## MONDAY 17th Feb. 2025



13:00 - 14:00

Registration, Lunch & First Coffee

**14:00 - 14:50 Keynote**Chair: H.-J. Butt

Drops dance and explode on lubricated surfaces

Dan Daniel



14:50 - 15:40 Short Talks Chair: H.-J. Butt **Breaking Liquid Diodic Strucutres**Yotam Hantman

High-Order Methods for Wetting and Dewetting Phenomena on Soft and Rigid Substrates including Heat transfer Chen Migo





15:40 - 16:35

Coffee Break

16:35 - 17:50 Short Talks Chair: S. Ludwigs Droplets on soft sheets form lenses and create wrinkling patterns Salik Sultan

Non-monotonic motion of sliding droplets on strained soft solids Stefan Karpitschka

The role of substrate mechanics in osmotic biofilm spreading
Anthony Pietz







# TUESDAY 18th Feb. 2025



8:00 - 9:00

#### Coffee and Chats

9:00 - 9:40 Keynote Chair: R. Seemann Observing the structure of non-fouling polymer brushes in aqueous solutions
Ognen Pop-Georgievski



9:40 - 10:30 Short Talks Chair: R. Seemann Synthesis, polymerization and characterization of dye-labeled polymethacrylate brushes
Jonah Decker, Sören Steup



Hydrodynamic effects in adhering vesicles on periodically modulated substrates



Lucia Wesenberg

10:30 - 11:00

#### Coffee Break

11:00 - 12:15 Short Talks Chair: H. Stark Adaptive wetting device based on conducting polymers
Jungi Lu



Wetting of Surface Grafted Hydrophilic-b-Hydrophobic Block Copolymer Brushes Benjamin Leibauer



Dynamic wetting of self-assembled monolayers and polymer brushes functionalized with molecular photoswitches Bart Jan Rayoo



12:15 - 14:00

Lunch Break

TUESDAY - 18th Feb. 2025

14:00 - 14:40 Keynote Chair: D. Vollmer

Surfaces Slippery to Liquids
Glen McHale



14:40 - 15:30 Short Talks Chair: D. Vollmer Contact dynamics and morphology under drops impacting an oil-covered substrate

Kirsten Harth

Gradient dynamics model for volatile binary mixtures including Marangoni flows

Jan Diekmann





15:30 - 16:15

Coffee Break

16:15 - 18:00 Plenary Talk Chair: R. Berger The psychology of climate change - from political activism to denial

Prof. Roland Imhoff

18:00 - 19:00

Discussion



8:00 - 9:00

#### Coffee and Chats

9:00 - 9:40 Keynote Chair: K. Harth **Effect of Surface Stochasticity on Droplet Motion** Maja Vuckovac



9:40 - 10:30 **Short Talks** Chair: K. Harth

Dynamics of a sessile drop exposed to a surface acoustic wave Lou Kondic

Stood-up drops as a novel, easiest and fasted way to measure receding contact angles Thomas Willers





10:30 - 11:00

### Coffee Break

11:00 - 12:15 **Short Talks** Chair: D. Helmer Swelling of a polymer brush up to 100% relative humidity Simon Schubotz



based on carbon nanoparticles and İlia Sadilov

Light response lamellar structures polymer matrix

Luciana Buonaiuto

12:15 - 14:00

Lunch Break

## WEDNESDAY - 19th Feb. 2025

14:00 - 14:40 Keynote Chair: S. Karpitschka How to keep solar panels clean Doris Vollmer



14:40 - 15:05 Short Talks Chair: S. Karpitschka z-GrAdd\_Facile Fabrication of Wettability Gradients Via DLP 3D Printing for Liquid Manipulation Applications



Niloofar Nekoonam

15:15 - 15:30

Conference Picture

16:00

Excursion

19:00

Joint Dinner

## THURSDAY 20th Feb. 2025



8:00 - 9:00

Coffee, Chats & Mounting of Posters

9:00 - 9:40 Keynote Chair: S. Aland Fluid dynamics during spontaneous imbibition in multimodal porous media

Maia Rücker



9:40 - 10:05 Short Talks Chair: S. Aland

Beyond the Cassie-Baxter Model: New Insights for Predicting Imbibition in Complex Systems

Mathis Fricke



10:05 - 10:30

### Coffee Break

## 10:30 - 12:30 Posters

- 1. Spontaneously Charged Water Drops Induce Corrosion | Zhongyuan Ni
- 2. Dynamic Wetting of Adaptive Polyelectrolyte Substrates: A multiscale approach | Mona Meltschoch
- 3. Estimating sliding drop width via side-view features using artificial neural networks| Sajjad Shumaly
- 4. Estimating drop width for sliding drops using Machine Learning | Rishi Chaurasia
- 5. Robust, Easy-To-Clean Silica Sol-Gel Solar Panel Coatings | Tarik Karakaya
- 6. Dynamics of drop-induced lubricant separation and depletion on oleophilic polymer brushes| Enqing LIU
- 7. Removing particles from hydrophobic surfaces by single water drops | Franziska Sabath
- 8. Lateral adhesion of droplets measured with the scanning drop friction force instrument

  | Fiona Berner

### THURSDAY - 20th Feb. 2025

- 9. Correlating the slippery behavior of nanoscale poly(dimethylsiloxane) layers to their liquid like molecular mobility | Lin Jian
- 10. Stimulus Responsive Polymer Brushes for Control of Static and Dynamic Wetting with Lipid Vesicles | Felix Weissenfeld
- 11. Block copolymer gradient brushes: A detailed look at the synthesis and characterization

  | Jonah Decker
- 12. Synthesis and investigation of Nile Red- and aurone-labeled methacrylate derivatives as novel solvatochromic probes for polymer analysis

  | Sören Steup
- 13. Kinetics of Cloak Development of Droplets on Lubricated Polymer Brushes | Rodrique Badr

12:30 - 14:00

Lunch Break

**14:00 - 14:40 Keynote**Chair: S. Weber

Wettability in porous materials to design of fluid imbibition and molecular transport

Annette Andrieu-Brunsen



14:40 - 15:30 Short Talks Chair: S. Weber Biomolecular condensates wetting membranes - dynamical insights from numerical simulations
Sebastian Aland



Stimulus Responsive Polymer Brushes for Control of Static and Dynamic Wetting with Lipid Vesicles Felix Weissenfeld



15:30 - 16:35

Coffee Break & Meeting of the PIs

## THURSDAY - 20th Feb. 2025

16:35 - 17:50 Short Talks Chair: D. Daniel Shape of polystyrene droplets on soft PDMS: Exploring the gap between theory and experiment at the three-phase contact line Ralf Seemann, André Erhardt



Charge separation at contact lines slows down the breakup of liquid bridges on surfaces

Agron Ratschow



Aaron Ratschow



Electrostatic Surface Charging by Water Dewetting Nikolaus Knorr



8:00 - 9:00

Coffee & Chats

9:00 - 9:40 Keynote Chair: U. Thiele Theory of non-dilute binding and surface phase separation Christoph Weber



9:40 - 10:30 **Short Talks** Chair: U. Thiele Does the topology of polymer brushes determine their sorption characteristics in vapors? Huaisong Yong



**Evaporation near the contact lines** of droplets and rivulets on topographically complex surfaces Nikolai Kubochkin



10:30 - 11:00

Coffee Break

11:00 - 12:15 **Short Talks** Chair: R. Berger Slide electrification Hans-Jürgen Butt



Time evolution of surface charges deposited by evaporating water droplets

NITISH SINGH



Spontaneous charge separation by drop motion across of a hydrophobic tube

Shaghayegh Saeidiharzand

12:15 - 12:30

Last Coffee & Farewell

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