

## Droplet Interaction Technologies

### DROPIT (GRK 2160/1)

### Doctoral Seminar – AGENDA

#### Wednesday, 15.5.2019:

8:45-9:00 Welcome and start of the PhD seminar

9:00-9:30 **Project B5: Martina Baggio**  
Numerical computation for drop impact on textured surfaces

9:30-10:00 **Project C4: Alexander Straub**  
Visualization of droplet-liquid interaction

#### BREAK

10:30-11:00 **Project C5: Visakh Vaikuntanathan**  
Development of novel optical technique for micro-fluid dynamics

11:00-11:30 **Associated Project 1: Stefanie Fest-Santini**  
Usage of Micro-CT for detailed surface description

11:30-12:00 **Associated Project 2: Francescocarlo Massa**  
High-order numerical methods for multi-component incompressible flows

#### LUNCH

13:00-13:30 **Associated Project 3: Karin Schlottke**  
DNS of droplet evaporation

13:30-14:00 **Associated Project 4: Yanchao Liu**  
Droplet interaction at high velocities

14:00-14:30 **Project B1: Patrick Foltyn**  
Droplet collisions with solid superhydrophilic surfaces

#### BREAK

15:00-15:30 **Project B2: Manuel Giovanni Gritti**  
Drop impact/deposition onto micro-structured hydrophobic and superhydrophobic surfaces

15:30-16:00 **Project B3: Robert Haide**  
Characterisation of porous media by X-ray micro computed tomography

16:00-17:00 DROFIT Internal: Administrative issues, Midterm Reviews

**Thursday, 16.5.2019:**

8:45-9:00 Welcome and start of the second day of the PhD seminar

9:00-9:30 **Project B6: Sina Ackermann**  
Upscaling of coupled free-flow porous media flow processes

9:30-10:00 **Project B4: Lukas Ostrowski**  
Compressible effects in droplet interactions with textured walls

**BREAK**

10:30-11:00 **Project A6: Jonas Zeifang**  
A discontinuous Galerkin method for droplet dynamics in weakly compressible flows

11:00-11:30 **Project C1: Ronan Bernard**  
Micro and macro drop impact dynamics with miscible liquids

11:30-12:00 **Project A1: Gautham Varma Raja Kochanattu**  
Modelling of deformed, multi-component liquid drop evaporation

**LUNCH**

13:00-13:30 **Project A2: Christoph Müller**  
Multi-scale modelling of the evaporation process

13:30-14:00 **Project A3: Wladimir Reschke**  
Gas-kinetic simulation of microdroplet - gas interaction

14:00-14:30 **Project A4: Simone Chiochetti**  
Numerical methods for compressible multi-phase flows with complex equations of state

**BREAK**

15:00-15:30 **Associated Project 5: Melanie Lipp**  
A locally-refined quadtree finite-volume staggered-grid scheme

15:30-15:45 **Associated Project 6: Denis Hoch**  
Oil mist deposition in textile filters – from nano CT-Scans to CFD simulations.

15:45-16:00 **Associated Project 7: Luca Verzeroli**  
DG methods for linear elasticity: implementation, validation and perspectives

16:00 Summary and end of doctoral seminar

16:00-16:30 DROPIT Internal: Administrative issues

**20:00 Common Dinner (Doctoral Seminar/DIPSI)**