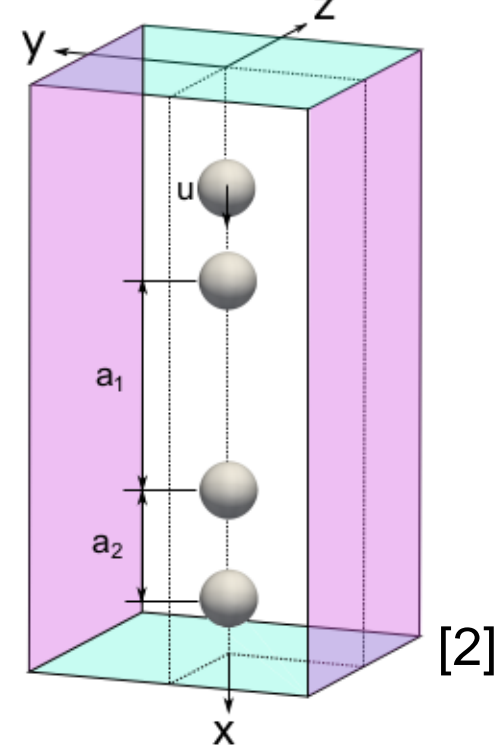
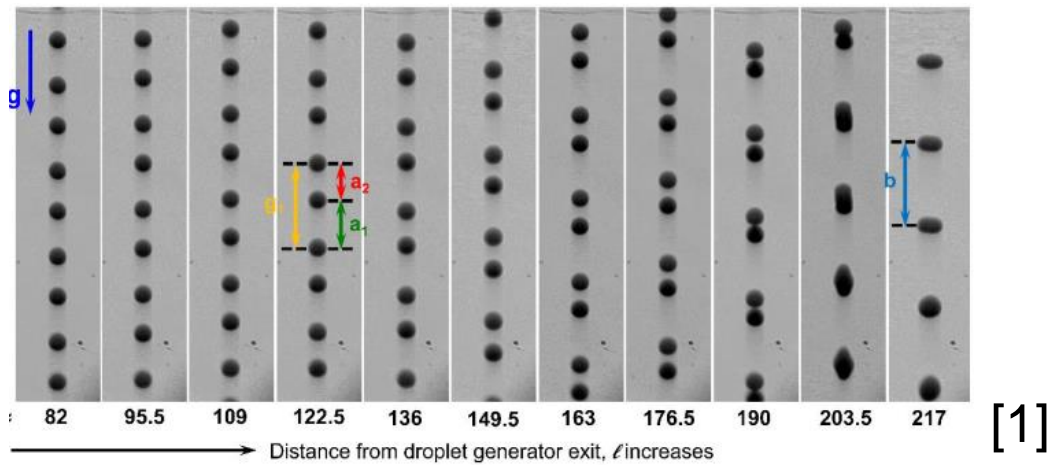


DROPIT Summer School aims to bring together multidisciplinary scientists to work on droplet interaction related topics using a combination of experimental, numerical and analytical tools. In line with this objective, the doctoral researchers of DROPIT form in total seven international working groups with invited experts. Each group consists of two to five persons who are given the opportunity to work together intensively for three weeks in June. All groups will meet during kick-off and final meeting where the doctoral researchers will present their projects.

## Projects

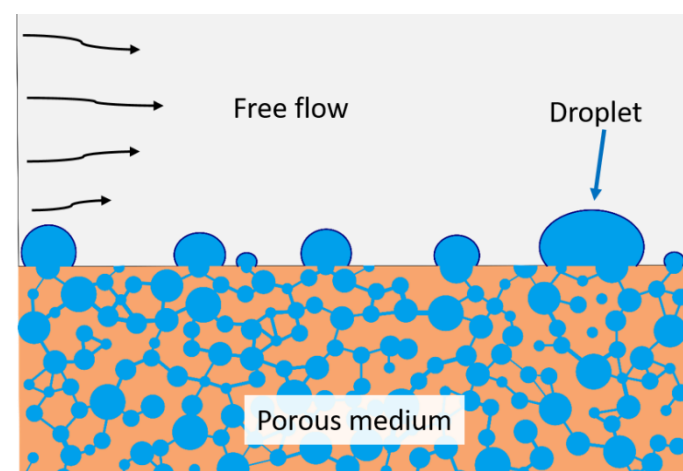
### Numerical and Experimental Investigation of Grouping Behavior in Monodisperse Droplet Streams

Participants: D. Appel  
Guests: M. Ibach, V. Vaikuntanathan



### Evaporation in a Coupled Free Flow–Porous Medium System Including Droplets on the Interface

Participants: M. Veyskarami, R. Helmig, C. Bringedal, M. Santini, S. Fest-Santini  
Guests: A. Raouf, E. de Vries, S. Chen

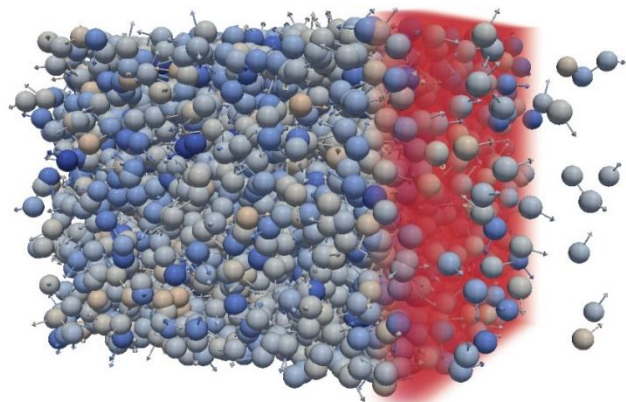


### Application of the General Defocusing Particle Tracking Method to Analyze the Three-Dimensional Flow Field during Droplet Impact

Participants: S. Schubert, A. Geppert  
Guests: M. Rossi

### Investigation of Surface Tension Effects on Evaporating Droplets with Micro and Macroscopic Models

Participants: R. Tietz, P. Mossier  
Guests: J. Keim, S. Frank, A. Frezzoti, H. Gorji



### Topological Visualization Methods to Analyze Drop Impacts

Participants: D. Klötzl, P. Palmetshofer, W. Ren, S. Schubert

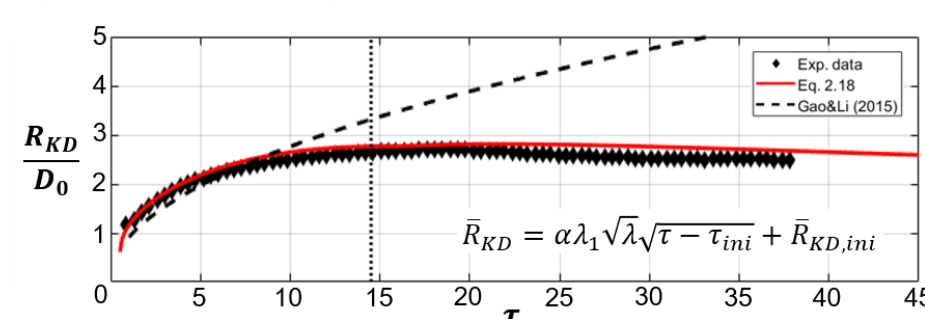
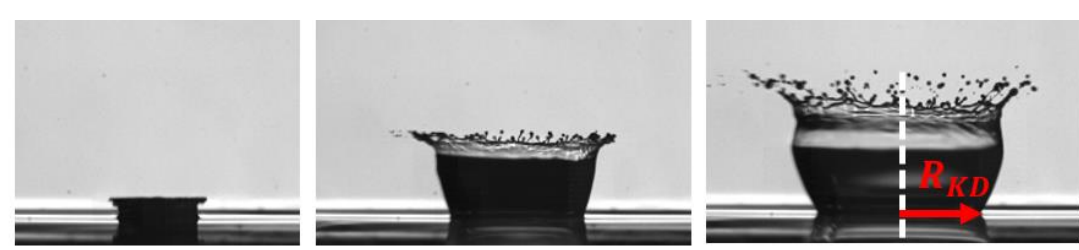
### Experimental and Numerical Investigation of Droplet Impacts onto Pillars with a Wetted Base

Participants: P. Palmetshofer, W. Ren, Y. Liu  
Guests: J. Steigerwald



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

Participants: A. Geppert, J. Stober, F. Massa, S. Schubert

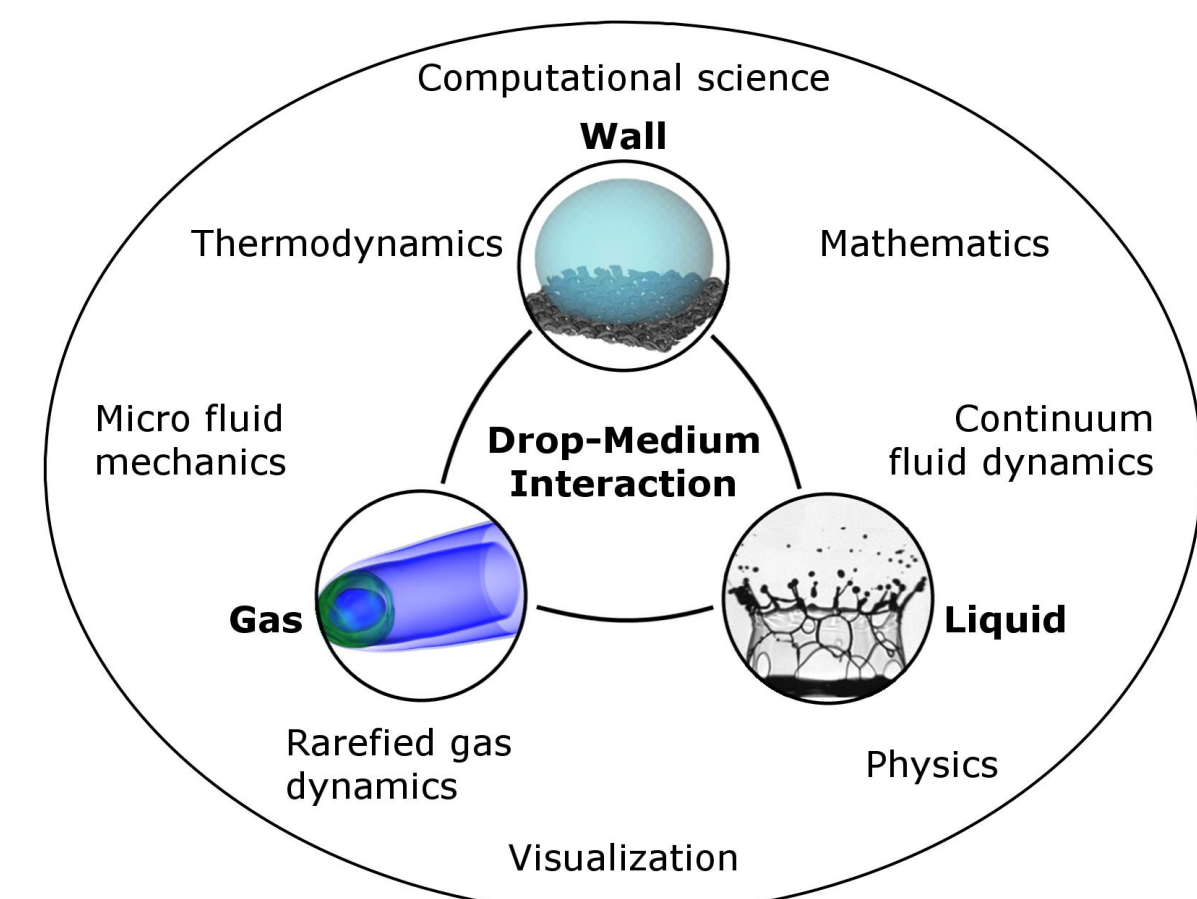


## Dates & Locations

- Kick-Off Dinner:** 9<sup>th</sup> of June 2022 in Stuttgart, Germany  
Get-together with all participants
- Kick-Off Meeting:** 10<sup>th</sup> of June 2022 in Stuttgart, Germany  
Official start of the Summer School including project presentations
- Closure Meeting:** 30<sup>th</sup> of June 2022 in Bergamo, Italy  
Conclusion of the Summer School with presentations of project outcomes

## About DROPIT

- DROPIT brings together researchers from the University of Stuttgart in Germany, the University of Bergamo and the University of Trento in Italy.
- Currently, up to 15 doctoral and several post-doctoral researchers are working in synergy to solve droplet dynamic problems.
- DROPIT aims at investigating the effects of micro-scale phenomena on the macroscopic flow properties in three thematic areas: drop-gas, drop-wall and drop-liquid interactions.



- The research group approaches the problems experimentally, numerically and with theoretical tools.
- A qualification program aims at developing personal, teamwork and organizational skills of the doctoral researchers. This includes specialized courses, international workshops, visiting researchers and the summer school.

## 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

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



## References

- [1] Vaikuntanathan V., Amini K., Arad A., Katoshevski D., Greenberg B., Weigand B., Aug. 29<sup>th</sup> 2021 ICLASS  
[2] Ibach M., Schulte K., Vaikuntanathan V., Arad A., Katoshevski D., Greenberg B., Weigand B., Aug. 29<sup>th</sup> 2021 ICLASS