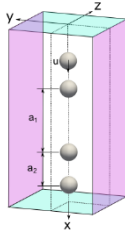


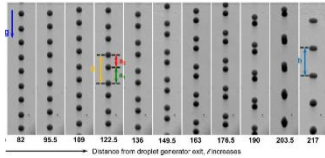
Projects

• P1) Numerical and Experimental Investigation of Grouping Behavior in Monodisperse Droplet Streams

Participants: D. Appel (SP-A6)
 Guests: M. Ibach (University of Stuttgart)
 V. Vaikuntanathan (Shiv Nadar University)



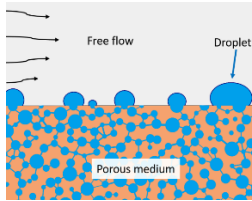
Ibach M., Schulte K., Vaikuntanathan V., Arad A., Katoshevski D., Greenberg B., Weigand B., Aug. 29th 2021 ICLASS



Vaikuntanathan V., Amiri K., Arad A., Katoshevski D., Greenberg B., Weigand B., Aug. 29th 2021 ICLASS

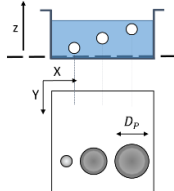
• P2) Evaporation in a Coupled Free Flow–Porous Medium System Including Droplets on the Interface

Participants: M. Veyskarami (SP-B6)
 R. Helmig (University of Stuttgart)
 C. Bringedal (University of Stuttgart)
 M. Santini (University of Bergamo)
 S. Fest-Santini (University of Bergamo)
 Guests: A. Raouf (Utrecht University)
 E. de Vries (Utrecht University)
 S. Chen (University of Arizona)



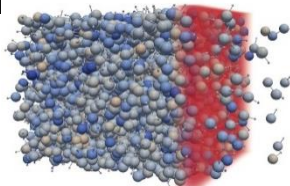
• P3) Application of the General Defocusing Particle Tracking Method to Analyze the Three-Dimensional Flow Field during Droplet Impact

Participants: S. Schubert (SP-C1)
 A. Geppert (SP-C5)
 Guests: M. Rossi (Technical University of Denmark)



• P4) Investigation of Surface Tension Effects on Evaporating Droplets with Micro and Macroscopic Model

Participants: R. Tietz (SP-A3)
 P. Mossier (SP-A2)
 S. Tonini (University of Bergamo)
 J. Keim (University of Stuttgart)
 S. Frank (University of Stuttgart)



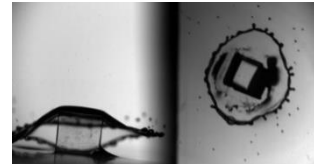
Projects

• P5) Topological Visualization Methods to Analyze Drop Impacts

Participants: D. Klötzl (SP-C4)
 P. Palmetschofer (SP-B1)
 W. Ren (SP-B5)
 S. Schubert (SP-C1)

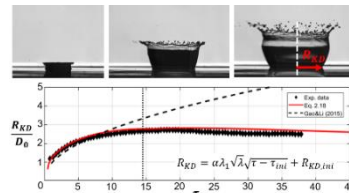
• P6) Experimental and Numerical Investigation of Droplet Impacts onto Pillars with a Wetted Base

Participants: P. Palmetschofer (SP-B1)
 W. Ren (SP-B5)
 Y. Liu (University of Stuttgart)
 Guests: J. Steigerwald (University of Stuttgart)
 S. Bakshi (Indian Institute of Technology Madras)



• P7) Investigation of Early Phase Contact Line Movement During Droplet Impact to Improve the Analytical Crown Base Model (Experiments, Numerical Simulation, Analytics)

Participants: A. Geppert (SP-C5)
 J. Stober (Sp-C2)
 F. Massa (University of Bergamo)
 S. Schubert (SP-C1)



Contact

Dr.-Ing. Anne Geppert
 anne.geppert@itlr.uni-stuttgart.de
 Tel. +49 711 685 62413
 University of Stuttgart

Institute of Aerospace
 Thermodynamics
 Pfaffenwaldring 31
 70569 Stuttgart

WebEx Meeting Information
<https://unistuttgart.webex.com/unistuttgart/j.php?MTID=me1277d247c7afc5003fa12b84f42f2ab>
 Access Code: 2734 415 0247
 Password: DROPI2022

GRK 2160/2: DROPI
<https://www.project.uni-stuttgart.de/dropit/>



DROPI

Spokespersons:
 Prof. Dr.-Ing. Bernhard Weigand
 Prof. Dr.-Ing. Elvio Cossali

Research Training Group 2160/2 – Droplet Interaction Technologies

Summer School 2022

DROPI Summer School aims to bring together multidisciplinary scientists to work on droplet interaction related topics using a combination of experimental, numerical and analytical tools.

June 9th – 30th
 Stuttgart, Germany
 and
 Bergamo, Italy



University of Stuttgart
 Germany



UNIVERSITÀ
 DEGLI STUDI
 DI BERGAMO



Università di Trento
 Italy

DFG Deutsche
 Forschungsgemeinschaft

Dates and Locations

Come Together

9th of June
19:00
Naturfreundehaus
Büsnauer Rain 1
Stuttgart-Vaihingen
(25min walk from Hotel Römerhof)



https://naturfreunde-stuttgart.de/wp-content/uploads/2012/11/DSC_1980_Mlein.jpg

Kick-Off Meeting

10th of June
8:45 – 14:45
International Meeting Centre - Eulenhof
University of Stuttgart
Robert-Leicht-Straße 161
(10min walk from Hotel Römerhof)



<https://www.beschaeftigte.uni-stuttgart.de/uni-services/infrastruktur/foebilder/bilder/galerie/nordansicht.JPG>

Final Meeting

30th of June
8:45 – 16:15
Sala Conferenze, San't Agostino
Bergamo



Photographed by Jonathan Sobier





Closure Dinner

30th of June
N.A.
Bergamo



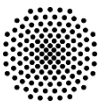


Photographed by Jonathan Sobier

Program* | Kick-Off Meeting | 10th of June

- 8:45 Arrival & Coffee  
- 9:00 Welcome Speech and Introduction into Dropit
Prof. Weigand & Prof. Cossali
- 9:15 Keynote Talk by **Dr. Visakh Vaikuntanathan**
An overview of some experimental investigations on droplet interaction with solid, liquid, and air
- 9:50 Project Introduction
P1) Numerical and Experimental Investigation of Grouping Behavior in Monodisperse Droplet Streams
- 10:10 Project Introduction
P2) Evaporation in a Coupled Free Flow-Porous Medium System including Droplets on the Interface
- 10:30 Coffee break 
- 11:00 Project Introduction
P3) Application of the General Defocusing Particle Tracking Method to Analyze the Three-Dimensional Flow Field during Droplet Impact
- 11:20 Project Introduction
P4) Investigation of Surface Tension Effects on Evaporating Droplets with Micro and Macroscopic Models
- 11:40 Project Introduction
P5) Topological Visualization Methods to Analyze Drop Impacts
- 12:00 Lunch 
- 13:20 Project Introduction
P6) Experimental and Numerical Investigation of Droplet Impacts onto Pillars with a Wetted Base
- 13:40 Project Introduction
P7) Investigation of Early Phase Contact Line Movement during Droplet Impact to Improve the Analytical Crown Base Model (Experiments, Numerical Simulation, Analytics)
- 14:00 Keynote Talk by **Prof. Shamit Bakshi**
Evaporation induced flow around a pendant droplet evaporating in atmospheric condition

*) Program will be streamed via Webex, see Contact

Program* | Final Meeting | 30th of June

- 8:45 Arrival & Coffee 
- 9:00 Introductory remarks
Prof. Weigand & Prof. Cossali
- 9:20 Cooperation between the University of Bergamo and the University of Stuttgart
Prof. Cavalieri, Prof. W. Ressel
(Rectors of both Universities)  
- 9:50 Coffee break 
- 10:20 Keynote Talk by **Prof. David Katoshevski**
Title to be announced.
- 10:45 Project Results
P1) Numerical and Experimental Investigation of Grouping Behavior in Monodisperse Droplet Streams
- 11:15 Coffee break 
- 11:45 Project Results
P2) Evaporation in a Coupled Free Flow-Porous Medium System including Droplets on the Interface
- 12:15 Project Results
P3) Application of the General Defocusing Particle Tracking Method to Analyze the Three-Dimensional Flow Field during Droplet Impact
- 12:45 Lunch 
- 13:45 Project Results
P4) Investigation of Surface Tension Effects on Evaporating Droplets with Micro and Macroscopic Models
- 14:15 Project Results
P5) Topological Visualization Methods to Analyze Drop Impacts
- 14:45 Coffee break 
- 15:15 Project Results
P6) Experimental and Numerical Investigation of Droplet Impacts onto Pillars with a Wetted Base
- 15:45 Project Results
P7) Investigation of Early Phase Contact Line Movement during Droplet Impact to Improve the Analytical Crown Base Model (Experiments, Numerical Simulation, Analytics)
- 16:15 Closing *) Program will be streamed via Webex, see Contact