

Colloquium Venue

Auditorium V47.03 + Foyer

Pfaffenwaldring 47, DE-70569 Stuttgart

S1, S2, S3 to station "Universität"



Universität Stuttgart

Institut für Thermodynamik

der Luft- und Raumfahrt

Pfaffenwaldring 31

DE-70569 Stuttgart

<https://www.itlr.uni-stuttgart.de/>

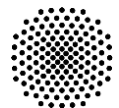
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DROPIT

FINAL
COLLOQUIUM OF THE
INTERNATIONAL
RESEARCH
TRAINING GROUP
GRK2160
(DROPIT)

31 Jul.- 01 Aug. 2025

DFG



Thursday, July 31, 2025

12:00 - Welcome address by Bernhard Weigand and Gianpietro Elvio Cossali, Spokespersons of DROPIT

12:15 - Light Meal and Poster Session 13:15

13:15 - Retrospective on nine years of DROPIT by Bernhard Weigand and Gianpietro Elvio Cossali

14:15 - Speech by Peter Middendorf, Rector of University of Stuttgart

14:30 - Speech by Sergio Cavaliere, Rector of University of Bergamo

14:45 - Speech by Michael Dumbser, University of Trento

15:00 - Coffee break and Poster Session 15:30

15:30 - **“Uniformly high-order bound-preserving OEDG schemes for two-phase flows” by Rémi Abgrall (University of Zürich). A joint work with Kailiang Wu and Ruifang Yan (Sustech, China)**

16:10 - “Droplet impact onto dry and wet structured surfaces” by Patrick Palmetshofer and Patrick Foltyn (University of Stuttgart and Trumpf SE+Co. KG)

16:40 - “Hyperbolic diffuse interface models for compressible multiphase flow and numerical solutions” by Davide Ferrari and Simone Chiochetti (University of Trento and University of Cologne)

Friday, August 01, 2025

09:00 - **“Melt atomization and Spray Forming” by Anne Geppert (University of Bremen)**

09:40 - “Analytical/numerical modelling of the evaporation of deformed, multi-component, and oscillating liquid drops” by Yueqiao Hu and Simona Tonini (University of Bergamo)

10:10 - “Numerical simulation for drop impact on macro-scaled structures” by Martina Baggio and Rishav Saha (Diehl Stiftung GmbH+Co. KG and University of Stuttgart)

10:40 - Coffee break

11:00

11:00 - “Oblique Droplet Impact onto a Thin Wall Film” by Jonathan Lukas Stober and Maurizio Santini (University of Stuttgart and University of Bergamo)

11:30 - “Towards discontinuous Galerkin solution of multiphase flows” by Daniel Regener Roig and Alessandro Colombo (University of Bergamo)

12:00 - “Numerical methods for solving multi-phase flow problems using diffuse interface models” by Hasel Cicek Konan, Massa Francesco Carlo and Lukas Ostrowski (University of Stuttgart, University of Bergamo and Carl Zeiss SMT GmbH)

12:30 - Lunch

14:00

14:00 - **“A combined analytical/numerical approach to modelling heat/mass transfer processes in droplets” by Sergei Sazhin (University of Brighton)**

14:40 - $\mathbb{M}_{\text{ulti}} \otimes [-\mathbb{P}_{\text{hase}}, -\mathbb{S}_{\text{cale}}, -\mathbb{P}_{\text{hysics}}]^T$: A Sharp-Interface Perspective on Compressible DROplet InteracTion Dynamics” by Daniel Appel, Amalía Travnicsek and Pascal Mossier (University of Stuttgart)

15:10 - “Coupled free- and porous medium systems including drops at the interface” by Anna Mareike Kostecky and Rainer Helmig (University of Stuttgart)

15:40 - “Comparison of micro-PIV and defocused PTV measurements to analyze the influence of viscosity on the dynamics of droplet impact on a thin film” by Stefan Schubert and Pablo Molina Vogelsang (HENSOLDT AG and University of Stuttgart)

16:10 - Farewell Notes by Bernhard Weigand and Gianpietro Elvio Cossali