

# SWZ-Mini-Workshop „Simulation for Sustainability” 11. und 12. Juni 2026

## Anreise

Institut für Informatik  
Albrecht-von-Groddeck-Straße 7 (Gebäudenummer: D5)  
D-38678 Clausthal-Zellerfeld



## SWZ-Mini-Workshop „Simulation for Sustainability” 11. und 12. Juni 2026

### Donnerstag, 11. Juni – Vormittag

Ab 9:00	<b>Get together mit Kaffee</b> (Institut für Informatik, D5, TU Clausthal, Albrecht-von-Groddeck-Straße 7, 38678 Clausthal-Zellerfeld)
9:30 – 9:40	<b>Begrüßung</b> (Prof. Dr. N. Merkert, Vorstandsvorsitzende des SWZ)
9:40 – 10:30	Keynote: <b>Stahlherstellung ohne CO2! Wie? Prozesssimulations-Werkzeug zur Beantwortung</b> (Prof. Dr.-Ing. Karl-Heinz Spitzer, Institut für Metallurgie, TU Clausthal)
10:30 – 10:50	<b>High-Throughput Atomistic Discovery of Stress-State-Dependent BCC-&gt;HCP Transformation in Iron</b> (Hoang-Thien Luu)
10:50 – 11:10	<b>Molecular Dynamics Simulation of Interdiffusion Kinetics in Al-Fe Systems under Oxygen-Free Conditions</b> (Durga Prasanth Dude)
11:10 – 11:30	<b>Kaffeepause</b> (Foyer)
11:30 – 11:50	<b>Simulating synaptic geometry</b> (Mitha Thomas)
11:50 – 12:10	<b>Adaptive Antennas for Sustainable IoT: Simulating Wet-Antenna Effects and Adaptive Matching for LoRa Networks</b> (Mohammed Jajere Adamu)
12:10 – 12:30	<b>Simulation-Driven Reflow Optimization for Thermally Stable Quartz Glass Technology for mm-Wave Applications</b> (Vinitha Johny)
12:30 – 14:00	<b>Mittagessen</b> (Mensa TU Clausthal, Leibnizstraße 3, 38678 Clausthal-Zellerfeld) (Hinweis: Barzahlung oder Mensakarte Studierendenwerk Südniedersachsen)

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### Donnerstag, 11. Juni – Nachmittag

14:00 – 14:50	Keynote: <b>ReconCycle project</b> (Prof. Dr. Aleš Ude, Jožef Stefan Institute, Slovenien)
14:50 – 15:10	<b>Modeling Soft Material to Enable Robotic Recycling</b> (Simon Blaue)
15:10 – 15:30	<b>Simulating non-spherical bubble oscillations, bubble splitting and merging</b> (Robert Mettin)
15:30 – 15:50	<b>Kaffeepause</b> (Foyer) + <b>Gruppenfoto</b>
15:50 – 16:10	<b>Simulating underwater noise in sessile marine invertebrates</b> (Rafael Manso Sainz)
16:15 – 16:30	<b>Bubble dynamics on top of protruding objects observed with X-ray phase-contrast, high-speed imaging and fit with 3D CFD simulations</b> (Max Koch)
16:30 – 18:30	<b>Postersession</b> (Foyer), <b>SWZ-Strategiemeeting</b>
Ab 18:30	<b>Abendessen</b> (Restaurant "Ju Bin Lou", Schulstraße 47, 38678 Clausthal-Zellerfeld) <i>(Hinweis: Selbstzahler)</i>

## SWZ-Mini-Workshop „Simulation for Sustainability” 11. und 12. Juni 2026

### Freitag, 12. August – Vormittag

Ab 9:00	<b>Get together mit Kaffee</b>
9:50 – 10:10	<b>Reactive Molecular Dynamics Simulation of NO<sub>x</sub>-Water Interactions for Sustainable Plasma-Activated Water Chemistry</b> (Nina Merkert)
10:10 – 10:30	<b>Self-Assembly and Minor Phase Continuity in SIS/Star Polymer Blends: An AFM and SCFT Study</b> (Moris Koné)
10:30 – 10:50	<b>Molecular Dynamics Simulation and Experiments of Complex Polymers Under Flow and During Mechanical Recycling</b> (Sreesa Sasidharan Nair)
10:50 – 11:10	<b>Simulation of Molecular Degradation and Nonlinear Rheology in Recycled HDPE via EHMMSF Modelling</b> (Alexsandar Arumugam)
11:10 – 11:30	<b>Kaffeepause</b> (Foyer)
11:30 – 11:50	<b>Cluster Impact on High-Entropy Alloys: Deformation, Hardness Change, and Sub-Grain Formation</b> (Iyad Alabd Alhafez)
11:50 – 12:10	<b>Molecular dynamics simulation of shock waves in Fe and Fe-C: Influence of system characteristics</b> (Daniel Thürmer)
12:10 – 12:30	<b>Fazit und Verabschiedung</b> (Prof. Dr. Nina Merkert)
12:30 – 14:00	<b>Mittagessen</b> (Mensa TU Clausthal, Leibnizstraße 3, 38678 Clausthal-Zellerfeld) (Hinweis: Barzahlung oder Mensakarte Studierendenwerk Südniedersachsen)
16:00 – 24:00	Optional: <b>Lange Nacht der Wissenschaft 2026 der TU Clausthal</b> <a href="https://www.lndw.tu-clausthal.de">https://www.lndw.tu-clausthal.de</a>