

# 54<sup>th</sup> European Two-Phase Flow Group Meeting Programme

**Day 1: Sunday September 8<sup>th</sup> 2024**

**Location: Dunlop Oriel House ([Map](#))**

## **Time**

14:00-16:00	Registration	Dunlop Oriel House
16:00-16:15	Opening Remarks	Tony Robinson
	<b>Boiling &amp; Condensation 1</b>	<b>Chair: Tony Robinson</b>
	<b>Presenter</b>	<b>Title</b>
16:15-16:40	Markides, Christos	Laser-based thermographic measurements of nucleate flow boiling in a vertical miniaturised channel
16:40-17:05	Dorao, Carlos	Flow boiling regimes in a horizontal-heated pipe
17:05-17:30	O'Shaughnessy, Seamus	Enhancing Condensation using Co-Blast Surfaces
17:30-17:55	Garivalis, Alekos	Pool boiling enhancement with porous Ti-6Al-4V coatings obtained by cold spray manufacturing using water as working fluid
18:00-21:00	Social Event @ Kennedys Pub ( <a href="#">Map</a> )	Drinks reception with pub grub

**Day 2: Monday September 9<sup>th</sup> 2024****Location: Trinity Business School , PORTAL Innovation Space, Room 115 ([Map](#))**

Time

09:00-09:45	Registration	PORTAL Rm 115, Trinity Business School
09:45-10:05	Welcoming Address	Tony Robinson
	<b>Modelling &amp; Simulations 1</b>	<b>Chair: Rémi Revellin</b>
	<b>Presenter</b>	<b>Title</b>
10:05-10:50	Lucas, Dirk (Keynote)	An Euler-Euler based CFD framework for multiphase flows combining resolved and unresolved structures
10:50-11:15	<b>Coffee Break</b>	
11:15-11:40	Haustein, Herman	From micro-droplets and bubbles to complex fluids
11:40-12:05	Picchi, Davide	Characteristics of Taylor bubbles moving in a shear-thinning fluid
12:05-12:30	Delaure, Yan	Towards modelling mass transfer in poly-disperse bubble plumes
12:30-12:55	Brauner, Neima & Ullman, Amos	Numerical simulations and mechanistic modeling of high-pressure gas-liquid flow in M-shaped jumper of subsea gas production systems
12:55-14:00	<b>Lunch</b>	
	<b>Boiling &amp; Condensation 2</b>	<b>Chair: Carlo Iorio</b>
	<b>Presenter</b>	<b>Title</b>
14:00-14:25	Bortolin, Stefano	Dropwise and filmwise condensation on vertical hydrophilic surfaces: experimental investigation with saturated steam
14:25-14:50	Thome, John	Open Questions on Two-Phase Flow and Boiling in Microchannels
14:50-15:15	Bonjour, Jocelyn	Toward thermally-generated sprays for efficient phase change heat transfer under low pressure
15:15-15:40	Zajączkowski, Bartosz	Bubble dynamics during pool boiling on tube bundles under low pressure
15:40-16:05	<b>Coffee Break</b>	
	<b>Modelling &amp; Simulations 2</b>	<b>Chair: Jocelyn Bonjour</b>
	<b>Presenter</b>	<b>Title</b>
16:05-16:30	Besagni, Giorgio	Bubble column fluid dynamics: a multi-scale perspective
16:30-16:55	Mikielewicz, Dariusz	Flow boiling and flow condensation at small, medium and high reduced pressures
16:55-17:20	Revellin, Rémi	A Novel Approach for Determining Two-Phase Flow Conditions at Primary Nozzle Throat of Ejectors Used in Refrigeration Systems and Investigating their Impact on the System Performance
17:20-17:45	Eshaghimvari, Majid	Capillary Flow Simulation in Biporous Media

**Day 3: Tuesday September 10<sup>th</sup> 2024****Location: Trinity Business School , PORTAL Innovation Space, Room 115 ([Map](#))**

Time

	<b>Bubble &amp; Drop Flows 1</b>	<b>Chair: Paolo Di Marco</b>
	<b>Presenter</b>	<b>Title</b>
09:00-09:45	Tomiyama, Akio (Keynote)	On Dynamics of Single Bubble and Bubbly Flow in Bubble Column
09:45-10:10	Schlüter, Michael	Influence of bubble formation history on rising velocity
10:10-10:35	Legendre, Dominique	Effect of bubble deformation and contamination on the stability of bubble chains
10:35-11:00	Angeli, Panagiota	Effects of surface active agents on drop formation and emulsion properties
11:00-11:30	<b>Coffee Break</b>	
	<b>Bubble &amp; Drop Flows 2</b>	<b>Chair: Akio Tomiyama</b>
	<b>Presenter</b>	<b>Title</b>
11:30-11:55	Hosseini, Fria	Advanced Ultrasound Techniques for the Characterization of Multiphase Flows
11:55-12:20	Passarelli, Adolfo	Flow boiling heat transfer coefficient in enhanced tubes: benchmark correlations and ANN comparison
12:20-12:45	Phakoukaki, Yiota	Hydrodynamics and extraction abilities of novel solvents in continuous small channels
12:45-13:10	Tony Robinson	Fizzics of Guinness
13:10-14:10	<b>Lunch</b>	
14:30-18:00	Social Outing @ Guinness Storehouse ( <a href="#">Website</a> )	Bus pick-up at Trinity College @14:30 / Arrive GSH 15:00 /Bus pick-up at GSH @18:00
19:00-22:00	Gala Dinner @ ELY Wine Bar ( <a href="#">Map</a> )	Walking distance from Trinity College

**Day 4: Wednesday September 11<sup>th</sup> 2024****Location: Trinity Business School , PORTAL Innovation Space, Room 115 ([Map](#))**

Time

	<b>Bubbles/Drops/Films</b>	<b>Chair: John Thome</b>
	<b>Presenter</b>	<b>Title</b>
09:00-09:45	O'Naraigh, Lennon (Keynote)	A mathematical model and mesh-free numerical method for contact-line motion in lubrication theory
09:45-10:10	Gu, Tianle	DC electric field impact on bubble dynamics
10:10-10:35	Siedel, Samuel	AC electric field impact on bubble dynamics
10:35-11:05	<b>Coffee Break</b>	
11:05-11:30	Gibbons, Michael	Droplet Contact Line Heat Transfer
11:30-11:55	Behle, Robin	Investigation of the effect of thermocapillarity on deformation of evaporating films on structured substrate
11:55-12:20	Tadrist, Lounes	Two-phase flow regimes At low Reynolds number : Bubbly flow case
12:20-12:45	Iorio, Carlo	Advanced Research on Liquid Evaporation in Space: A sounding rocket experiment
12:45-13:00	John Thome	Closing Remarks