematic condition	SPEAKER: Javad Sodagar Abardeh TALK: Description of confined gas transport considering effects of capillary condensation	SPEAKER: Ali Berk Kahraman TALK: Simulation of Swirl Generation with Active Flow Control in Diesel Engines	SPEAKER: Riccardo Daniele TALK: Superheat Limit of Real Fluids	SPEAKER: Changwoo Kang TALK: Turbulent Taylor-Couette flow with a permeable wall at a low Reynolds number	SPEAKER: Simone CRUCIANI TALK: Flow past a cylinder with a flexible splitter plate: stability and resolvent analysis	SPEAKER: Akbar Ravan Ghalati TALK: Turbulent Mixing in Water Jet Pump Using the Stress-Blended Eddy Simulation (SBES) Model	SPEAKER: Yu-Chang Fan TALK: Large eddy simulation for decaying MHD turbulence at low magnetic Reynolds number	SPEAKER: Giuseppe Vacca TALK: AMOC in a box: Heat and salinity transport in horizontal double-diffusion convection	SPEAKER: Grigory Sarnitsky TALK: The effects of small-scale turbulence for ice growth in mixed-phase clouds	SPEAKER: Mohammad Reza Daneshvar Garmroodi TALK: Mixing Yield-Stress Fluids: Localization Mechanisms and Regime Transitions	SPEAKER: NAVANEETH Kizhakke Marath TALK: Dynamics of a weakly elastic particle translating parallel to a rigid wall
15:30	SPEAKER: Francesco Fossella TALK: Multi-scale Data Assimilation in Turbulence: From Shell Models to the Spatiotemporal Complexity of Rayleigh-Bénard Convection	SPEAKER: Konstantin Volokh TALK: Transition to turbulence via material instabilities	SPEAKER: Roberto Verzicco TALK: An hemodynamic study of the intra- and supra-annular implantation of mechanical bi-leaflet aortic valves	SPEAKER: RIVIERE Alienor TALK: From turbulent to laminar bubble breakup: capillary splitting of gas filaments	SPEAKER: Declan Keogh TALK: Experimental exploration of Magneto-Coriolis-Centrifugal Convection (MC3)	SPEAKER: Christoffer Hansen TALK: A Local Integral Non-Equilibrium (LINE) wall model for large-eddy simulation of complex turbulent flows including separation	SPEAKER: Julien Cerutti TALK: (YSA) - Numerical Study of Enclosed Liquid-Liquid Interface Dynamics	SPEAKER: Raquel Dapena-Garcia TALK: Particle migration in areas of constricted flow	SPEAKER: Gorka S. Larraona TALK: A CNN-based method for fast automatic generation of zonal models in fluid systems	SPEAKER: Edoardo Bellincioni TALK: Melting-induced sliding: heat transfers and lubrication	SPEAKER: Geert Brethouwer TALK: The effect of streamwise rotation on plane Couette flow	SPEAKER: Roberta Santoriello TALK: Linear Stability Analysis of a Cantilever Flexible Plate in a Parallel Viscous Channel Flow using an Arbitrary-Lagrangian-Eulerian Method	SPEAKER: Michael Stavropoulos TALK: (YSA) Oscillator dynamics in jet-edge interaction: classification of linear and non-linear frequency-selection mechanisms	SPEAKER: Moritz Linkmann TALK: Energy Fluxes in Reduced Magnetohydrodynamic Turbulence	SPEAKER: Wolf-Christian Müller TALK: Advective transport in two-dimensional quasi-homogeneous Boussinesq turbulence	SPEAKER: Kokab Goharian TALK: Numerical Modeling of Ice Crystal Formation and its Diffusion Growth in Turbulent Mixed-phase Clouds Using Lagrangian Multiphase DNS	SPEAKER: Ernest Simon TALK: Experimental study of non-Newtonian fluid mixing through TOMO-PTV	SPEAKER: Giuseppe Procopio TALK: Microhydrodynamics near cylindrical boundaries
15:45	SPEAKER: Collin Victor TALK: Inadequacy of Nudging Data Assimilation Algorithms for Non-Dissipative Systems	SPEAKER: Patrick Keuchel TALK: (YSA) - Non-linear transient growth and transition to turbulence in pulsatile pipe flow	SPEAKER: Manuel Garcia-villaiba TALK: Flow and transport phenomena in the left atrium: Assessing the risk of thrombogenesis	SPEAKER: Hauna Fathmadinda Hosen TALK: Rising dynamics and interfacial mass transfer of single CO2 bubbles in Newtonian and non-Newtonian liquids	SPEAKER: Mattias Brynjell-Rahkola TALK: Self-sustaining magnetohydrodynamic states in astrophysical discs	SPEAKER: Suad Jakirlic TALK: Turbulence anisotropy characterization of concentric annulus flow with inner wall rotation: an eddy-resolving Reynolds stress modeling study	SPEAKER: Haohao Hao TALK: Marangoni Flow Maintained by the Slow Release of Surfactants from a Hydrogel and Numerical Modeling	SPEAKER: Elisa Bellantoni TALK: Immersed Boundary-Lattice Boltzmann Simulations of Droplet's Spreading	SPEAKER: Graham Benham TALK: Optimisation of a floating, rotating energy storage system	SPEAKER: Debarshi Debnath TALK: (YSA) - Evaporation dynamics of droplet populations: A DNS study	SPEAKER: Anne Cadlou TALK: Numerical solution of a wave-turbulence model in a rotating channel	SPEAKER: Csaba Hős TALK: Predicting valve chatter in complex pipe networks via an impedance-based approach	SPEAKER: Matteo Mancinelli TALK: Experimental control of jet-surface interaction noise	SPEAKER: Manthan Verma TALK: Numerical Analysis of Spectral Characteristics of 2D and 3D Forced Incompressible MHD Turbulence	SPEAKER: Nanda Poddar TALK: How does boundary absorption depend on time and space? Unraveling its role in reactive solute transport	SPEAKER: Bayode Owolabi TALK: Flow and pollutant dispersion from a line source in 3D urban street canyons having different spatial morphologies	SPEAKER: Emily Cook TALK: Pressure-driven flow of a yield-stress fluid in an annular channel with internal torque	SPEAKER: Victoria Nicolazo-Cruch TALK: (YSA) - Bio-convective transport for selective particle sorting
16:00	SPEAKER: Aseel Farhat TALK: Connecting the Nudging and Synchronization Filters for Data Assimilation	SPEAKER: Runjie Song TALK: Three-dimensional coherent structures in a curved pipe flow	SPEAKER: Valerio Lupi TALK: Does non-Newtonian blood rheology matter in large vessels and heart chambers?	SPEAKER: Wenhai Lei TALK: 3D periodic fluid-fluid interface formation during multiphase displacement in micropillar scaffolds and their unprecedented efficiency in carbon capture	SPEAKER: Semion Sukoriansky TALK: Can coherent vortices and vortex streets on giant planets be identified with Solitary Rossby waves in Zonostrophic turbulence, i.e., Zonons?	SPEAKER: Davide Modesti TALK: Forced-air convection in one-sided heated and cooled turbulent channel flows	SPEAKER: Huanshu Tan TALK: Cruising Dynamics of Floating Hydrogel Bars Driven by Sustained Marangoni Flow from Slow Releasing Surfactants	SPEAKER: Stefan Zitz TALK: The dynamics of ring-rivulets on complex wetting patterns	SPEAKER: Faisal Iqbal TALK: Advancements in Battery Cooling Technologies for Electric Vehicles	SPEAKER: Simon Bjuri TALK: Modelling stagnant film mass transfer through mass transfer coefficient approach	SPEAKER: Xinyu Ma TALK: Direct numerical simulation of turbulent flow in spanwise rotating duct considering variable cross-section effect	SPEAKER: Stephane Poulain TALK: Hovering of an actively driven fluid-lubricated foil	SPEAKER: Sophie Malle TALK: Centimeter-scale acoustic streaming jet induced by surface acoustic wave transducers	SPEAKER: Raquel Mausle TALK: Spatio-temporal correlation in incompressible MHD turbulence	SPEAKER: Julius Busse TALK: Modelling the spread of particulate pollution in the ocean	SPEAKER: Chris Westbrook TALK: Experimental studies of snowflake settling dynamics	SPEAKER: Natalie Germann TALK: Elastic reinforcement of gellan/alginate hydrogels with glutaraldehyde crosslinked amine-functionalized silica fillers under torsional and extensional deformations	SPEAKER: Andrea Scagliarini TALK: Sedimentation and microchannel flow of active suspensions: hydrodynamic and geometric effects

EFDC2 Parallel Session 3 Programme (updated: 19/08/25)

PARALLEL SESSION 3 Tuesday 26 Aug 2025	Breakout Room 01 George Moore Auditorium	Breakout Room 02 ICON Theatre D	Breakout Room 03 Accenture Theatre A	Breakout Room 04 Elan Theatre B	Breakout Room 05 Lynch Theatre F	Breakout Room 06 Intel Theatre E	Breakout Room 07 O'Connor Theatre C	Breakout Room 08 H1.49 ALE room	Breakout Room 09 H2.38 ALE room	Breakout Room 10 E2.16/E2.17 ALE room	Breakout Room 11 E1.17/E1.18 ALE room	Breakout Room 12 H1.51/H1.52 classroom	Breakout Room 13 H1.12 classroom	Breakout Room 14 H2.20 classroom	Breakout Room 15 E1.19 classroom	Breakout Room 16 H2.32 classroom	Breakout Room 17 H2.40/H2.41 classroom	Breakout Room 18 E2.18 classroom
	Cat03. MS on "Data Science and Data-Driven Models in Turbulence and Fluid Dynamics"	Cat32. Instability and Transition	Cat13. Biological/Biomedical Fluid Mechanics	Cat12. Atomization and Sprays	Cat33. Intermittency and Scaling	Cat57. Wall-Bounded Flows: Simulations	Cat52. Surface Tension Effects and Interfacial Fluid Dynamics	Cat37. Lattice Boltzmann Methods in Fluids	Cat21. Environmental Fluid Dynamics and Sustainability	SPECIAL SESSION: Cat30a. Heat Transfer and Phase Change / Molecular Dynamics	Cat19. Convection and Buoyancy-Driven Flows	Cat25. Fluid-Structure Interaction	Cat34. Jets and Free Shear Flows	Cat38. MHD Turbulence	Cat54. Transport and Mixing	Cat10. Atmospheric Flows	Cat43. Non-Newtonian Flows	Cat53. Suspensions
16:45	SPEAKER: Patricio Clark Di Leon TALK: Exploring latent space representations of turbulent flows	SPEAKER: Bowen Yang TALK: Onset of discontinuous transition in body-forced pipe flow	SPEAKER: Hanna Hörwing TALK: Impact of dynamic wall motion on haemodynamic data for large eddy simulations on the right atrium	SPEAKER: Tommie Verouden TALK: Droplet atomization of respiratory-like fluids in a cough machine: the role of viscoelasticity	SPEAKER: Shadab Alam TALK: Multifractality and scaling of kinetic energy dissipation rate in compressible turbulence	SPEAKER: Debshankar Ghosh TALK: Asymmetric near-wall streak characteristics in a heated turbulent channel with variable physical properties	SPEAKER: Julien Landel TALK: The maze-solving secrets of soap	SPEAKER: Boyuan Wang TALK: Quantum lattice Boltzmann method with probability encoding for simulating nonlinear fluid dynamics	SPEAKER: Ren Paulo Estaquio TALK: Experimentally Validated Discrete Phase Model for PM2.5/10 with Numerical Transport Mapping	SPEAKER: Avik Saha TALK: (YSA) Exploration of Interfacial Thermal Resistance in Boiling through Isobaric Molecular Simulations	SPEAKER: Jonas Roller TALK: Optimal control of dielectrophoretic force-driven flows	SPEAKER: Pallabi Das TALK: Interplay of Flow and Swimming in Porous Media	SPEAKER: Valéry Botton TALK: Initial transient of acoustic streaming jets.	SPEAKER: Sébastien Galtier TALK: Fast magnetoacoustic wave turbulence in the low beta limit of MHD	SPEAKER: Vincent Berrouet TALK: Experimental and Numerical Study of a Turbulent Water Flow Mixing Induced by a Fractal Grid	SPEAKER: Antonia Hillenbrand TALK: Wind lidar measurements on an ocean-going vessel for the characterization of the atmospheric boundary layer at sea	SPEAKER: Thomasina Ball TALK: Wrinkling of a Lubricated Viscoplastic Beam	SPEAKER: Fredrik Lundell TALK: Rheology and alignment in nanofibril dispersions: the key to make biobased filaments with high stiffness and strength
17:00	SPEAKER: Patricio Clark Di Leon TALK: Exploring latent space representations of turbulent flows	SPEAKER: Björn Hof TALK: Friction factor transition and activation of large scale motions in pipe flow	SPEAKER: Laura Bevis TALK: Simulation and analysis of patient-specific turbulent flow patterns for Transcatheter Aortic Valve Replacement Therapy	SPEAKER: Isaac Jackiw TALK: Revisiting the low Ohnesorge number limit in aerodynamic droplet breakup	SPEAKER: Georgy Zinchenko TALK: Anomalous dissipation in compressible turbulence	SPEAKER: Jason Appelbaum TALK: Outer-layer self-similarity in spatially developing turbulent boundary layers	SPEAKER: Zhichao Deng TALK: Solutocapillary effects on shear flow driven by air jet impingement	SPEAKER: Hugo Saraiva Tavares TALK: Simplified lattice Boltzmann approach for magnetohydrodynamic turbulence in pipe flows	SPEAKER: Naomi Mestre-Curto TALK: Comparative Analysis of Two Methodologies for Modeling Pollutant Dispersion in Outdoor Environments	SPEAKER: Matteo Teodori TALK: (YSA) Fluctuating Hydrodynamics Simulations of Condensation on Solid Surfaces	SPEAKER: Peter Szabo TALK: Dielectrophoretic-driven convection in the spherical shell experiment AtmoFlow	SPEAKER: Matthew Turner TALK: Coupled fluid/vessel sloshing interaction in the presence of porous baffles	SPEAKER: Andres Garcia-Rico TALK: High-Speed Schlieren of Compressible Jets at Systematically Controlled Reynolds Numbers	SPEAKER: Dmitry Krasnov TALK: Submerged liquid metal jet in a transverse magnetic field	SPEAKER: Xu Chu TALK: A RAG-Augmented LLM Agent for OpenFOAM-Based Computational Fluid Dynamics	SPEAKER: Davide Selvatici TALK: (YSA) Sensitivity analysis on Stratocumulus-topped Boundary Layers for wind energy applications	SPEAKER: Luca Biancofiore TALK: The role of viscoelasticity in a thin squeezed film	SPEAKER: William Kai Alexander Worby TALK: Dynamic analysis of flow-induced alignment of colloidal rods in LAOS experiments
17:15	SPEAKER: Xander de Wit TALK: (YSA) - Machine learning Lagrangian trajectories in turbulence using the Mori-Zwanzig formalism	SPEAKER: Mukund Vasudevan TALK: Intermittency factors and criticality in pipe flow	SPEAKER: Dominik Obrist TALK: Effect of bioprosthetic heart valve design on leaflet fluttering and laminar-turbulent transition	SPEAKER: Shaka Chu TALK: High-Fidelity Characterisation of Aerosol Dispersion in Near-Field Rotor Wake	SPEAKER: Martin Oblgado TALK: A Universal Relation Between Intermittency and Dissipation in Turbulence	SPEAKER: Philipp Schlatter TALK: Synthetic turbulence created via vector autoregression (VAR) and proper orthogonal decomposition (POD)	SPEAKER: Nathan Chapelle TALK: (YSA) - Influence of bacterial surfactants on evaporation-driven capillary flows in a model soil pore	SPEAKER: Brendan Waters TALK: Wall Modelled Lattice Boltzmann Method for Atmospheric Boundary Layers	SPEAKER: Patrick Purcell TALK: Benchmarking energy efficiency of municipal wastewater treatment plants	SPEAKER: Mauro Chinappi TALK: Electroosmosis in nanopores	SPEAKER: Edgar Knobloch TALK: Traveling spatially localized convective structures in an inclined porous medium	SPEAKER: Sagnik Garai TALK: Hydroelastic Scattering and Trapping of Microswimmers	SPEAKER: Paul Wissmann TALK: High-speed schlieren and BOS measurements of the jet flow of a clustered linear plug nozzle with differential throttling	SPEAKER: Victor Munoz TALK: Activity and Cumulative Entropy in MHD Simulations via the GOY Shell Model with fractal forcing	SPEAKER: Florence Raynal TALK: Residence Time Distributions for in-line chaotic mixers: does the ideal in-line mixer exist?	SPEAKER: David Cunningham TALK: Modernising Wind Load Standards for Ireland	SPEAKER: Giuseppe Antonio Rosi TALK: Persistence of confined vortex rings in highly loaded fluids: Shared dynamics between dense suspensions and highly concentrated shear-thinning solutions	SPEAKER: Andrea Carretero TALK: Improving UV protection by depicting the aggregation in thin films of TiO2 suspensions
17:30	SPEAKER: Jeremiah Lubke TALK: Characterizing Lagrangian Coherent Structures in MHD Turbulence with unsupervised Machine Learning	SPEAKER: Jorge Sandoval TALK: (YSA) Transition to turbulence in the Stokes Boundary Layer: Edge States and Periodic Self-Sustained Process (PSSP)	SPEAKER: Till Zeugin TALK: Fractal-generated turbulence in mechanical heart valves	SPEAKER: Kaitao Tang TALK: Gravitational Effects on Liquid Rim Splashing	SPEAKER: Arthur Couteau TALK: Inhomogeneous viscosity as a spectral energy transfer mechanism	SPEAKER: Gabriele Boga TALK: (YSA) - Numerical experiments on scalar transport and mixing in turbulent boundary layers	SPEAKER: Alexandre Vigna-Brummer TALK: (YSA) From hydrostatic to flowing regimes: Isolated meniscus in contact with a vertical soap film	SPEAKER: Robin Jaeger TALK: A LBM/IBM/FEM coupled method for FSJ Simulation on high Reynolds turbulent flow	SPEAKER: Doireann O'Kiely TALK: Chemical spills: modelling infiltration for improved clean-up	SPEAKER: Paul Regnault TALK: Bubble growth simulation at an electrode using a cut-cell method	SPEAKER: Yantao Yang TALK: Passive scalar dispersion along porous stratum with natural convection	SPEAKER: Basile Dhote TALK: Preferential orientation of floaters in surface gravity waves	SPEAKER: Samanyu Raina TALK: Open-jet studies of additively manufactured supersonic micro-nozzles		SPEAKER: Xinliang Guo TALK: A new scaling of the mechanical-to-scalar timescale ratio	SPEAKER: Thijs Bon TALK: Impact of spanwise surface heterogeneity on a steady stably stratified Ekman layer: buoyancy-induced secondary circulations with Coriolis effects	SPEAKER: Rajnandan Borthakur TALK: Electrophoresis of non-uniformly charged particles in complex fluids: Beyond the analytical predictions	SPEAKER: Joseph Meredith TALK: Microparticle collection in millifluidic systems using low frequency vibrations

EFDC2 Parallel Session 4 Programme (updated: 21/08/25)

PARALLEL SESSION 4 Wednesday 27 Aug 2025	Breakout Room 01 George Moore Auditorium	Breakout Room 02 ICON Theatre D	Breakout Room 03 Accenture Theatre A	Breakout Room 04 Elan Theatre B	Breakout Room 05 Lynch Theatre F	Breakout Room 06 Intel Theatre E	Breakout Room 07 O'Connor Theatre C	Breakout Room 08 H1.49 ALE room	Breakout Room 09 H2.38 ALE room	Breakout Room 10 E2.16/E2.17 ALE room	Breakout Room 11 E1.17/E1.18 ALE room	Breakout Room 12 H1.51/H1.52 classroom	Breakout Room 13 H1.12 classroom	Breakout Room 14 H2.20 classroom	Breakout Room 15 E1.19 classroom	Breakout Room 16 H2.32 classroom	Breakout Room 17 H2.40/H2.41 classroom	Breakout Room 18 E2.18 classroom
	Cat03. MS on "Data Science and Data-Driven Models in Turbulence and Fluid Dynamics"	Cat60. Wind and Water Power	Cat13. Biological/Biomedical Fluid Mechanics	Cat20. Drops and Bubbles	Cat33. Intermittency and Scaling	Cat58. Wall-Bounded Flows: Theory	Cat52. Surface Tension Effects and Interfacial Fluid Dynamics	Cat36. Large-Eddy Simulation and Related Techniques	Cat41. Multiphase Flows	MIXED SESSION: Cat30. Heat Transfer and Phase Change Cat27. Geophysical Fluid Dynamics	Cat19. Convection and Buoyancy-Driven Flows	Cat25. Fluid-Structure Interaction	Cat34. Jets and Free Shear Flows	Cat39. Magnetohydrodynamics	Cat54. Transport and Mixing	Cat14. Boundary Layers	Cat44. Non-Newtonian Turbulence	MIXED SESSION: Cat53. Suspensions Cat45. Particle-Laden Flows
10:30	SPEAKER: Luca Guastoni TALK: Reconstruction of wall-bounded turbulent flows from sparse measurements using physics-informed diffusion models	SPEAKER: Raúl Bayoán Cal TALK: Entrainment of mean kinetic energy in floating offshore wind farms	SPEAKER: Maria Vittoria Salvetti TALK: Experimental PIV Analysis of Hemodynamic Flow in the Thoracic Aorta with Patient-Specific Boundary Conditions	SPEAKER: Vid Agréž TALK: Vibration induced movement of an attached hydrogen bubbles	SPEAKER: Elias Kohler TALK: Energy Spectra in the DIA Framework for Homogeneous Isotropic Turbulence	SPEAKER: Sergio Pirozzoli TALK: On velocity and pressure fluctuations in turbulent wall-bounded flows	SPEAKER: Aman Bhargava TALK: (YSA) - A Mesoscopic Framework Bridging Micro- and Macroscale Contact Line Dynamics	SPEAKER: Min Gao TALK: A new insight into discontinuous Galerkin spectral element method for implicit large eddy simulations	SPEAKER: Leonel Beckedorff TALK: Experiments on bubble breakup in homogeneous isotropic turbulence: correlating local interface dynamics and surrounding flow structures	SPEAKER: Michel Speetjens TALK: Capturing 3D dynamics in district-heating networks by a compact pipe model	SPEAKER: Antoine Meyer TALK: Stability of a ferrofluid in a Taylor-Couette system with radial temperature gradient	SPEAKER: Sei Yamauchi TALK: Fluid-Structure Interaction Analysis of Flow Vibration Phenomena and Aerodynamic Characteristics due to Elastic Deformation of Thin Flat Plate Wings	SPEAKER: F. Gökhan Ergin TALK: The impact of isentropic nozzle design on the turbulence intensity of compressible round jet flow	SPEAKER: Uma Siva Sankar Kompalli TALK: Transition to Unsteady Flow due to a Vertical Magnetic Field in Liquid Metal Battery Electrode	SPEAKER: Prabhash Kumar TALK: Asynchrony-driven chaotic mixing in two-dimensional viscous flows	SPEAKER: Altaf Ahmed TALK: Impact of phase distortion in nonlinear saturation of Mack second mode in hypersonic parallel flow boundary layer	SPEAKER: Ziyin Lu TALK: Elastic and elasto-inertial turbulence in curved pipes	SPEAKER: Massimiliano Giona TALK: The added mass effect at microscales: the fluctuational theory
10:45	SPEAKER: Michele Buzzicotti TALK: Generation and Reconstruction of Lagrangian Turbulence with Stochastic Generative Models	SPEAKER: Zein Sadek TALK: Waveform impacts on the dynamics of floating offshore wind farms	SPEAKER: Benedikt Harald Johanning-meiners TALK: Hemodynamics of a Patient-Specific Compliant Thoracic Aorta Model in non-Newtonian Pulsatile Flow	SPEAKER: Ianto Cannon TALK: Bubble detachment from heterogeneous surfaces	SPEAKER: Santiago J. Benavides TALK: Triad phase dynamics and the inertial range energy spectrum in 2D turbulence	SPEAKER: Adal D. Galvan-Castro TALK: The lifetime of velocity structures in wall-bounded flows	SPEAKER: Subrat Kumar Nayak TALK: (YSA) - A three-dimensional numerical scheme for modeling three-phase contact line pinning using Smoothed Particle Hydrodynamics.	SPEAKER: Sijie Wang TALK: k-g Two-Equation-Based Delayed Detached Eddy Simulation of Turbulent Flows in the Discontinuous Galerkin Spectral Element Framework	SPEAKER: Cecilia Estepa-Cantero TALK: Experimental characterisation of the interaction between a vortex ring and a single bubble	SPEAKER: Tolga Emir TALK: Thermal plume dynamics and statistics around melting ice spheres	SPEAKER: Ruonan Wang TALK: Centrifugal Buoyancy-Driven Flow and Heat Transfer in an Open Rotating Cavity With Inlet Swirl	SPEAKER: Balint Nagy TALK: Dynamics of a flapping plate in laminar and turbulent flows	SPEAKER: Thomas Gollard TALK: Pressure Ratio Effect on the Aeroacoustics of a Supersonic Aerospoke Nozzle Jet	SPEAKER: Yan-wu Cao TALK: Reversal behavior of Quasi-Two-dimensional Liquid Metal Convection in a Horizontal Magnetic Field	SPEAKER: Anna Klünker TALK: Dynamical compartment and Markov state modelling for mixing quantification in reactors		SPEAKER: Wouter Bos TALK: Toms Riddle for Drag Reduction in Polymer-Laden Turbulence	SPEAKER: Eric Climent TALK: Cruising and jumping, the dynamic behaviour of micro-swimmers in turbulence
11:00	SPEAKER: Tianyi Li TALK: High-Fidelity Generation and Reconstruction of Three-Dimensional Turbulence Using Diffusion Models	SPEAKER: Yahya Lakrifi TALK: Numerical study of hydrodynamic instabilities of a draft tube turbine using high fidelity simulation	SPEAKER: Pascal Corso TALK: Modal analysis reveals aortic valve design effects on blood flow patterns	SPEAKER: Detlef Lohse TALK: Why are electrolytic bubbles so small?	SPEAKER: TJ O'Brien TALK: (YSA) Shell Spacing in GOY-Like Shell Models of Turbulence	SPEAKER: Yunchao Zhao TALK: On the causal structures of turbulent skin-friction drag in wall-bounded turbulent flows	SPEAKER: Lisa Fritzsche TALK: Flow dynamics inside Newtonian and non-Newtonian liquid bridges during stretching	SPEAKER: Niladri Sekhar Panda TALK: Interpolated Reynolds Stress Hybrid RANS-LES Solvers for Non-Isotropic Wall-bounded Turbulent Flows	SPEAKER: SANJID S TALK: Species transfer from multiple rising bubbles in periodic domain	SPEAKER: Diego Perissutti TALK: Time and length scales of ice morphodynamics driven by sub-surface turbulence	SPEAKER: Jan-Bert FLOR TALK: Vertical convection in a rectangular cavity	SPEAKER: Chandan Bose TALK: Dynamical Behaviour and Gust Response of a Flapping Foil with Variable Flexibility	SPEAKER: Mihai Mihaescu TALK: Large Eddy Simulation and Computational Aeroacoustics of a Supersonic Twin Nozzle	SPEAKER: Caroline Nore TALK: Large-scale analysis of the von Kármán Sodium experiment using Proper Orthogonal Decomposition	SPEAKER: Thanh Tung Thai TALK: Trajectory-based study and visualization of coherent flow structures in chemical reactors	SPEAKER: Siyi Li TALK: The establishment of boundary layers in the rotor-stator cavity during the transient process	SPEAKER: Alessandron Chiarini TALK: Energy and enstrophy transfers in polymeric turbulence	SPEAKER: Dylan Reynolds TALK: On the stability of a collection of sedimenting spheres
11:15	SPEAKER: Masanobu Inubushi TALK: Essential Observations for Turbulence Reconstruction with 2D Navier-Stokes Equations: A Data Assimilation Approach	SPEAKER: Noam Bloch TALK: Large-Eddy Simulation of hydrodynamic instabilities in pump-turbines at low opening	SPEAKER: Daniel Pointner TALK: ML-assisted analysis of flow patterns in extracorporeal membrane oxygenation (ECMO) membrane lungs	SPEAKER: Pascal Panizza TALK: Flow-induced Lateral Migration and Droplet Segregation in Flexible Rectangular Microchannels	SPEAKER: Nestor Garcia Cabrera TALK: Statistical Behaviour of Triad Phases in 3D Shell Models of Turbulence	SPEAKER: Javier Jimenez TALK: A causal event in wall-bounded turbulence	SPEAKER: Yunshan Jiang TALK: Dynamics of finger-bubble systems in Hele-Shaw channels	SPEAKER: Kazuhiro Inagaki TALK: Effects of subgrid-scale stress on turbulence structure in minimal channel flow	SPEAKER: Jacques Magnaudet TALK: A rational constitutive law for the viscous stress tensor in the one-fluid model of two-phase flows	SPEAKER: Romain Volk TALK: Ice melting in saltwater: laboratory experiments in the diffusive-convective regime	SPEAKER: Will Bloomer TALK: The influence of inhomogeneous temperature boundary conditions on the formation of tornado-like vortices	SPEAKER: Takeshi Sawada TALK: Attitude Dynamics of Inflatable Aeroshell with Fluid-Structure Interaction	SPEAKER: Lukas Babor TALK: Numerical investigation of the mixed convection flow over a non-isothermal horizontal plate with zero net heat supply	SPEAKER: Ruben Rojas TALK: Gravity Defying Thick Liquid Metal Walls for Fusion Reactor Chambers	SPEAKER: Anja Goebel TALK: A Transfer Operator Based Computational Study of Reacting Fluids	SPEAKER: Tom Eaves TALK: Edge states in an oscillating boundary layer	SPEAKER: Hayato Masuda TALK: (YSA) - Timescale-based mechanism of turbulence modulation by polymer additives	SPEAKER: Philip Pearce TALK: Emergent clogging of continuum particle suspensions in constricted channels
11:30	SPEAKER: Moritz Linkmann TALK: Machine-accelerated simulations of drift-wave turbulence	SPEAKER: Ujjwal Shrestha TALK: Influence of Leakage Flow on the Suction Performance of a Mixed Flow Pump with Semi-Open Casing	SPEAKER: Fan Wu TALK: The leaflets of the mitral valve determine the flow pattern in the ventricle	SPEAKER: Han Guo TALK: Bubble nucleation on hydrophobic micropillar arrays in a micro-Venturi channel under a supersaturated aqueous solution flow	SPEAKER: Pingfan Yang TALK: Small-Scale Anisotropy and Ramp-Cliff Structures in Turbulent Shear Flows	SPEAKER: Xuke Zhu TALK: A unified framework for mean temperature analysis in compressible turbulent channel flows	SPEAKER: Savinin Pertant TALK: Numerical simulation of thin films: study of meniscus and pinch evolution	SPEAKER: Moritz Spraul TALK: Towards Virtual Flight: High-Order Large-Eddy Simulation of a Wingtip Vortex	SPEAKER: Lyes Gornit TALK: Dynamics of a two-fluid flow inside a rotating cylinder	SPEAKER: Kenneth Golden TALK: Fluid Dynamics of Sea Ice	SPEAKER: Rudie Kunnen TALK: Scale-by-scale energy flux in turbulent rotating convection: comparing Fourier-based and spatial-filtering methods	SPEAKER: Gaetan Raynaud TALK: Shape tapering diversifies the dynamics of flapping flags	SPEAKER: Eugene Benilov TALK: Stability of oblique liquid curtains with surface tension	SPEAKER: Samy Lalloz TALK: (YSA) - Modelling the Sun's corona with distorted Alfvén waves in liquid metal experiments	SPEAKER: Benjamin Agfjel TALK: Mixing a tea with a flexible spoon: from spoon's trajectory to secondary flows	SPEAKER: Rocio Compton TALK: Secondary motions over a solar installation of e-type roughness with varying pitch	SPEAKER: Yusuke Koide TALK: Role of vortex scales in polymer stretching by turbulence	SPEAKER: Eavan Fitzgerald TALK: (YSA) - Synchronous orthogonal flows in superparamagnetic particle suspensions
11:45	SPEAKER: Sina Tajfirooz TALK: A data-driven approach for eddy-viscosity turbulence closure in turbulence two-phase stratified flows		SPEAKER: Xinyi He TALK: Experimental study on the left ventricular flow of mitral valve replacement	SPEAKER: Youna Louyer TALK: (YSA) Capillary attraction between millimeter-sized particles in a soap film	SPEAKER: Gerrit Elsinga TALK: Vorticity stretching motions in unsteady turbulence	SPEAKER: Sergio Hoyas TALK: Why are we still studying turbulence? The price of ignorance	SPEAKER: Vitor Cunha TALK: Incorporating Non-Local Solid-Fluid Interactions within a Diffuse-Interface Representation for Thin Film Dynamics	SPEAKER: Elliott Alloin TALK: Large Eddy Simulations of part-load instability in a Pump-Turbine in pump mode	SPEAKER: Nicolas Montiel TALK: Various regimes of two-phase turbulent flow in corrugated channels	SPEAKER: David W. Rees Jones TALK: Modelling melt pond drainage through porous, reactive sea ice	SPEAKER: Chris Howland TALK: Self-aggregation in Rainy-Bénard convection	SPEAKER: Ella Traas TALK: Research study on the use of Structural Health Monitoring data to analyse the Queensferry Crossing bridge response for wind action.	SPEAKER: Rajat Kumar TALK: Characteristics and mechanism of the axis-switching phenomenon of an asymmetric synthetic jet	SPEAKER: Juancheng Yang TALK: Experimental study on the flow structure and heat transfer of liquid metal under the influence of magnetic field			SPEAKER: Alexander Morozov TALK: Narwhals and their blessings: chaotic flows of dilute polymer solutions in parallel shear flows	SPEAKER: Simone Tandurella TALK: Flow structures in the settling of dense suspensions of spherical particles

EFDC2 Parallel Session 5 Programme (as of 18/08/25)

	Breakout Room 01 George Moore Auditorium	Breakout Room 02 ICON Theatre D	Breakout Room 03 Accenture Theatre A	Breakout Room 04 Elan Theatre B	Breakout Room 05 Lynch Theatre F	Breakout Room 06 Intel Theatre E	Breakout Room 07 O'Connor Theatre C	Breakout Room 08 H1.49 ALE room	Breakout Room 09 H2.38 ALE room	Breakout Room 10 E2.16/E2.17 ALE room	Breakout Room 11 E1.17/E1.18 ALE room	Breakout Room 12 H1.51/H1.52 classroom	Breakout Room 13 H1.12 classroom	Breakout Room 14 H2.20 classroom	Breakout Room 15 E1.19 classroom	Breakout Room 16 H2.32 classroom	Breakout Room 17 H2.40/H2.41 classroom	Breakout Room 18 E2.18 classroom
PARALLEL SESSION 5 Wednesday 27 Aug 2025	Cat03. MS on "Data Science and Data-Driven Models in Turbulence and Fluid Dynamics"	Cat32. Instability and Transition	Cat13. Biological/Biomedical Fluid Mechanics	Cat20. Drops and Bubbles	Cat05. MS on "Unsteady Turbulence"	Cat57. Wall-Bounded Flows: Simulations	Cat52. Surface Tension Effects and Interfacial Fluid Dynamics	MIXED SESSION: Cat17. Computational Fluid Dynamics and Numerical Methods Cat36. Large-Eddy Simulation and Related Techniques	Cat41. Multiphase Flows	Cat27. Geophysical Fluid Dynamics	Cat19. Convection and Buoyancy-Driven Flows	Cat25. Fluid-Structure Interaction	Cat06. Acoustics	Cat51. Superfluids Turbulence	Cat24. Fluid Dynamics: General	MIXED SESSION: Cat11. Atmospheric Turbulence Cat35. Lagrangian Aspects of Turbulence	Cat43. Non-Newtonian Flows	Cat45. Particle-Laden Flows
14:30	SPEAKER: Satoshi Matsumoto TALK: (YSA) - Data-driven closure model for turbulent eddies in the energy containing range	SPEAKER: Roger Ayats TALK: (YSA) - Turbulent stripes and bands pattern-formation mechanisms in planar shear flows	SPEAKER: Christoph Bruecker TALK: Streaming flow in the ventricles of the human brain	SPEAKER: Yijun Wang TALK: Dynamic behaviours of droplets impacting solid-liquid composite surfaces	SPEAKER: Oliver Buxton TALK: Turbulent/turbulent entrainment in a planar wake	SPEAKER: Sanath Kotturshettar TALK: Mean flow scaling of stably stratified turbulent channel flows	SPEAKER: James Sprittles TALK: Rogue Nanowaves: Rupture of Thin Liquid Films by Thermal Fluctuations	SPEAKER: Roel Verstappen TALK: Merging Filtering, Modelling and Discretization to Simulate Large Eddies in Burgers' Turbulence	SPEAKER: Jonas H. Ruesch TALK: (YSA) Experimental investigation on thin shear-driven water films at high velocity air flows	SPEAKER: Sofia Contador TALK: (YSA) Perspectives on Mixing at the Ocean-Sea Ice Interface: Insights into Double-Diffusion Convection	SPEAKER: Shingo Motoki TALK: (YSA) - Confined turbulent thermal convection in a vertical magnetic field	SPEAKER: Yutaro Motoori TALK: Swimming mechanism of a dolphin in terms of the hierarchy of coherent vortices	SPEAKER: Alden Midmer TALK: Acoustic damping of tip-vortex noise with an owl inspired, serrated leading edge.	SPEAKER: Bes Elliot TALK: Study of zero temperature quantum turbulence using the vortex filament model	SPEAKER: Jean Le Bris TALK: Sub-kolmogorov measurements in a turbulent swirling flow	SPEAKER: Roshan Samuel TALK: Lagrangian statistics of thermal convection at very high Rayleigh numbers	SPEAKER: Ludovico Crespi TALK: Homogeneous shear turbulence of dilute polymer solutions	SPEAKER: David Richter TALK: Mixed convection leads to significant vertical transport of settling particles
14:45	SPEAKER: Téo Granger TALK: A Reduced-Order Model for Predicting the Dynamics and Transition to Turbulence in Rayleigh-Taylor Instability	SPEAKER: Tomotaka Ichikawa TALK: Interscale energy transfer in a transitional swept-flat plate boundary layer	SPEAKER: Filippo Caruso Lombardi TALK: Hemodynamic consequences of ventricular tachycardia	SPEAKER: Ziyao Zhang TALK: Direct numerical simulation of simultaneous droplet impact on a solid substrate	SPEAKER: Oliver Buxton TALK: Turbulent/turbulent entrainment in a planar wake	SPEAKER: Maurizio Quadrio TALK: Anisotropic turbulence without spectra	SPEAKER: Mathieu Sellier TALK: Spin coating of a sphere: experiments and numerical simulations	SPEAKER: Andrea Bettini TALK: Adjoint-based Inflow Modelling for the forced Burgers' Equation	SPEAKER: Ange Combrouze TALK: Effect of bubble size on the stability of flowing liquid films in binary oil mixtures.	SPEAKER: Mina Jafari TALK: Theoretical and Numerical Modeling of Hydro-Sedimentary currents for Geophysical Applications	SPEAKER: Ronald du Puits TALK: Near-wall velocity and temperature fields in turbulent convection with rough surfaces	SPEAKER: Giovanni Vagnoli TALK: Higher order evaluation of hydrodynamic stresses on immersed body surface	SPEAKER: Miguel Fosas de Pando TALK: Fluid mechanics of a recorder: coherent structures and sound generation	SPEAKER: Clement Bret TALK: Richardson-Kolmogorov Cascade in Quantum Turbulence: from Experimental Insights to a New Interpretation of Effective Viscosity	SPEAKER: Dmitriy Zhigunov TALK: (YSA) Tiled exact coherent structures in spatially extended Kolmogorov flow	SPEAKER: Jean-baptiste Gorce TALK: Freely decaying turbulence in the lagrangian framework	SPEAKER: Angel Rivera TALK: Direct numerical simulations of polymer flows at small Reynolds number	SPEAKER: Marco Mazzuoli TALK: Transport of small particles underneath non-breaking waves propagating over a shallow wavy bottom: results from DNS of turbulent free-surface flow
15:00	SPEAKER: Martin Oblgado TALK: Active grid turbulence decay through the lens of physics informed neural networks	SPEAKER: Tobias Schneider TALK: Variational computation of unstable invariant solutions in fluid flows	SPEAKER: David Ribereau TALK: Fluttering of an aortic valve bioprostheses with the Lattice Boltzmann method coupled to a finite element solver for fluid structure interaction.	SPEAKER: Adolfo Esteban TALK: Numerical analysis of the rebound threshold for drops impacting solid surfaces	SPEAKER: Aditya Vaid TALK: Coherent Structures, Turbulence Dissipation and Turbulent/Non-Turbulent Interfaces in Turbulent Wakes	SPEAKER: Yuhang Wang TALK: A new extension of k- ω turbulence model for supersonic rough-wall flows	SPEAKER: Jihoo Moon TALK: Bouncing liquid metal droplet for thermal dissipation enhancement	SPEAKER: Flavio Tuteri TALK: Turbulence modeling in the QR space	SPEAKER: Thomas GOUZEC TALK: Effect of enhanced foaming capacities of binary liquid mixtures on vertical two-phase flow regimes	SPEAKER: James Herterich TALK: Understanding the hydrodynamics of coastal boulder transport	SPEAKER: Thibault Desaleux TALK: Analysis of Turbulent Fields and their structure in Internally Heated Convection	SPEAKER: Yoel Forterre TALK: Eversion of a soft tube at low Reynolds number	SPEAKER: Julie Jambert TALK: Study of physical interactions between low frequency ultrasound and clogging at microscale for fouling control.	SPEAKER: Niccolo Geracitano TALK: Stability of superfluid wakes	SPEAKER: Pierre Carlotti TALK: Taylor-Couette style flows with two parallel inner cylinders	SPEAKER: Xingyu Zhou TALK: A Lagrangian view of mixing in stratified shear flows	SPEAKER: Francesco Serafini TALK: (YSA) Drag reduction by polymer additives: the Maximum Drag Reduction asymptote	SPEAKER: Cristian Mauricio Potosi Rosero TALK: Particle Dynamics in Turbulent Flow Through a T-Junction
15:15	SPEAKER: Reza Hassanian TALK: Prediction of Inertial Particle Acceleration Variations in Particle-Laden Turbulent Flow: DL-Based Model	SPEAKER: Dan Lucas TALK: Obtaining dynamically relevant recurrent flows via triads.	SPEAKER: Jon McCullough TALK: Comparison of lattice Boltzmann method and finite volume method for the study of blood flow in cerebral aneurysms	SPEAKER: Julien Deschamp TALK: Drop impact in a cavity	SPEAKER: Clement Barbet Lavergne TALK: Non-equilibrium scalings in the High-Reynolds number spheroid wake	SPEAKER: Federica Gattere TALK: Linear Impulse Response Function of a Turbulent Channel Flow: measurement and possible uses		SPEAKER: Niall Madden TALK: Computational frameworks for reactive solute transport in oscillatory flow: deterministic and stochastic modeling	SPEAKER: Ping Lin TALK: A Phase-Field Blood Flow Model with RBCs Interacting through a 2D Lennard-Jones Type of Potential	SPEAKER: Cyprien Vermelle TALK: (YSA) Templating model hydrothermal vents	SPEAKER: Patrick Fischer TALK: Turbulent Thermal Vibrational Convection on a Half Soap Bubble		SPEAKER: Zhengxuan Song TALK: An asymptotic theory for broadband shock-associated noise in imperfectly expanded supersonic jets		SPEAKER: Arij Asad TALK: Mixing Behavior of Laminar Plume	SPEAKER: Naoto Yokoyama TALK: Generation of down- and counter-gradient fluxes due to vortical structures in shear turbulence under stratification	SPEAKER: Vivaswan Chandrashekar TALK: Flow Asymmetry enhanced by Viscoelasticity	SPEAKER: Larissa Richter TALK: (YSA) Onset of Turbulence in Particle-laden Pulsatile Pipe Flow Experiments with a Physiological Waveform

EFDC2 Parallel Session 6 Programme (as of 18/08/25)

PARALLEL SESSION 6 Wednesday 27 Aug 2025	Breakout Room 01 George Moore Auditorium	Breakout Room 02 ICON Theatre D	Breakout Room 03 Accenture Theatre A	Breakout Room 04 Elan Theatre B	Breakout Room 05 Lynch Theatre F	Breakout Room 06 Intel Theatre E	Breakout Room 07 O'Connor Theatre C	Breakout Room 08 H1.49 ALE room	Breakout Room 09 H2.38 ALE room	Breakout Room 10 E2.16/E2.17 ALE room	Breakout Room 11 E1.17/E1.18 ALE room	Breakout Room 12 H1.51/H1.52 classroom	Breakout Room 13 H1.12 classroom	Breakout Room 14 H2.20 classroom	Breakout Room 15 E1.19 classroom	Breakout Room 16 H2.32 classroom	Breakout Room 17 H2.40/H2.41 classroom	Breakout Room 18 E2.18 classroom
	Cat03. MS on "Data Science and Data-Driven Models in Turbulence and Fluid Dynamics"	Cat32. Instability and Transition	Cat13. Biological/Biomedical Fluid Mechanics	Cat20. Drops and Bubbles	Cat33. Intermittency and Scaling	Cat57. Wall-Bounded Flows: Simulations	Cat04. MS on "Poroelastic Flows"	Cat17. Computational Fluid Dynamics and Numerical Methods	Cat41. Multiphase Flows	Cat27. Geophysical Fluid Dynamics	Cat19. Convection and Buoyancy-Driven Flows	Cat25. Fluid-Structure Interaction	Cat07. Acoustics of Turbulent Flows	Cat23. Flow Control	Cat24. Fluid Dynamics: General	Cat11. Atmospheric Turbulence	Cat43. Non-Newtonian Flows	Cat45. Particle-Laden Flows
16:00	SPEAKER: Fabio Guglietta TALK: High-Fidelity Simulations and Data-Driven Approaches for Modeling the Human Heart	SPEAKER: Ewa Tuliszka-Sznitko TALK: A subcritical transition to turbulence in the counter-rotating Taylor-Couette configuration, radius ratio 0.9	SPEAKER: Kohel Hoshino TALK: Investigation of the Relationship Between Aneurysm Initiation and Vascular Wall Deformation Using One-Way FSI Analysis in an Animal Model	SPEAKER: Vatsal Sanjaya TALK: (YSA) Impacting spheres: from liquid drops to elastic beads	SPEAKER: Takashi Ishihara TALK: Sublayers in significant layers in high Reynolds number turbulence at $Re=2250$	SPEAKER: Amir Shahripour TALK: Interactions between the near-wall streaks and the incoherent part of the flow	SPEAKER: Bjornar Sandnes TALK: Flow patterns in frictionally deformable porous media	SPEAKER: Henri Lam Huang TALK: Is multiphase energy-conserving scheme really energy-conserving and accurate?	SPEAKER: Neil Balmforth TALK: Buckling of floating ice	SPEAKER: Hongru Li TALK: Modelling and simulation of bubbly thermal convection at moderate turbulence intensities	SPEAKER: Matthias Heil TALK: Elastic fibres in shear flows can maintain steady orientations	SPEAKER: Marios Ioannis Spiropoulos TALK: Pressure-velocity mode decompositions for aeroacoustics of wake-aerofoil interaction	SPEAKER: Marios Solera-Rico TALK: Modeling the dynamics of controlled wake flows with machine learning	SPEAKER: Alberto Solera-Rico TALK: Bouncing and hovering of liquid jets upon collision with rotating disks	SPEAKER: Seungjoo Lee TALK: Multiple shooting for turbulent flow reconstruction in the atmospheric boundary layer using large-eddy simulation	SPEAKER: Nick Janssens TALK: Elastoviscoplastic effects on liquid plug in an airway reopening model	SPEAKER: Renjie HAO TALK: Sliding and sampling velocities of inertial particle settling in turbulence	
16:15	SPEAKER: Samuel Ahnert TALK: Weak Dominant Balance: A robust method for identifying governing flow physics from noisy data	SPEAKER: Yoshiaki Hiruta TALK: Noise-induced transition in low-dimensional model of subcritical transition	SPEAKER: Jaskaran Singh TALK: Stochastic Sensitivity Analysis on the Influence of Carotid Artery Geometry on Atherosclerotic Plaque Formation	SPEAKER: Peter Lewin-Jones TALK: Impacts of Drops on Liquid Baths: When Do Gas Microfilms Cause Bouncing?	SPEAKER: Lukas Bentkamp TALK: (YSA) - Generating small-scale turbulence statistics at arbitrary Reynolds number using ensemble simulations	SPEAKER: Slavash Toosi TALK: Inner-outer interactions and Reynolds number effects in pipes with regular cosine-shaped roughness	SPEAKER: Bjornar Sandnes TALK: Flow patterns in frictionally deformable porous media	SPEAKER: Robin Barbera TALK: Anisotropic mesh adaptation for multiphase flows.	SPEAKER: Simon Wrana TALK: Impact of inertia on flow-induced particle motion in laminar shear flow	SPEAKER: Vasco Zanchi TALK: Fracture of a floating ice sheet by stationary water waves at the laboratory scale	SPEAKER: Julien Salort TALK: Internal gravity waves and turbulent thermal plumes in stratified cryogenic helium	SPEAKER: Brandon Hilliard TALK: Transition to turbulence induced by the fluid-structure interaction between pulsatile flow and a straight flexible pipe segment	SPEAKER: Marios Ioannis Spiropoulos TALK: Investigation of the acoustic and flow-fields of the perpendicular rod-airfoil configuration	SPEAKER: Aditya Desai TALK: Low-order modeling and control of a fluidic pinball wake in turbulent regime: An experimental investigation	SPEAKER: Bartosz Protas TALK: Systematic search for singularities in Navier-Stokes flows based on the Ladyzhenskaya-Prodi-Serrin conditions	SPEAKER: Maxime Sicat TALK: Coupled time-resolved measurements of scalar dispersion and velocity fields in a turbulent urban street canyon	SPEAKER: JOHN TSAMOPOULOS TALK: Hydrodynamic interaction of two viscous drops in Elastoviscoplastic materials	SPEAKER: Kai Schneider TALK: Multiscale analysis of inertial particle dynamics in turbulence with gravitational settling
16:30	SPEAKER: Antonio Colanera TALK: State-space quantization for local reduced order modelling	SPEAKER: Aaron Towne TALK: Statistical modeling of disturbance growth in wall-bounded flows	SPEAKER: Ellen Jolley TALK: Translation of a viscoelastic cell in Newtonian fluid	SPEAKER: Ignacio Roa Antunez TALK: A comprehensive numerical study of free drop-particle collisions	SPEAKER: Tong WU TALK: Skew-normal modeling of conditional multi-scale velocity gradient PDFs in turbulence	SPEAKER: Masanori Takaoka TALK: Local flux in wavenumber space in trigonometric-mode model of planar shear flow	SPEAKER: T��rence Desclaux TALK: Frictional poroelasticity of a yeast clog	SPEAKER: Pascal Mossier TALK: Tackling Compressible Turbulent Multi-Component Flows with Dynamic hp-Adaptation	SPEAKER: Amitabh Bhattacharya TALK: Origin of Levitation Force in Horizontal Core Annular Flows	SPEAKER: Paul Linden TALK: Hydraulic control, turbulence and mixing in stratified buoyancy-driven exchange flows	SPEAKER: Simen Bootsma TALK: Melting of a vertical ice cylinder in cold and saline water	SPEAKER: Justine Parmentier TALK: Non-Reciprocal Transport in Contracting Vessels	SPEAKER: Ugur Karban TALK: A nonlinear toy model for jet noise modelling and control	SPEAKER: Riccardo Maranelli TALK: Ensemble variational-based open-loop control of cavity flows	SPEAKER: Paul Christodoulides TALK: Fluid flows over steps of various angles	SPEAKER: Johan Meyers TALK: LES-based data assimilation in turbulent flow using weakly constrained 4D-Var	SPEAKER: Malay Hitesh Kumar Vyas TALK: Dynamics of compound polymeric droplet in viscoelastic extensional flow	SPEAKER: J��r��me Auzoux TALK: (YSA) - Stokes number effects on inertial particles in turbulence under microgravity
16:45	SPEAKER: Xiaodong Li TALK: Calibration of frequency-domain reduced-order models of unsteady flows	SPEAKER: Zepeng Yang TALK: Kinetic energy budget analysis on roughness effects on linear stability in compressible boundary layer	SPEAKER: Marco Laudato TALK: Advancing Thrombosis Fluid Dynamics: A Multi-Scale Neural Operator Approach	SPEAKER: Aaron Ratschow TALK: (YSA) Why charged drops do not splash	SPEAKER: Carlos Granero Belinchon TALK: A multiscale characterization of turbulence based on information theory	SPEAKER: Giacomo Della Posta TALK: On the wall state in hypersonic transitional boundary layers in chemical non-equilibrium	SPEAKER: Emma Bouckley TALK: Reversible and irreversible deformation in the flow-induced compaction of soft porous media: the role of medium rheology	SPEAKER: SIMON EL OUAFA TALK: Development of a New Well-Balanced Numerical Scheme for Compressible Porous Media Flows	SPEAKER: Zhonghan Xue TALK: Numerical investigation of melting solid spheres under forced convection	SPEAKER: Philipp Vieweg TALK: (YSA) Large-scale flow structures and their induced mixing in horizontally extended forced stratified shear flows	SPEAKER: Swen van den Heuvel TALK: (YSA) Melting of ice cylinders near the free surface	SPEAKER: Murilo Cicolin TALK: Flow-Induced Vibration of Flat Porous Plates	SPEAKER: Cristiano Pimenta TALK: Flow Separation Dynamics in Cars Under the Influence of Turbulent Inflows	SPEAKER: Sarah Smith TALK: Flow control in solar photovoltaics	SPEAKER: Durga Charan TALK: Experimental Investigation of the Hydrodynamic and Oxygenation Performance of Flapping-Based Aerators	SPEAKER: Baptiste Caro TALK: Numerical simulation and modelling of extreme events in the urban boundary layer for a UAV flight application	SPEAKER: Pierre Philippe TALK: Experimental study of viscoplastic jet-like intrusion flows	TALK: A novel experimental setup for tracking the rotation of magnetic particles in turbulence
17:00	SPEAKER: Rajat Mittal TALK: Modal Decomposition of Flows - From Kinematics to Dynamics via the Force Partitioning Method	SPEAKER: Ming Dong TALK: A high-efficiency and high-accuracy approach on describing excitation of non-modal perturbations in hypersonic boundary layers by freestream forcing	SPEAKER: Angelo Raimondo Favero TALK: (YSA) - A non-planar Hele-Shaw model for the nasal cavity flow	SPEAKER: John Kolinski TALK: Surface-tension driven instability accelerates contact on atomically smooth mica surfaces	SPEAKER: Chiara Calascibetta TALK: (YSA) - Hidden symmetry in passive scalar advected by 2D Navier-Stokes turbulence		SPEAKER: Richard McNair TALK: Compaction in poroelastic media with deformable, impermeable boundaries	SPEAKER: Guillaume De Rom��mont TALK: A data-driven learned discretization approach in finite volume schemes for compressible fluid dynamics	SPEAKER: Sofia Angriman TALK: Ice melting in oscillatory flow	SPEAKER: Marion Cousse TALK: Evolution of a Lamb-Oseen vortex under the non-traditional Coriolis force in a weakly stratified fluid	SPEAKER: Milton Assunc��ao TALK: The dynamics of sedimentation and crystallization: an asymptotic approach		SPEAKER: Andrea Schillaci TALK: A Machine Learning approach for car interior noise prediction	SPEAKER: Mohammed Hussein Hamede TALK: Thermo-electro hydrodynamic convection in microgravity conditions.	SPEAKER: Dirk de Boer TALK: Wake Interaction Forces on a Reversing Flat Plate	SPEAKER: Anna Pavan TALK: (YSA) Direct Numerical Simulation of a paradigmatic Urban Heat Island		TALK: Localization-delocalization transition for light particles in turbulence
17:15	SPEAKER: Lorenzo Piro TALK: Policy heterogeneity improves multiagent olfactory search in 3D turbulence	SPEAKER: Riccardo Bertonecello TALK: Optimal perturbations in a controlled Blasius boundary layer	SPEAKER: Marco Atzori TALK: Flow in a 23-generation model of human airways: laminar but not steady!	SPEAKER: Salar Jabbari Farrokhi TALK: Breakup of liquid bridges with dissolved Xanthan Gum on solid surfaces	SPEAKER: Gabriel B Apolinario TALK: An ensemble of Gaussian functionals with multifractal statistics		SPEAKER: Zoe Godard TALK: Cyclic loading of non-linear heterogeneous poroelastic material	SPEAKER: Nils Tilton TALK: A direct forcing immersed boundary method for flows with conjugate heat transport	SPEAKER: Alvaro Ramos Perez TALK: Particle and gas mass transfer in sparger gas-liquid systems: a comparative experimental study using a wire-mesh sensor	SPEAKER: Jean Renaud TALK: Quasi-geostrophic vortex merger over bathymetry	SPEAKER: Rundong Zhou TALK: (YSA) Transition to the ultimate regime in stratified inclined duct		SPEAKER: Delara Soltani TALK: Adjacent Micro Synthetic Jets for Thermal Management in Microelectronic Devices	SPEAKER: Mahbod Mohammadshadi TALK: Aerodynamics of thin porous airfoils: an interactive boundary layer approach	SPEAKER: Helen Alina Pabst TALK: (YSA) Drag and wake of a tree in the wind: laboratory experiments, field measurements, and numerical simulations	SPEAKER: Paul Griffiths TALK: Modelling interfacial flows in the low Reynolds number regime	SPEAKER: Andr�� Freitas TALK: (YSA) - Statistical Properties of Turbulence Under a Smart Lagrangian Forcing	

EFDC2 Parallel Session 7 Programme (updated: 19/08/25)

	Breakout Room 01 George Moore Auditorium	Breakout Room 02 ICON Theatre D	Breakout Room 03 Accenture Theatre A	Breakout Room 04 Elan Theatre B	Breakout Room 05 Lynch Theatre F	Breakout Room 06 Intel Theatre E	Breakout Room 07 O'Connor Theatre C	Breakout Room 08 H1.49 ALE room	Breakout Room 09 H2.38 ALE room	Breakout Room 10 E2.16/E2.17 ALE room	Breakout Room 11 E1.17/E1.18 ALE room	Breakout Room 12 H1.51/H1.52 classroom	Breakout Room 13 H1.12 classroom	Breakout Room 14 H2.20 classroom	Breakout Room 15 E1.19 classroom	Breakout Room 16 H2.32 classroom	Breakout Room 17 H2.40/H2.41 classroom	Breakout Room 18 E2.18 classroom
PARALLEL SESSION 7 Thursday 28 Aug 2025	MIXED SESSION: Cat03. MS on "Data Science and Data-Driven Models in Turbulence and Fluid Dynamics" Cat09. Artificial Intelligence in Turbulence	Cat32. Instability and Transition	Cat13. Biological/Biomedical Fluid Mechanics	Cat20. Drops and Bubbles	Cat05. MS on "Unsteady Turbulence"	Cat58. Wall-Bounded Flows: Theory	Cat46. Porous Media Flows	Cat17. Computational Fluid Dynamics and Numerical Methods	Cat41. Multiphase Flows	Cat27. Geophysical Fluid Dynamics	Cat19. Convection and Buoyancy-Driven Flows	MIXED SESSION: Cat08. Aerodynamics Cat25. Fluid-Structure Interaction	Cat15. Combustion and Reacting Flows	Cat23. Flow Control	Cat55. Vortex Dynamics and Structure Formation	Cat49. Separated Flows	Cat26. Free Surface Flows	Cat45. Particle-Laden Flows
	SPEAKER: Robin Heinonen TALK: Parameter selection for glfatory search in turbulent flows	SPEAKER: Youngwoo Kim TALK: Design of porous surface for hypersonic boundary layer stabilization with linear stability theory	SPEAKER: Pier Giuseppe Ledda TALK: Assessing Mixing and Transport in the Vitreous Chamber During Infusion in Ophthalmic Surgery	SPEAKER: Uros Orthaber TALK: Nanobubble filamentation and cylindrical shock wave emission in a gold nanoparticle aqueous suspension	SPEAKER: Marta Wacławczyk TALK: Unsteady, Non-equilibrium Turbulence in Atmosphere	SPEAKER: Jiamei Li TALK: (YSA) - Scale-by-scale cycle of turbulence in turbulent channel flow	SPEAKER: Yan Jin TALK: A pore-scale resolved direct numerical simulation study of solutal convection in porous media	SPEAKER: Francesco Viola TALK: Recent improvements in the Immersed Boundary Method	SPEAKER: Ansu Sun TALK: Using sub-sonic vibrating flow fields for micro particle collection and sorting	SPEAKER: Nicolas Morales-Preciado TALK: Instability of thin-film flows with temperature-dependent viscosity	SPEAKER: Jörg Schumacher TALK: Self-similar thermal plume networks in high-Rayleigh-number convection	SPEAKER: Banafsheh Seyed-Aghazadeh TALK: Free-Surface Induced Limit-Cycle Oscillations of a Flat Plate in Plunging Mode	SPEAKER: Chetankumar Sundaral Vegad TALK: Spray flame in hot vitiated cross flow at high pressure	SPEAKER: Giorgio Maria Cavallazzi TALK: Manipulation of the turbulent wall cycle via multi-agent deep reinforcement learning	SPEAKER: Zhihan Xu TALK: Experiments and simulations on short-wave instabilities in helical vortices	SPEAKER: Himpu Marbona TALK: A Time-Frequency Mode Analysis based on a Variational Problem for the Analysis of Non-Stationary Separated Flow	SPEAKER: Amelie Ferran TALK: Correlation between near-surface turbulence and the free-surface capillary channel flows	SPEAKER: Masako Sugihara-seki TALK: Inertial focusing of deformable particles in square capillary channel flows
	SPEAKER: Maurizio Carbone TALK: (YSA) - Learning to Backtrace Turbulent Scalar Fields	SPEAKER: Lukasz Klotz TALK: Influence of porous material on the flow behind a backward-facing step: experimental study	SPEAKER: Beatriz Eguzkitza TALK: A trip in nasal cavity: From the air to the epithelium	SPEAKER: Lennon Ó Náraigh TALK: Bounds on the Spreading Radius in the Viscous Case	SPEAKER: Marta Wacławczyk TALK: Unsteady, Non-equilibrium Turbulence in Atmosphere	SPEAKER: Youjie Xu TALK: Extending the Logarithmic Velocity Profile in Turbulent Channel Flow	SPEAKER: Marco De Paoli TALK: Multiscale modelling of convective mixing in porous media: experiments, pore-scale and Darcy simulations with dispersion	SPEAKER: Pablo Gómez TALK: On the boundary condition for volume of fluid methods at moving contact lines	SPEAKER: Daniel Lauwers TALK: Large-eddy simulations of the gas-liquid electrolyte flow in the electrochemical machining process of thin-walled workpieces	SPEAKER: Juan Cruz Gonzalez Sembla TALK: (YSA) - Convection in a rapidly rotating spherical shell: Newton's method using implicit Coriolis integration	SPEAKER: Olivier Soutard TALK: Large scales and self-similarity in Rayleigh-Taylor turbulence with a high density contrast	SPEAKER: Manuel Lorite-Diez TALK: 3D coupling for freely falling plates and their wakes	SPEAKER: Alice Ponet TALK: Numerical investigation of the turbulent wall cycle via multi-agent deep reinforcement learning for gust alleviation in an experimental frame work	SPEAKER: Enrico Amico TALK: (YSA) - Deep Reinforcement Learning for gust alleviation in an experimental frame work	SPEAKER: Tao Yang TALK: Dynamics of a helical vortex ring in the presence of a vortex line	SPEAKER: Justas Sereika TALK: Influence of Viscosity and Pulsatile Parameters on Separated Flow Dynamics	SPEAKER: Eirini Florou TALK: Characterization of strong free-surface turbulence	SPEAKER: Edward Skewington TALK: Gravity current energetics in depth-averaged models
	SPEAKER: Andres Cremades Botella TALK: Importance-based coherent structures: Definition of high-importance regions through explainable deep learning.	SPEAKER: MANORANJAN Mishra TALK: Reaction Controlled Fingering instability in Partially Miscible Fluid System	SPEAKER: Carlos Martinez-Bazan TALK: A hybrid Eulerian-Lagrangian model for the transport of solutes in the spinal canal	SPEAKER: Nan Gao TALK: Numerical and experimental studies of droplet impact on doubly re-entrant pillars	SPEAKER: Mohammad Ahmad Ameen Ahmad TALK: Dissipation in unsteady grid-generated turbulence	SPEAKER: Daniel Morón Montedecosa TALK: A threshold of turbulence decay in transitional pipe flow	SPEAKER: JING DONG TALK: An experimental study of heat transport in porous media convection	SPEAKER: Gabriel Weymouth TALK: Shrinking numerical domains using Biot-Savart boundary conditions	SPEAKER: Omkar Khare TALK: Modifying cavitation intensity in vortex based hydrodynamic cavitation device via inserts	SPEAKER: Yutong Zhang TALK: Rotating Thermal Convection in a Full Sphere with Heterogeneous Temperature Boundary Conditions	SPEAKER: Matthew McCormack TALK: Multiple turbulent states in liquid metal magnetococonvection	SPEAKER: Azim Babu Memon TALK: Flow-induced oscillations of two circular cylinders at subcritical Re	SPEAKER: Heinrich Heinzer TALK: Analysis of heat-up, devolatilization, and ignition of coal particles using point-particle DNS	SPEAKER: Rohan Kaushik TALK: Embedding Physical Invariances in Machine Learning based PDE Methods using Graph-Nets	SPEAKER: Yimshen Xu TALK: Helical turbulence of three-dimensional flow past a cylinder as the resolution of d'Alembert's paradox	SPEAKER: Amirreza Rouhi TALK: Application of riblets to separating turbulent boundary layers	SPEAKER: Pim Bullee TALK: Turbulent properties of the surface layer below wind-driven waves	SPEAKER: Konan Ishihara TALK: Passive separation of microparticles in helical-channel viscoelastic flow
	SPEAKER: Miguel Benítez TALK: Using physics to design new rewards for DRL control techniques	SPEAKER: Surya Maharana TALK: Impact of Buoyant Product Settling on Rayleigh-Taylor Instability around A+B → C Reaction Fronts	SPEAKER: Benjamin Schnabel TALK: A Proof of Concept on Cleaning Medical Devices in Silico	SPEAKER: Mikheil Kharbedia TALK: Tailoring tin droplet deformation by low-energy laser pulse	SPEAKER: Guoyu Fan TALK: Unsteady perturbations in the enstrophy cascade of 2D turbulence	SPEAKER: Rich Kerswell TALK: Transient growth on streaky unbounded shear flow: the symbiosis of Orr and Pushover mechanisms	SPEAKER: Ellen Luckins TALK: Salt weathering: modelling salt transport and crystallisation in drying porous media	SPEAKER: Jean-Mathieu Teissier TALK: Estimating the numerical errors' spectral signature for higher-order finite-volume Navier-Stokes solvers in subsonic turbulence	SPEAKER: Hiroya Watanabe TALK: (YSA) Velocity of an impact-induced focused liquid jet in a converging shaped container	SPEAKER: Amir Atoufi TALK: Mechanistic upwelling in oscillating benthic boundary layers	SPEAKER: Fang Xu TALK: Restoration of axisymmetric large-scale flow structures in buoyancy-driven turbulence by polymer additives	SPEAKER: Abdessamad Nait Ouhra TALK: Nonlinear Dynamics of a Forced Oscillating Cylinder: Subharmonic Oscillations and Vortex Shedding	SPEAKER: Zhen Lu TALK: Quantum computing of nonlinear reacting flows with the probability density function method	SPEAKER: Gioacchino Caferio TALK: Turbulent channel flow manipulations by sinusoidal riblets - a numerical study	SPEAKER: Robert Kerr TALK: Double vortex sheets and v1/4 scaling from interacting orthogonal vortices	SPEAKER: Roberto Corsini TALK: Direct numerical simulation of the separated flow around a wing section at Re = 66000	SPEAKER: Yinghe Qi TALK: (YSA) Breakup and coalescence of particle clusters in free-surface turbulence	SPEAKER: Paulius Vilkinis TALK: Experimental analysis of particle trapping and separation in microcavities
SPEAKER: Maochao Xiao TALK: SmartFlow: An open-source framework for deep reinforcement learning in turbulence modeling, flow control and numerical algorithm development	SPEAKER: Hammam Mohamed TALK: Revisiting Classical Stability: The Influence of Surface Tension and Wetting in Confined Falling Liquid Films	SPEAKER: Francois Peaudecerf TALK: Quorum-sensing dynamics of bacteria near solute-accumulating interfaces	SPEAKER: Rohith Jayaram TALK: The influence of Lagrangian coherent structures on the break-up and coalescence of drops in 2D turbulence	SPEAKER: Afonso A. Ghira TALK: Strong unsteady transitions in isotropic turbulence	SPEAKER: Zilin Zong TALK: State-dependent performance of basis functions in reduced-order modelling	SPEAKER: SAURABH Kumar TALK: Empirical Relationships to Describe Parameters for Temporal Evolution of Soil Pore Size Distribution	SPEAKER: Matthias Frey TALK: Assessment of an artificial viscosity-based shock capturing strategy for the simulation of highly turbulent supersonic flows using spectral difference methods	SPEAKER: Simona Signorile TALK: An accurate wetting boundary scheme for simulating three-component immiscible multiphase fluid systems in microchannels	SPEAKER: Giulio Foggi Rota TALK: Turbulent flow along patches of submerged vegetation	SPEAKER: Marc Cordelle Vacher TALK: (YSA) - Sloshing instability induced by a bubble flow	SPEAKER: Mohammed Heider TALK: Vortex-Induced Vibration of Multiple Elastically Coupled Circular Cylinders in a Side-by-Side Arrangement	SPEAKER: Michael Le Bars TALK: Dynamics of an autocatalytic reaction front: effects of imposed turbulence and buoyancy-driven flows	SPEAKER: Jizhong Zhang TALK: DNS study of drag reduction via outer-scaled actuated spanwise wall oscillation	SPEAKER: Zishuo Han TALK: Fast generation of turbulence by weaving multi-scale coherent vortices	SPEAKER: Sean Symon TALK: Variational data assimilation of a 3D wake using limited experimental data	SPEAKER: Jørgen Røysland Aarnes TALK: Vortical surface imprints in turbulent free-surface flows: dimples and scars	SPEAKER: Natalie Frank TALK: (YSA) - Clustering in an externally vibrated particle-laden fluid in microgravity	
SPEAKER: Ismael ZIGHEB TALK: Machine Learning for turbulent flows : physics-guided Reduced Order Modeling	SPEAKER: Péter Tamás Nagy TALK: (YSA) - Minimal absorbing zone of shear flows	SPEAKER: Silvia Ceccacci TALK: Dynamics and interactions of bacteriophages and bacteria in mucus environment	SPEAKER: Neeladri Bera TALK: Extensional magneto-rheology by exploiting ferrofluid droplet necking within magnetic field.	SPEAKER: Paul Beaumard TALK: Experimental analysis of the links between second order structure functions and subgrid-stress in grid turbulence	SPEAKER: Olivier Liot TALK: An on-chip flowmeter to measure yeast clog permeability	SPEAKER: Peng Luan TALK: Constructing turbulence models using the kinetic Fokker-Planck equation	SPEAKER: Francesco Villani TALK: Direct numerical simulations of turbulent flows over liquid-infused surfaces with a phase-field approach	SPEAKER: Bicheng Chen TALK: How do aligned wind, wave, and current modulate Langmuir supercells?	SPEAKER: Teresa Di Renzo TALK: Natural ventilation of a room-atrium system with fluctuating opposing wind	SPEAKER: Horia Hangan TALK: Numerical simulations of trailing edge spanwise sinusoidal perturbation of an A320 wing at Reynolds number of 1 million		SPEAKER: György Psál TALK: Optimised configuration of MVG-s mounted on a flat plate	SPEAKER: Miguel David Bustamante TALK: Chern-Simons theory is actually the 3D Euler equations for a compressible fluid with helicity and uniform Rossby-Ertel's potential vorticity magnitude		SPEAKER: Simeon Djambov TALK: Toy-model for the formation of rillenkarren by raindrop impacts	SPEAKER: Sumithra Reddy Yerasi TALK: Seeds of Innovation: The Flight of Engineered Micro-Voyagers Inspired by Natural Seeds		

EFDC2 Parallel Session 8 Programme (as of 18/08/25)

PARALLEL SESSION 8 Thursday 28 Aug 2025	Breakout Room 01 George Moore Auditorium	Breakout Room 02 ICON Theatre D	Breakout Room 03 Accenture Theatre A	Breakout Room 04 Elan Theatre B	Breakout Room 05 Lynch Theatre F	Breakout Room 06 Intel Theatre E	Breakout Room 07 O'Connor Theatre C	Breakout Room 08 H1.49 ALE room	Breakout Room 09 H2.38 ALE room	Breakout Room 10 E2.16/E2.17 ALE room	Breakout Room 11 E1.17/E1.18 ALE room	Breakout Room 12 H1.51/H1.52 classroom	Breakout Room 13 H1.12 classroom	Breakout Room 14 H2.20 classroom	Breakout Room 15 E1.19 classroom	Breakout Room 16 H2.32 classroom	Breakout Room 17 H2.40/H2.41 classroom	Breakout Room 18 E2.18 classroom
	Cat09. Artificial Intelligence in Turbulence	Cat32. Instability and Transition	Cat13. Biological/Biomedical Fluid Mechanics	Cat20. Drops and Bubbles	Cat05. MS on "Unsteady Turbulence"	Cat57. Wall-Bounded Flows: Simulations	Cat04. MS on "Poroeleastic Flows"	Cat17. Computational Fluid Dynamics and Numerical Methods	Cat42. Multiphase Turbulence	Cat27. Geophysical Fluid Dynamics	Cat19. Convection and Buoyancy-Driven Flows	Cat08. Aerodynamics	Cat22. Experimental Techniques	Cat23. Flow Control	Cat55. Vortex Dynamics and Structure Formation	Cat49. Separated Flows	Cat26. Free Surface Flows	Cat45. Particle-Laden Flows
14:30	SPEAKER: Seoyeon Heo TALK: Data-Driven Turbulence Modeling with Physics-Driven Corrections	SPEAKER: Martin Oberlack TALK: Oblique Couette flow instabilities: space-time modes and Squire's theorem extended	SPEAKER: Edwina Yeo TALK: Active L��v��que boundary layers: bacterial adhesion in shear flow	SPEAKER: Abhishek Jaiswal TALK: Morphed Leidenfrost effect of ferrofluid droplets within a magnetic field	SPEAKER: Pierre Guillon TALK: Phase Transition from Turbulence to Zonal Flows in the Hasegawa-Wakatani System	SPEAKER: Aneek Chakraborty TALK: Forced thermal convection over porous surfaces	SPEAKER: Robert Style TALK: Extracting Hard-to-Measure Hydrogel Transport Properties via Freezing Experiments	SPEAKER: Gianmaria Noventa TALK: Efficient under-resolved simulations of the separation-induced transition over a wide range of flow conditions	SPEAKER: Federico Toschi TALK: On the dynamics of turbulent dense emulsions	SPEAKER: Lorenzo Silvestri TALK: The effect of turbulent mixing in the spontaneous aggregation of convective clouds	SPEAKER: Bahadir Turkyilmaz TALK: Non-invasive simultaneous measurements of temperature and velocity fields for Rayleigh-B��nard convection to investigate effect of aspect ratio	SPEAKER: Rozie Zangeneh TALK: (YSA) Development of Anisotropic Decay Models for Reynolds Stressand Kinetic Energy Dissipation Equations	SPEAKER: Yoshiyasu Ichikawa TALK: Can fluorescent molecular rotor detect the viscosity changes in non-Newtonian flows around microstructures in microchannels?	SPEAKER: Junhao Song TALK: Influence of Surface Dimple Size and Distribution on the Aerodynamic Drag of High-Speed Trains	SPEAKER: Arman Hemmati TALK: Spanwise instabilities on the surface of parallel oscillating foils at moderate Reynolds numbers	SPEAKER: Maria Vittoria Salvetti TALK: Aerodynamic Performance of Rectangular Cylinders in Accelerated Flow	SPEAKER: Priyanka Gautam TALK: Vertical mixing under combined influence of waves, turbulence and shear currents: A Langmuir turbulence experiment	SPEAKER: Pijush Patra TALK: Collision dynamics of sedimenting charged cloud droplets in a vertical electric field
14:45	SPEAKER: Haochen Liu TALK: A data-driven explicit algebraic Reynolds stress model for simulating turbulent flows	SPEAKER: Thi Thai Le TALK: Using regression methods to predict fluid interface instabilities	SPEAKER: Anaelle Givaudan TALK: (YSA) - Roll formation in a bio-active fluid	SPEAKER: Steffen Bisswanger TALK: Upstream motion of oil droplets in co-axial Ozuo flow due to Marangoni forces	SPEAKER: Jian-Zhao Wu TALK: (YSA) Theory and simulation of vibroconvection under periodic or stochastic vibrations	SPEAKER: Lina Tessier TALK: Predicting Flows Over Rough Surfaces Under Icing Conditions Using a Double-Averaged Navier-Stokes Model	SPEAKER: Robert Style TALK: Extracting Hard-to-Measure Hydrogel Transport Properties via Freezing Experiments	SPEAKER: Francesco Mario D'alf��ro TALK: (YSA) - Parameter free shock capturing scheme for discontinuous Galerkin method	SPEAKER: Lorenzo Campana TALK: Towards an improved modelization of forces on a large spherical bubble in a turbulent flow	SPEAKER: Shinya Okino TALK: Transition from laminar to turbulent double-diffusive fingering convection	SPEAKER: Stephan Weiss TALK: Temperature reconstruction from velocity fields in turbulent Rayleigh-B��nard convection	SPEAKER: Christopher Julian Schauerter TALK: Analysis of upstream traveling waves in transonic buffet flow	SPEAKER: Jacopo SERPIERI TALK: Towards plasma-based swirling jets	SPEAKER: Alfred Abella TALK: Water vortex lattices generated by submerged waveguides	SPEAKER: Mario Morello TALK: Effects of Decelerating Flow on the Aerodynamic Behavior of Square and Rectangular Cylinders	SPEAKER: Alexander Schepetkin TALK: Numerically accurate treatment of implicit turbulent bottom stress in an ocean model with barotropic-baroclinic mode splitting	SPEAKER: Gupta Manojkumar Ishwarchandra TALK: Interaction of droplets with vortical structures: to understand atmospheric clouds	
15:00	SPEAKER: Marco Cayuela TALK: (YSA) - Interpretable data-driven decomposition strategy based on Fourier NeuralOperators – application to turbulent flows	SPEAKER: Giuseppe Arnone TALK: Asymptotic behaviour of throughflow solutions in the class of Jeffreys fluids	SPEAKER: Guohui Hu TALK: Numerical investigation of dynamics of nanoscale DNA-liposome complex under shear flow	SPEAKER: Duarte Rocha TALK: Evaporating binary neighbouring droplets: Non-monotonic symmetry evolution	SPEAKER: Petter Rikheim Benonisen TALK: How turbulence develops from a randomly spinning active grid	SPEAKER: Donnchadh Macgarry TALK: Drag and Peak Surface Pressure of Arrays of Roughness Elements with Different Height-Width Ratios	SPEAKER: Joseph Webber TALK: Poromechanical modelling of pumping with responsive hydrogels	SPEAKER: Ross Cockcroft TALK: Comparative Performance Analysis of Navier-Stokes and Lattice Boltzmann Based Wind Solver Approaches: OpenFOAM vs. waLBerla wind	SPEAKER: Tomasz Plusa TALK: VOF and LES Modelling of Vortex Formation in Unbaffled Eccentric Stirred Tanks	SPEAKER: Emily S.C. Ching TALK: Heat and Salt Fluxes in Turbulent Double-Diffusive Vertical Convection	SPEAKER: Johannes Bosbach TALK: Analysis of thermal structures in turbulent Rayleigh-B��nard convection at different aspect ratios using temperature sensitive paint	SPEAKER: Vincent Labarre TALK: Experimental investigation of drag and lift on inclined disks	SPEAKER: Prafulla Prakash Shekar TALK: (YSA) Toward accurate statistics of velocity gradients in large aspect-ratio Rayleigh B��nard convection cell using Shake-The-Box and VIGI	SPEAKER: Artur Tyliczcak TALK: Active control of pseudo-rotating multi-armed jets	SPEAKER: Jason Barcikie TALK: Kelvin waves along a free-surface vortex: observation of the dispersion relation.	SPEAKER: Sahar Rezapour TALK: The road to recovery: the last exit, milestones, and timing	SPEAKER: Indiana Olbert TALK: Coupled process-based and data-driven modelling of coastal hydrodynamics	SPEAKER: Nathan Coombs TALK: Colloidal deposits from evaporating sessile droplets
15:15	SPEAKER: Mario Javier Rincon TALK: Global improvement and performance evaluation of two-dimensional progressive data-augmented turbulence models	SPEAKER: Eunok Yim TALK: Stability analysis of swirling jet of hydro turbine flow	SPEAKER: Sharadhi Nagaraja TALK: 2D μPIV Investigation of Artemia Salina Swimming Dynamics	SPEAKER: Mohammad Reza Hashemi TALK: Manifold-Informed Neural Network (MINN) for Prediction of Interface Evolution in Two-Phase Flows	SPEAKER: Svenja Goedeke TALK: Strange active grid turbulence and its sensitivity to geometric excitations	SPEAKER: Matilde Fiori TALK: (YSA) Squishy Brain: Poromechanics and Solute Transport in the Brain Tissue	SPEAKER: KENJI OGUNI TALK: Symplectic Euler time integration algorithm for the Navier-Stokes equations	SPEAKER: Julien Carlier TALK: Proper orthogonal decomposition investigation of turbulent natural convection in an air-water system with evaporation across the free surface	SPEAKER: Paul Pruzina TALK: Modelling double diffusive staircases in one dimension	SPEAKER: Himanshu Dave TALK: Effect of Coriolis force on interface morphology within thermally driven Rayleigh-B��nard convection	SPEAKER: Soumarup Bhattacharyya TALK: Aerodynamics of light actuated dandelion-inspired drones	SPEAKER: Ernest Gyan Bediako TALK: Estimates of Lagrangian velocities in starting vortex flows of superfluid helium-4	SPEAKER: Ondrej Fercak TALK: Wake Merging in Undulated Cylinder Arrays	SPEAKER: Martina Luise TALK: Energy distribution under quantum defects reconnection	SPEAKER: Nathan Shumway TALK: Leading-edge shear layer behavior during leading-edge vortex development over a pitching wing	SPEAKER: Fabio Pino TALK: Linear control strategies for liquid film on a substrate moving against gravity	SPEAKER: Lukas Codispoti TALK: Caustic Collisions of Polydispersed Droplets in Turbulence	

EFDC2 Parallel Session 9 Programme (updated: 19/08/25)

PARALLEL SESSION 9 Thursday 28 Aug 2025	Breakout Room 01 George Moore Auditorium	Breakout Room 02 ICON Theatre D	Breakout Room 03 Accenture Theatre A	Breakout Room 04 Elan Theatre B	Breakout Room 05 Lynch Theatre F	Breakout Room 06 Intel Theatre E	Breakout Room 07 O'Connor Theatre C	Breakout Room 08 H1.49 ALE room	Breakout Room 09 H2.38 ALE room	Breakout Room 10 E2.16/E2.17 ALE room	Breakout Room 11 E1.17/E1.18 ALE room	Breakout Room 12 H1.51/H1.52 classroom	Breakout Room 13 H1.12 classroom	Breakout Room 14 H2.20 classroom	Breakout Room 15 E1.19 classroom	Breakout Room 16 H2.32 classroom	Breakout Room 17 H2.40/H2.41 classroom	Breakout Room 18 E2.18 classroom
	Cat09. Artificial Intelligence in Turbulence	Cat32. Instability and Transition	Cat13. Biological/Biomedical Fluid Mechanics	Cat20. Drops and Bubbles	Cat05. MS on "Unsteady Turbulence"	Cat16. Compressible Flows and Turbulence	Cat04. MS on "Poroelastic Flows"	Cat17. Computational Fluid Dynamics and Numerical Methods	Cat42. Multiphase Turbulence	MIXED SESSION: Cat30. Heat Transfer and Phase Change Cat27. Geophysical Fluid Dynamics	Cat19. Convection and Buoyancy-Driven Flows	Cat08. Aerodynamics	Cat22. Experimental Techniques	Cat18. Control of Turbulent Flows	Cat24. Fluid Dynamics: General	Cat59. Waves		Cat45. Particle-Laden Flows
16:00	SPEAKER: Jonas Luther TALK: (YSA) - Non-Linear Super-Stencils for Turbulence Model Corrections	SPEAKER: Ruonan Wang TALK: The Convective Instability in the Rotating-disk Boundary Layer of a Rotor-Stator Cavity	SPEAKER: Julien Le Dreff TALK: Swimming dynamics and efficiency in chain diatom colonies	SPEAKER: Bidisha Bhatt TALK: (YSA) - Capillary contractions and flow in a slinky	SPEAKER: Antoine Briard TALK: Self-similarity in the magnetic Rayleigh-Taylor instability	SPEAKER: Dea Daniella Wangsawijaya TALK: Characterisation of rough-wall drag in compressible turbulent boundary layers	SPEAKER: Anne Juel TALK: Microfluidic model of haemodynamics in complex media	SPEAKER: Mahsa Hassanpour TALK: Simulation of the transient dissolution of particles with different shapes using a Volume of Solid method	SPEAKER: Marc Avila TALK: Causal analysis of drop deformation and breakup in isotropic turbulence	SPEAKER: Gediminas Skarbalus TALK: Defining Transitioning Molecules in Water Phase Equilibrium via Molecular Dynamics Simulations	SPEAKER: Francesca Pelusi TALK: (YSA) Rayleigh-Bénard thermal convection in concentrated emulsions: a plethora of dynamical regimes	SPEAKER: Paolo COMUNIAN TALK: Aerodynamic interaction of small side-by-side propellers in forward flight	SPEAKER: Nihal Tawdi TALK: (YSA) Breaking the Kolmogorov barrier in turbulence	SPEAKER: Sajeda Mokbel TALK: Gradient-enhanced reinforcement learning for the efficient control of turbulent flows	SPEAKER: Berengere Dubrulle TALK: Efficiency anomaly: another fundamental law of turbulence?	SPEAKER: Wouter Mostert TALK: Simulations of breaking solitary waves using a multilayer free surface model		SPEAKER: Hozan Ibrahim TALK: Modeling Non-Spherical Particle Collisions in Particle-Laden Flows Using Impulse-Based Method and Signed Distance Fields
16:15	SPEAKER: Alessandro Giannotta TALK: Adjoint-accelerated Bayesian inference of turbulence model closure coefficients	SPEAKER: Susumu Goto TALK: Onset of convection cells of partially filled liquid in a horizontally rotating cylinder	SPEAKER: IOANNIS DIMAKOPOULOS TALK: Filament Stretching of Poro-Viscoelastic Materials	SPEAKER: Shahin Akbari TALK: Non-linear mode coupling in non-axisymmetric droplet oscillations	SPEAKER: Francisco Branco TALK: Direct numerical simulations of shearless turbulent/turbulent interaction	SPEAKER: Tobias Gibis TALK: (YSA) - Heat transfer effects in compressible turbulent boundary layers with and without pressure gradients	SPEAKER: Anne Juel TALK: Microfluidic model of haemodynamics in complex media	SPEAKER: Amol Gode TALK: CFD-PBM approach for modelling droplet size distribution of emulsions produced using vortex-based hydrodynamic cavitation device	SPEAKER: Amalia Travnickek TALK: Direct numerical simulation of a droplet in compressible isotropic turbulence	SPEAKER: Paolo Personnetaz TALK: Laminar to turbulent transition in librating spheres	SPEAKER: Yifeng Fu TALK: Quantifying the boundary layer asymmetry by applying different boundary layer theories in spherical Rayleigh-Bénard convection	SPEAKER: Sara Montagner TALK: (YSA) - Low Reynolds number propellers under non uniform inflow conditions	SPEAKER: Ekaterina Koroteeva TALK: Multi-wavelength pulsed LED system for high dynamic range flow velocimetry	SPEAKER: Johann Simon Kern TALK: (YSA) - Dynamic Low-Rank Approximation for optimal control of large-scale fluid systems	SPEAKER: Shijun Liao TALK: Noise-expansion cascade: an origin of randomness of turbulence	SPEAKER: Frederic Dias TALK: Effect of real-world perturbations on wave breaking due to a sharp-crested superharmonic instability		SPEAKER: Juliana B. R. Loureiro TALK: Experimental investigation of particle-particle interaction and shielding effect on normal jets using high-speed particle tracking
16:30	SPEAKER: Patrick Jenny TALK: Spectral adjoint-based assimilation of sparse data in unsteady simulations of turbulent flows	SPEAKER: Elena Marensi TALK: Optimal body force for heat transfer in turbulent vertical heated pipe flow	SPEAKER: Kiruthika Sundararajan TALK: Near-wake dynamics of insect's flapping wings in forward flight	SPEAKER: Lucas Jannin TALK: Droplet dynamics in both limits of low and high soluble surfactants in a Hele-Shaw cell	SPEAKER: Pedro Alves TALK: Inhomogeneity near turbulent/turbulent interfaces	SPEAKER: Michele Cogo TALK: Supersonic turbulent boundary layers over rough surfaces: geometry effects	SPEAKER: Miles Morgan TALK: Fluid-driven granular flows in a submerged silo		SPEAKER: Filippo Coletti TALK: Dense turbulent interfacial suspensions	SPEAKER: Cai Maitland Davies TALK: Particle tracking and tracer evolution using Lagrangian means	SPEAKER: FEI WANG TALK: The effects of surface stress in surface thermally driven circulation	SPEAKER: Jan Lepicovsky TALK: An Experimental Study on Unsteady Aerodynamics of Turbine Cascade with a Single Blade in Forced Flutter	SPEAKER: Daniel Glinnan TALK: Reconstructing density fields from experimental data under complex illumination conditions	SPEAKER: Niccolò Berizzi TALK: (YSA) - Streamwise travelling waves for drag reduction on a transonic airfoil	SPEAKER: Alexander Migdal TALK: Theory of Decaying Turbulence and Its Experimental Verification	SPEAKER: Benoît-Joseph Gréa TALK: Frozen waves in the inertial regime		SPEAKER: Makoto Yamamoto TALK: Computation on Impact of Partially Melted Ice Particle on Wall with Water Film
16:45	SPEAKER: Bharathram Ganapathisubramanian TALK: Assimilating roughness effects from sparse experimental data	SPEAKER: Dario Klingenberg TALK: (YSA) - Nonlinear optimal perturbations in turbulent channel flow at $Re_{\tau} \approx 180$		SPEAKER: Ikrohn Yoon TALK: Direct Numerical Simulation of Freezing Water Droplet	SPEAKER: Moritz Linkmann TALK: Physics-based models for large-eddy simulations of (un)steady magnetohydrodynamic turbulence	SPEAKER: Yitong Fan TALK: Resolvent-based estimation of turbulent energy in compressible turbulent boundary layers	SPEAKER: Lewis Melvin TALK: Choking in Confined Hele-Shaw cells: Effect of Elastomer Geometry		SPEAKER: Kevin Zhong TALK: (YSA) Melting of a finite-size Lagrangian sphere in homogeneous turbulence	SPEAKER: Balu Nadiga TALK: Learning of a Spatiotemporal Dynamics in Low-Dimensional Latent Spaces for Climate Prediction	SPEAKER: Yuzhou BU TALK: Experimental model of subglacial lakes: Rayleigh-Bénard and Horizontal convection	SPEAKER: Victor Baconnet TALK: Numerical investigation of the flow over low-pressure turbine blades with end walls	SPEAKER: Hongping Wang TALK: Convolutional SMART: a fast reconstruction technique for tomographic particle image velocimetry	SPEAKER: Felix Kranz TALK: Large drag and power reductions via simulation-based optimization of driving waveforms in turbulent pipe flow	SPEAKER: Dwight Barkley TALK: A toy model for magnetic field reversals	SPEAKER: Irmgard Knop TALK: (YSA) Gravity Waves and Their Impact on Tracer Transport		SPEAKER: Bernhard Roth TALK: (YSA) High-resolution measurements of particle saltation over an erodible sand bed

EFDC2 Parallel Session 10 Programme (updated: 19/08/25)

PARALLEL SESSION 10 Friday 29 Aug 2025	Breakout Room 01 George Moore Auditorium	Breakout Room 02 ICON Theatre D	Breakout Room 03 Accenture Theatre A	Breakout Room 04 Elan Theatre B	Breakout Room 05 Lynch Theatre F	Breakout Room 06 Intel Theatre E	Breakout Room 07 O'Connor Theatre C	Breakout Room 08 H1.49 ALE room	Breakout Room 09 H2.38 ALE room	Breakout Room 10 E2.16/E2.17 ALE room	Breakout Room 11 E1.17/E1.18 ALE room	Breakout Room 12 H1.51/H1.52 classroom	Breakout Room 13 H1.12 classroom	Breakout Room 14 H2.20 classroom	Breakout Room 15 E1.19 classroom	Breakout Room 16 H2.32 classroom	Breakout Room 17 H2.40/H2.41 classroom	Breakout Room 18 E2.18 classroom
09:00	SPEAKER: Junho Eom TALK: Turbulence Model Improvement with Field Inversion for Supersonic Flow around an Axisymmetric Body	SPEAKER: Liming Yin TALK: Numerical investigation of the flow dynamics in circular perforations with turbulent reattachment	SPEAKER: Abellohn Buchner TALK: Interactions and energetics of coupling in dipteran flight	SPEAKER: Yijun Wang TALK: Numerical investigations of shock-droplet interactions using a novel space-time adaptive volume-of-fluid solver	SPEAKER: Ryo Araki TALK: Energy and information transfer mechanisms in developed turbulence	SPEAKER: Qihan Ma TALK: Effect of molecular thermal fluctuations on compressible decaying turbulence	SPEAKER: Peter Castellucci TALK: Dynamic injection of a compressible gas into a confined porous layer	SPEAKER: Kiran Satheshechandran TALK: A diffuse interface approach for the simulation of red blood cells and elastic capsules in flow	SPEAKER: Fabio Sortini TALK: 3D measurements of droplet deformation and breakup in homogeneous isotropic turbulence	SPEAKER: Jerome Noir TALK: Flows within precessing non-axisymmetric ellipsoids	SPEAKER: Berengere Podvin TALK: Local analysis of the effect of radiation on the large-scale circulation in a cubic Rayleigh-Bénard cell	SPEAKER: Hulya Biler TALK: Impact of axial separation distance on tip vortex evolution between coaxial counter-rotating propellers	SPEAKER: John Lawson TALK: Physics Informed Gaussian Process Regression for Particle Tracking Velocimetry	SPEAKER: Amir Amjadmanesh TALK: Direct numerical simulation of turbulent drag-reduction via piezoelectric actuation	SPEAKER: Pedro Solís García TALK: Two-phase wing tip vortex breakdown	SPEAKER: Samuel Boury TALK: A laboratory experiment to reach an internal gravity wave turbulence regime	SPEAKER: Rajesh Bhagat TALK: The influence of Surface tension in thin-film planar hydraulic jumps	
09:15	SPEAKER: Minghan Chu TALK: Real-Time Heat Flux Estimation Using Approximate Bayesian Inference and Deep Learning	SPEAKER: Thomas Boeck TALK: Numerical studies of transition and edge state dynamics in MHD duct flow	SPEAKER: Daniele Certini TALK: Wake analysis of a robotic avian wing with moult gaps in gliding flight	SPEAKER: Henry Sharp TALK: Particle deposition from a unpinned, particle-laden, sessile droplet undergoing one-sided evaporation	SPEAKER: Ryo Araki TALK: Energy and information transfer mechanisms in developed turbulence	SPEAKER: Shishir Srivastava TALK: Influence of thermal non-equilibrium on the velocity-gradient and the pressure-Hessian tensors in two-species reacting compressible flows	SPEAKER: Hosameldin Abdelaziz TALK: Matching small and large scales in weakly-porous grid flows	SPEAKER: Adam Hanlon TALK: Investigating the coupling behaviour of high anisotropic strain rates on planar single mode RMI	SPEAKER: Marine Appart TALK: Finite element phase field simulations of embedded needle wetting experiments on complex substrates	SPEAKER: Vadim Giraud TALK: Investigating the Drag Force Due to Inertial Waves Generated by Topography	SPEAKER: Innocent Mutabazi TALK: Thermoelectric convection in a cylindrical annulus under microgravity	SPEAKER: Kwan Pui Mok TALK: Experimental Investigation on the Aerodynamic Propulsive Performance of Sinusoidal Pumping Motions on a Wingsail	SPEAKER: Ivan Litvinov TALK: A tunable bifurcation-based stand-alone MEMS-based flow sensor	SPEAKER: Davide Gatti TALK: Turbulent skin friction drag reduction via spanwise forcing at large Reynolds numbers	SPEAKER: Silvia Morlacchi TALK: Decay of time correlations in point vortex systems	SPEAKER: Simen A Ellingsen TALK: Mean current created by wave-turbulence interactions: experiment and theory	SPEAKER: Klint Ongari TALK: Studies in circular hydraulic jump	
09:30	SPEAKER: Hesam Salehipour TALK: Φ -ROM: Physics-informed reduced order modeling using differentiable PDE solvers and deep neural networks	SPEAKER: Nicola Giola TALK: Large-scale streak instabilities in transitional channel flow	SPEAKER: Victor Colognesi TALK: Experimental study of the transition between strokes in flapping flight	SPEAKER: Leonardo Caciolla TALK: Evaporation of free and sessile droplets at mesoscale	SPEAKER: Martin Caelen TALK: Coherence of velocity fluctuations in a turbulent round jet	SPEAKER: Giulio Soldati TALK: Time and length scales of low-frequency pressure fluctuations in supersonic swept ramps	SPEAKER: Giorgia Tagliavini TALK: Capturing Saturation Overshoots in Hyperbolic Infiltration: The Critical Role of Numerical Schemes	SPEAKER: Christian Diddens TALK: ploomph -- A black-box tool for numerical stability analysis of azimuthal and Cartesian normal modes	SPEAKER: Paolo Guida TALK: Numerical modeling of ammonia spray atomization	SPEAKER: Conor Nolan TALK: Over-reflexion of gravity waves by vortices in a rotating ocean	SPEAKER: Anne Sergeant TALK: Boundary layer dynamics at high Rayleigh numbers using DNS and experiments	SPEAKER: Zilu Wang TALK: Three-Dimensional Flow Dynamics in Pumping Wingsail	SPEAKER: Lennart Kira TALK: Acoustic Tomography of Temperature and Flow Fields using Full-Waveform Inversion	SPEAKER: Marco Galli TALK: Spatial transient of turbulent boundary layer subjected to spanwise wall oscillations	SPEAKER: Daniele Massaro TALK: Wall-bounded vortex reconnections	SPEAKER: Matteo Clementi TALK: Experimental characterization of the inception and evolution of Langmuir turbulence under wind-driven waves	SPEAKER: Tyler Benkley TALK: Generalization of the Total Linearization Method to 3D Free Surface Flows	
09:45	SPEAKER: Kashish Taneja TALK: Reduced-order modeling of complex dynamical systems using stochastic transformers	SPEAKER: Zhongyu Zhang TALK: Generation and nonlinear evolution of streak structures generated by a pair of oblique waves on a subsonic turbulent mixing layer	SPEAKER: Lars Krenkel TALK: Experimental Investigation of the Aerodynamics of Diapores in Native Free Fall and Controlled Autorotation Condition in a Vertical Wind Tunnel	SPEAKER: Udo Sen TALK: Physicochemical hydrodynamics of condensate formation in evaporation-driven phase-separation	SPEAKER: Youssef Elashmawi TALK: The unsteady nature of the water flow field beneath a wind-driven air-water interface in a channel	SPEAKER: Somnath Ghosh TALK: Shock-turbulence interaction in pipe flow at moderate Reynolds number	SPEAKER: Giuseppe Antonio Zampogna TALK: Merging molecular dynamics with homogenization: a novel strategy for the modeling of nanofiltration phenomena	SPEAKER: Pedro Costa TALK: Making a GPU accelerated finite-difference DNS solver talk less and do more	SPEAKER: Paul-peter Naonouh TALK: Inertial effects on the marginal pinching of thin free films	SPEAKER: Emanuele Zuccoli TALK: Resonant triad interactions of two acoustic modes and a gravity wave	SPEAKER: Nathan Carboneau TALK: Effect of the wind depletion on the turbulent Rayleigh-Bénard convection	SPEAKER: Stefano Olivieri TALK: Influence of free-stream turbulence on the aerodynamics of a flapping wing	SPEAKER: Elio Guillon TALK: Jets driven by ultrasound in liquid metal	SPEAKER: Filippo Moroni TALK: Drag reduction in temporal turbulent boundary layers through wall oscillations	SPEAKER: Takashi Sakajo TALK: Topological flow data analysis for describing vortex dynamics in flow patterns	SPEAKER: Marlene Vernet TALK: Experimental evidence of the statistical equilibrium of large scales in hydroelastic wave turbulence	SPEAKER: Palvo Simson TALK: Analytical and Numerical Insights into Deep Water Waves and Waves Over a Variable Bottom	
10:00	SPEAKER: Eichi Sasaki TALK: Constrained minimization for extracting periodic orbits in shell-model turbulence	SPEAKER: PRAVEEN KUMAR TALK: Wave Turbulence and Damping Effects: A Study of Energy Transfer and Nonlinear Instabilities	SPEAKER: François Schweitzer TALK: Butterfly flight aerodynamics in altered gravity	SPEAKER: Behnam Kazemi Majd TALK: Comparative Study of Lagrangian POD and DMD for the Analysis of 3D Bubble Rise Characteristics	SPEAKER: Melanie Baptiste TALK: Dependence of the critical Reynolds number on temporal acceleration in transitional channel flows	SPEAKER: Jan Van den Bergh TALK: A 1D ejector model based on the compound flow theory	SPEAKER: Mirko Residori TALK: Viscous fluid flow at the percolation threshold	SPEAKER: Andrea Portoli TALK: High-Performance GPU-accelerated DNS solver for human airways	SPEAKER: Joshua Durrant TALK: Wrinkling in viscous fluids	SPEAKER: Rossen Ivanov TALK: Internal Waves, Currents and Soliton Equations	SPEAKER: Xiaojue Zhu TALK: Optimal transient growth in turbulent Rayleigh-Bénard convections	SPEAKER: Atsuto Izumi TALK: Sudden Nonlinear increases in Lift for Folded Thin Airfoils at Low Reynolds Number	SPEAKER: Pierre Yves Passaglia TALK: Optical and acoustic plastron thickness measurements over super-hydrophobic surfaces	SPEAKER: Marco Castelletti TALK: Wiener filtering in wall turbulence	SPEAKER: Wei He TALK: Triglobal stability analysis of hemisphere-cylinder flow at low Reynolds numbers	SPEAKER: Cesar Eparza TALK: Overtopping Flow Modulation by Infragravity Waves on Sloping Coastal Defences with a Shallow Foreshore	SPEAKER: Panayotis Panayotaras TALK: Low frequency mode interactions of surface gravity waves in a triangular domain	
10:15		SPEAKER: Lukas Maximilian Fuchs TALK: Resolvent modeling and control of standing-wave low-frequency dynamics of a turbulent separation bubble	SPEAKER: André Weber TALK: Shear Waves from Cavitation in Cerebrospinal Fluid: First Model Experiments	SPEAKER: VARNIT KAPOOR TALK: Simulating gas-liquid flows using single phase formulation using a meshless method	SPEAKER: Lorenzo Manfredini TALK: Shell Models on Recurrent Sequences: Fibonacci, Padovan and Other Series	SPEAKER: Marco D'Amato TALK: High Enthalpy Flow Simulations through a Nozzle	SPEAKER: Jan Siemen Smink TALK: Optimising branched fluidic networks: A unifying theory	SPEAKER: Jee Hann Ng TALK: Numerical study of ice accretion in unsteady and inhomogeneous icing environment		SPEAKER: Stefan Llewellyn Smith TALK: The viscous Green's function for internal waves: generation and scattering	SPEAKER: Michal Macek TALK: Mapping the transport enhancements in highly turbulent Rayleigh-Benard convection due to non-Oberbeck-Boussinesq effects				SPEAKER: Joel O'Donborg TALK: Stability analysis of shear, strain and rotation structures in turbulent fluid flow	SPEAKER: Simon Gsell TALK: Wave-driven dynamics of a ludson in a stratified fluid	SPEAKER: Daire O'Donovan TALK: Achieving Optimal Locomotion using Self-Generated Waves	

EFDC2 Parallel Session 11 Programme (updated: 19/08/25)

PARALLEL SESSION 11 Friday 29 Aug 2025	Breakout Room 01 George Moore Auditorium	Breakout Room 02 ICON Theatre D	Breakout Room 03 Accenture Theatre A	Breakout Room 04 Elan Theatre B	Breakout Room 05 Lynch Theatre F	Breakout Room 06 Intel Theatre E	Breakout Room 07 O'Connor Theatre C	Breakout Room 08 H1.49 ALE room	Breakout Room 09 H2.38 ALE room	Breakout Room 10 E2.16/E2.17 ALE room	Breakout Room 11 E1.17/E1.18 ALE room	Breakout Room 12 H1.51/H1.52 classroom	Breakout Room 13 H1.12 classroom	Breakout Room 14 H2.20 classroom	Breakout Room 15 E1.19 classroom	Breakout Room 16 H2.32 classroom	Breakout Room 17 H2.40/H2.41 classroom	Breakout Room 18 E2.18 classroom
		Cat12. Instability and Transition	Cat13. Biological/Biomedical Fluid Mechanics		Cat05. MS on "Unsteady Turbulence"	Cat16. Compressible Flows and Turbulence		Cat17. Computational Fluid Dynamics and Numerical Methods	Cat41. Multiphase Flows		Cat19. Convection and Buoyancy- Driven Flows	Cat08. Aerodynamics			Cat55. Vortex Dynamics and Structure Formation	Cat59. Waves		
	11:00	SPEAKER: Nicolas Noiray TALK: Aeroacoustic dynamics of the spinning wave whistle	SPEAKER: Yuzhe Fan TALK: Acoustically driven bubble deformation leads to sub-wavelength ultrasound focusing		SPEAKER: Özgür Gürçan TALK: Wave-number space network formulation of turbulence	SPEAKER: Anna Maitre TALK: Reactivity accident study in a molten salt reactor involving compressibility effects		SPEAKER: Kuralamuthan Veerapandian TALK: Numerical investigation on the effect of viscous dissipation on temperature rise in a vertical planetary mixer	SPEAKER: Ippel Oshima TALK: Visualization of Droplet Splashing Process Deviating from Mainstream Air-flow and Effect of Liquid Property on Characteristic of Droplet Splashing		SPEAKER: Yuhong Dong TALK: Interphase coupling and energy transport in particle- laden Rayleigh- Bénard convection: A numerical study	SPEAKER: Sunil Manohar Dash TALK: On the evolution of hairpin vortices on the flapping elliptical airfoil with leading- edge protuberances in the forward flight condition			SPEAKER: Morgan Taylor TALK: Hydrodynamic Characterisation of Flow Over Inclined Deep Cavities	SPEAKER: Yi-Fei Huang TALK: Coupled viscous damping waves in a three- layer fluid system		
	11:15	SPEAKER: Atharva Lagwankar TALK: Imperfect Bifurcations in a Laminar 3D Bluff Body Wake: Effect of Yaw and Pitch	SPEAKER: Yan Yang TALK: The optimization of the flow-induced acoustics of a fish schooling model		SPEAKER: Özgür Gürçan TALK: Wave-number space network formulation of turbulence	SPEAKER: Mario Di Renzo TALK: Self-similarity of air mixture's chemical species in hypersonic turbulent boundary layers		SPEAKER: Imane Skifa TALK: CFD Optimization of Mixing in Microalgae Raceway Ponds Using Oscillating Jets	SPEAKER: David Roughton-Reay TALK: Controlling pattern formation in a single hole lifted Hele-Shaw cell		SPEAKER: Pavel Urban TALK: Thermally modulated Rayleigh- Bénard convection: A model for large scale natural flows driven by diurnal heating	SPEAKER: Gangadhar Venkata Ramana Pinapatruni TALK: On the improved lift characteristics of hovering elliptical wing with both leading and trailing edge tubercles			SPEAKER: Léo Claus D'Cruz TALK: Experiment on the effect of jet on jet/trailing vortex interaction	SPEAKER: Aaron D'Cruz TALK: Transient timescales of shear wave propagation in a solid-liquid coupled system		
	11:30	SPEAKER: Lutz Lesshaft TALK: Thermoacoustic and hydrodynamic instabilities of a bluff body wake inside a Rijke tube	SPEAKER: Franck Plouraboué TALK: Fluid-structure- interaction water- hammer wave propagation within networks		SPEAKER: Matthieu Chatelain TALK: Lagrangian transport in a Gaussian stochastic turbulent flow.	SPEAKER: Ben Thorner TALK: Direct Numerical Simulations of Ethylene-Air Combustion in a Supersonic Mixing Layer With Impinging Oblique Shock Wave		SPEAKER: Dominik Schiffer TALK: Automated Parameter Variations in CFD Simulations with ANSYS Fluent for the Optimization of Fuel Cells	SPEAKER: Djibrilla Mounkaila Noma TALK: Creaming of concentrated emulsions under centrifugation		SPEAKER: Matti Ettel TALK: Natural thermal boundary conditions as the key to controlling convective pattern formation	SPEAKER: Rahul Ranjan TALK: A Numerical Study on the Pitch angular offset of Rear Airfoil in the 2D Flapping Elliptical Airfoils in Tandem Configuration			SPEAKER: Jianwei Zhu TALK: Non- axisymmetric forces on the inner wall of piston-nozzle device generating starting jet under background inclined- flow	SPEAKER: Laura Irvine TALK: Triggering triadic resonance in internal wave beams		
	11:45	SPEAKER: David Fabre TALK: Is the transition to unsteadiness in the wake of slender bodies an artefact of boundary conditions ?	SPEAKER: Alexandre Villé TALK: Inferring turbulent dynamics from stentotic mean field data using resolvent analysis and data assimilation		SPEAKER: Julia Domingues Lemos TALK: Stochastic modelling of spatio- temporal velocity fields: comparison against numerical data and introduction of intermittent corrections	SPEAKER: Ben Thorner TALK: ILES of inhomogeneous turbulent mixing layers under three- dimensional strain profiles		SPEAKER: Angel Gonzalez Villatoro TALK: Bridging experimental measurements and simulations: A data assimilation approach to vorticity generation analysis				SPEAKER: Esteban Valdecasa TALK: Physics of paraglidng : stability of spiral descent			SPEAKER: Maël Benlarbi TALK: Effect of stratification on wingtip vortices	SPEAKER: Philippe Petitjeans TALK: Perfect active absorption of water waves in a channel by a dipole source		
	12:00	SPEAKER: Shimin Zhang TALK: Experimental study of transitional response in multi- mode Faraday waves	SPEAKER: Johanna Michel TALK: Experimental Investigation of Shear- Induced Generation of Respiratory Aerosol: Simultaneous Measurements of Particle Quantities and Wave Topology		SPEAKER: Ernesto Fuentes Noriega TALK: On the scale- by-scale effect of rotation in confined non-homogeneous turbulence	SPEAKER: Donatella Passiatore TALK: A-priori analysis of sub-grid mixing in multi- component inert mixing layers		SPEAKER: Bo Wang TALK: Cavitation bubble collapse near a wall: A numerical study on a bubble initially generated by laser				SPEAKER: Kacper Janczuk TALK: Bayesian optimisation of a roof and diffuser extension on a simplified road vehicle			SPEAKER: Yu-Cheng Lu TALK: Direct numerical simulation to dynamic stall on vertical-axis wind turbine	SPEAKER: Joseph Anderson TALK: Advances in extracting current profiles from X-band radar images with a focus on retrieving subsurface current		
	12:15	SPEAKER: Timothée Salamon TALK: Weakly nonlinear harmonic gain of the 1:2 axisymmetric sudden expansion.			SPEAKER: Christos Vassilicos TALK: Average interscale and interspace energy transfers in non- homogenous turbulence							SPEAKER: Benjamin Irwin TALK: Optimising foil geometry for curvilinear flows			SPEAKER: Francisco Huera-Huarte TALK: Four hundred million years old delta wings			