

2nd International Symposium on AI and Fluid Mechanics Mini Symposia, Monday 31st August 2026		
08:15-08:45	Registration and Coffee	
08:45-08:55	Room D: Welcome Address, Prof. M. Gavaises (City St George University, UK)	
	Room D: Quantum Computing for CFD	Room E: AI and Experimental Fluid Mechanics
	Chair: Dr Felix Tennie	Chairs: Dr Simo Makiharju and Dr Nikolaos Prasianakis
09:00-09:45	Michael Lubasch, Quantinuum Ltd, UK <i>Quantum circuits for partial differential equations in Fourier space</i>	Andreas Schröder, DLR and BTU Germany <i>3D Lagrangian Particle Tracking and data assimilation in fluid mechanics</i>
09:45-10:30	Peter Brearley, University of Manchester, UK <i>Encoding general non-unitary operations on quantum computers with exponential accuracy</i>	Stefano Discetti, U Carlos III Madrid, Spain <i>Machine learning for enhanced flow measurements and control</i>
10:30-11:15	Coffee Break, Refreshments	
11:15-12:00	Philipp Thoma, Planqc GmbH, Germany <i>Quantum and Quantum-Inspired Approaches to CFD</i>	Wagdi Habashi, McGill University, Canada <i>Reduced Order Modeling: A Virtual In-flight Icing Aircraft Certification Methodology Unifying Computational-Experimental-Flight Fluid Mechanics</i>
12:00-12:45	Thomas Rung, TU Hamburg, Germany <i>Strategies to Deploy Quantum Concepts for CFD - From VQA to TQP</i>	Alexander Rack, ESRF, France <i>Depicting Dynamic Processes with Real-Time Radioscopy using hard Synchrotron Radiation</i>
12:45-14:00	Lunch	
14:00-14:45	Matthias Moller, TU Delft, The Netherlands <i>Quantum lattice Boltzmann methods and lattice gas automata</i>	Jeena Poonosamy, FIZ, Germany <i>AI-assisted lab-on-a-chip experiments: Setting new frontiers in radio-geochemistry</i>
14:45-15:30	Yue Yang, Peking University, China <i>Quantum computing and AI for turbulence simulation</i>	Simo Makiharju, University of Berkeley, USA <i>Exploration of AI tools for Experimental Multiphase Flow Data Augmentation</i>
15:30-16:00	Coffee Break, Refreshments	
16:00-16:45	Felix Tennie, City St George University London, UK <i>Quantum algorithms for integrating nonlinear dynamics using mean-field nonlinearities</i>	Nikolaos Prasianakis, PSI, Switzerland <i>Bridging Experiments and Simulations: AI-enhanced digital twins</i>
16:45-17:30	Dieter Jaksch, University of Hamburg, Germany <i>Quantum Computational Fluid Dynamics</i>	
18:00-20:00	Welcome Reception and Registration, Refreshments, Finger food	