



PROGRAM

Date: July 11, 2025

Venue: Faculty of Physics and Earth System Sciences, Lecture Hall for Theoretical Physics, Linnéstr. 5, 04103 Leipzig

08:55–09:00	Meeting of the Members of the Institute
09:00–09:05	Welcome
09:05–09:25	Motility and chemotaxis of <i>E. coli</i> in soft agar gels <u>Saba Telele</u> , Katja M. Taute
09:25–09:45	A reconfigurable optofluidic platform for soft matter studies employing programmable microenvironments <u>Falko Schmidt</u> , Carlos Gonzalez David, Marc Sulliger, Emilio Ruiz Rena, Raul Rica, Jaime Ortega Arroyo, Romain Quidant
09:45–10:05	(SPARXS) Single-molecule parallel analysis for rapid eXploration of sequence space across varied temperatures <u>Naveen Kumar</u> , Carolien Bastiaanssen, Patrick Irmisch, Archana Sivaraman, Henri Franquelim, Chirlmin Joo, Ralf Seidel
10:05–10:25	The role of fatty tissue in cervical cancer progression <u>Eliane Blauth</u> , Hans Kubitschke, Kolya Lettl, Daniel Hoffmann, Marko Trifunovic, Pablo Gottheil, Benjamin Wolf, Nadja Dornhöfer, Grit Gesine Ruth Hiller, Lars-Christian Horn, Jenny Leopold, Jürgen Schiller, Matthias Blüher, Bahriye Aktas, Josef A. Käs
10:25–10:50	Break (Aula)
10:50–11:10	Maintaining balance: the role of regulation in metabolic stability Ralf Steuer
11:10–11:30	Reconfiguring hydrodynamic flow fields of active particles by light <u>Lisa Rohde</u> , Gordei Anchutkin, Frank Cichos
11:30–11:50	Investigating 3D scaffolds for biomedical application <u>Jonas Naumann</u> , Kresten Singer, Siddharth Shukla, Alok Maurya, Stefan Schlichter, Imre Szenti, Akos Kukovecz, Amit Rawal, Nils Wilharm, Ulrich Thome, Mandy Laube, Stefan Mayr, Mareike Zink
11:50–12:10	Dynamical and morphological changes of polyethylenimine thin films in relation to its CO ₂ absorption performance <u>Maximilian Brückner</u> , Soma Ahmadi, Shiwang Cheng, Martin Treß
12:10–12:30	DNA mold-based fabrication of silver nanostructures <u>Christoph Hadlich</u> , Ulrich Kemper, Ralf Seidel
12:30–14:35	Poster Session and Lunch (Corridor/Aula)
14:35–14:55	Nonequilibrium dynamics of the helix–coil transition in polyalanine <u>Maximilian Conradi</u> , Henrik Christiansen, Suman Majumder, Fabio Müller, Wolfhard Janke
14:55–15:15	Cationic peptide-mediated charge neutralization of lipidated DNA origami: effects on membrane binding and release dynamics <u>Subhasini Singh</u> , Henri G. Franquelim
15:15–15:35	Feedback driven thermofluidic assembly of colloids in confinement <u>Desmond Joseph Quinn</u> , Sandrine Heijnen, Diptabrata Paul, Lisa Rohde, Philip Jones, Giorgio Volpe, Frank Cichos
15:35–16:00	Break (Aula)
16:00–16:20	Biofilm wrinkling may result from the buckling physics of a viscoelastic growing beam <u>Valentin Slepukhin</u> , Oskar Hallatschek
16:20–16:40	Mechanics of dissemination and residual disease in cervical cancer <u>Jörg Walter</u> , Salvador Rivera-Moreno, Ivonne Nel, Bahriye Aktas, Josef A. Käs
16:40–18:00	Poster Session (Corridor)
18:00	Barbecue