

Dear friends,

You are most welcome to our seminar **on October 14 and 15.**

Location: **Alfa Laval.**

Visiting address: Separatorvägen 1, 141 49 Huddinge

- From Arlanda Airport to Central Station: visitors can take either the commuter train or the Arlanda express
- From Central Station: visitors can take a commuter train toward Södertälje or Tumba and get off at **Flemingsberg** station. The Alfa Laval building is within walking distance of **Flemingsberg** station.

Hotel: Elite Palace Hotel, **Address:** Sankt Eriksgatan 115, 113 43 Stockholm

Day 1 (October 14) schedule:

- **11:45—12:15** Arrival and safety video
- **12:15—13:00** Lunch
- **13:15—13:30** Welcome by SIAMUF Chair (**Dragana Arlov**)
- **13:30—13:50** Short presentation on multiphase challenges in HSS
- **14:00—15:00** First round of visit
- **15:00—15:30** Fika and group swap
- **15:30—16:15** Second round of visit
- **16:30—18:30** Presentations
 - **16.30 – 16.50 Reza Ehteshami (MDU):** Zooming through boiling: from individual bubbles to minichannel flow
 - **16.50 – 17.10 Thisal Mandula Sugathapala (Chalmers):** Advancements in collision and aggregation theory in stratified turbulence

- **17.10 – 17.30 Kiran Satheeshchandran (KTH):** A Fully Eulerian Diffuse Interface Framework for Simulations of Elastic Capsules with Gas Transfer
 - **17.30 – 17.40:** Fika
 - **17.40 – 18.00 Robert-Zoltán Szász (LTH):** CFD simulations of flows through face masks
 - **18.00 – 18.20 Aniruddh Mohan (Ericsson):** Parametric and Generative Topology Optimization: An Industrial Benchmark Campaign for Thermo-Fluid Design
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- **18:30—19:30 Travel to hotel (not organized),** check-in
 - **19:30—22:00 Dinner**

Day 2 (October 15) schedule:

- **09:00—12:00** Presentations
 - **09.00 – 09.20 Lorenz Weber** (Chalmers): FluTAS-Boil: A scalable framework for the accurate simulation of complex boiling flows
 - **09.20 – 09.40 Simone Lomolino** (KTH): Biological streamers: the challenges of continuum modelling
 - **09.40 – 10.00 Andhika Pratama** (Chalmers): Numerical Framework for Deformation-Assisted Ice Nucleation in Supercooled Droplets
 - **10.00 – 10.20 Tasawar Iqbal** (KTH): Droplet-laden turbulent channel flows of viscoelastic and elastoviscoplastic fluids.
 - **10.20 – 10.40: Fika**
 - **10.40 – 11.00 Linda Yang** (Ericsson): A System-Level Computational Framework for Vapor Chamber Optimization
 - **11.00 – 11.20 Jonathan Bull** (Alfa Laval): Dynamic modelling and control of a continuous centrifugal sedimentation process
 - **11.20 – 11.40 Sol Guiomar Montero Carrasco** (Chalmers): Pore-scale mixing in hierarchical porous media
 - **11.40 – 12.00 Kaj Pettersson** (Chalmers): Modeling snowflakes using 3D lattice Boltzmann
 - **12.00 – 13.00: Lunch**
 - **13.00 – 13.20 Andreas Håkansson** (LTH) Towards predictive modelling of potato frying: industrial multiphase challenges and opportunities
 - **13.20 – 13.40 Grigory Sarnitsky** (Chalmers): Turbulence and mixed-phase cloud glaciation
 - **13.40 – 14.00 Shabab Mirjalili** (KTH): Progress on machine learning models for interfacial multiphase flows.
 - **14.00 – 14.10: Fika**
 - **14.10 – 14.30 Tobias Eidevåg** (Volvo Cars): From Droplets to Water Films: Multiphase Mechanisms Behind Automotive Radar Attenuation
 - **14.30 – 14.50 Shahriar Habibi** (KTH): Particle dynamics in non-Newtonian fluids
 - **14.50 – 15.00: closing of the seminar**