





Preliminary Programme: ERCOFTAC Autumn Meeting: <u>ERCOFTAC - ERCOFTAC Autumn Festival and 20th Da Vinci Competition 2025, Darmstadt, Germany</u>

Thursday;	09.10.2025	Room : L1 01 K24			
09:00 - 09:10	Introduction and welcome Andreas Dreizler		RSM	Welcome	
09:10 - 09:50	Review talk 1	Johannes Mich	STFS	"Great flames from small particles. Measurement and Modelling of Metal Combustion"	
09:50 – 10:10	Contributed talk 1	Peter Stephan/ Axel Sielaff	ΠD	"Insights into Pool Boiling Heat Transfer: Experimental and Numerical Investigations from the Multiscale Boiling Project on the ISS"	
10:10 - 10:30	Contributed talk 2	Felix Wolf	Informatik	"High-Performance Computing for Computational Engineering Science"	
10:30 - 11:00	Coffee break				
11:00 - 11:40	Review talk 2	Tao Li	RSM	"Experimental Insights into Turbulent Ammonia/Hydrogen Combustion"	
11:40 - 12:00	Contributed talk 3	John Linkhorst	VES	"Flow Electrochemistry for the Metal Energy Cycle"	
12:00 – 12:20	Contributed talk 4	Naveen Billur Mohan	FST	"Lubrication Film Friction Model for Non-Symetrically Profiled Annular Seals"	
12:20 - 13:20	Lunch break				
13:20 – 13:40	Contributed talk 5	Louis Krüger	SLA	"Flow and Heat Transfer Dynamics in Fuel Cell Cooling Systems: A complentary Experimental and Scale-Resolving Computational Study"	
13:40 - 14:00	Contributed talk 6	Michael Börner	GLA	"Rotation detonation combustor research for space propulsion applications at TU Darmstadt"	
14:00 – 14:20	Contributed talk 7	Florian Kummer	FDY	"Numerical Simulation of Flows with dynamic Interfaces"	
14:20 - 14:40	Contributed talk 8	Falco Marx	EST	"Advancing Waste Valorization via Fluidized Bed Thermochemical Conversion"	
14:40 - 15:00	Coffee break				
15:00 - 16:40	Da Vinci Award Session	5 Finalists			
15:00 – 15:20	Finalist 1	Deniz Bezgin	TU Munich, Germany		"Toward Machine-learned Discretizations and Differentiable CFD for Compressible Two-phase Flows"
15:20 – 15:40	Finalist 2	Jean-Jacques Hok	CERFACS, France		"Modeling Strategy for the Large Eddy Simulation of Lean Hydrogen-Air Explosions"
15:40 – 16:00	Finalist 3	Yash Kulkarni	Sorbonne Universite & C	CNRS, France	"Theoretical and Numerical Modelling of Three-Phase Dynamic Contact Line and Atomisation"
16:00 – 16:20	Finalist 4	Thomas Monahan	University of Oxford, UK	•	"Spatiotemporal Tidal Prediction and Analysis Using Physics-Informed MI"
16:20 – 16:40	Finalist 5	Daniel Moron	University of Bremen, Germany		"The Transitional Regime of Pulsatile Pipe Flow"
16:40 – 17:10	Coffee Break	Committee deliberating			
17:10 – 17:30	Decision and Presentation of Da Vinci Award				
17:30	Closing remarks				
19:30	Gala Dinner	Restaurant	"Ratskeller Darmstadt"	Marktplatz 8	s, 64283 Darmstadt; (see <a href="https://www.ratskeller-darmstadt.de/en/">https://www.ratskeller-darmstadt.de/en/</a> )
Friday,	10.10.2025	Room: L6 01 Raum 4/23	EG		
09:00 - 15:00	ERCOFTAC- Sitzung				