

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	Get together mit Kaffee (Institut für Informatik, D5, TU Clausthal, Albrecht-von-Groddeck-Straße 7, 38678 Clausthal-Zellerfeld)
9:30 – 9:40	Begrüßung (Prof. Dr. N. Merkert, Vorstandsvorsitzende des SWZ)
9:40 – 10:30	Keynote: Stahlherstellung ohne CO2! Wie? Prozesssimulations-Werkzeug zur Beantwortung (Prof. Dr.-Ing. Karl-Heinz Spitzer, Institut für Metallurgie, TU Clausthal)
10:30 – 10:50	High-Throughput Atomistic Discovery of Stress-State-Dependent BCC->HCP Transformation in Iron (Hoang-Thien Luu)
10:50 – 11:10	Molecular Dynamics Simulation of Interdiffusion Kinetics in Al-Fe Systems under Oxygen-Free Conditions (Durga Prasanth Dude)
11:10 – 11:30	Kaffeepause (Foyer)
11:30 – 11:50	Simulating synaptic geometry (Mitha Thomas)
11:50 – 12:10	Adaptive Antennas for Sustainable IoT: Simulating Wet-Antenna Effects and Adaptive Matching for LoRa Networks (Mohammed Jajere Adamu)
12:10 – 12:30	Simulation-Driven Reflow Optimization for Thermally Stable Quartz Glass Technology for mm-Wave Applications (Vinitha Johny)
12:30 – 14:00	Mittagessen (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: ReconCycle project (Prof. Dr. Aleš Ude, Jožef Stefan Institute, Slovenien)
14:50 – 15:10	Modeling Soft Material to Enable Robotic Recycling (Simon Blaue)
15:10 – 15:30	Simulating non-spherical bubble oscillations, bubble splitting and merging (Robert Mettin)
15:30 – 15:50	Kaffeepause (Foyer) + Gruppenfoto
15:50 – 16:10	Simulating underwater noise in sessile marine invertebrates (Rafael Manso Sainz)
16:10 – 16:30	Bubble dynamics on top of protruding objects observed with X-ray phase-contrast, high-speed imaging and fit with 3D CFD simulations (Max Koch)
16:30 – 18:30	Postersession (Foyer), SWZ-Strategiemeeting
Ab 18:30	Abendessen (Restaurant "Ju Bin Lou", Schulstraße 47, 38678 Clausthal-Zellerfeld) <i>(Hinweis: Selbstzahler)</i>

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Freitag, 12. August – Vormittag

Ab 9:00	Get together mit Kaffee
9:50 – 10:10	Reactive Molecular Dynamics Simulation of NO_x-Water Interactions for Sustainable Plasma-Activated Water Chemistry (Nina Merkert)
10:10 – 10:30	Self-Assembly and Minor Phase Continuity in SIS/Star Polymer Blends: An AFM and SCFT Study (Moris Koné)
10:30 – 10:50	Molecular Dynamics Simulation and Experiments of Complex Polymers Under Flow and During Mechanical Recycling (Sreesa Sasidharan Nair)
10:50 – 11:10	Simulation of Molecular Degradation and Nonlinear Rheology in Recycled HDPE via EHMMSF Modelling (Alexsandar Arumugam)
11:10 – 11:30	Kaffeepause (Foyer)
11:30 – 11:50	Cluster Impact on High-Entropy Alloys: Deformation, Hardness Change, and Sub-Grain Formation (Iyad Alabd Alhafez)
11:50 – 12:10	Molecular dynamics simulation of shock waves in Fe and Fe-C: Influence of system characteristics (Daniel Thürmer)
12:10 – 12:30	Fazit und Verabschiedung (Prof. Dr. Nina Merkert)
12:30 – 14:00	Mittagessen (Mensa TU Clausthal, Leibnizstraße 3, 38678 Clausthal-Zellerfeld) (Hinweis: Barzahlung oder Mensakarte Studierendenwerk Südniedersachsen)
16:00 – 24:00	Optional: Lange Nacht der Wissenschaft 2026 der TU Clausthal https://www.lndw.tu-clausthal.de