

Dynamics and Statistical Physics Division Fachverband Dynamik und Statistische Physik (DY)

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Overview of Invited Talks and Sessions

(Lecture rooms ZEU 160, ZEU 147, ZEU 118, and HÜL 186; Poster P1A and P3)

Plenary Talk of DY

PV XVII Wed 14:00–14:45 HSZ 02 **The Statistical Mechanics of Active Matter** — ●MICHAEL CATES

Invited Talks

DY 2.1	Mon	9:30–10:00	HÜL 186	Stochastic thermodynamics and the thermodynamic uncertainty relation — ●UDO SEIFERT
DY 7.1	Mon	10:15–10:45	ZEU 160	Immersed Boundary Methods for Rigid and Deformable Particles in Viscoelastic flows — ●ERIC SHAQFEH
DY 7.5	Mon	11:45–12:15	ZEU 160	Effect of bending on the dynamics of a spherical capsule in shear flow — ●ANNE-VIRGINIE SALSAC
DY 9.1	Mon	15:00–15:30	ZEU 160	Particle alignment in microchannels and microjets — ●STEPHAN FÖRSTER, MATHIAS SCHLENK, SUSANNE SEIBT, MARTIN TREBBIN, JOSEF BREU, STEPHAN ROTH
DY 14.1	Tue	9:30–10:00	HÜL 186	Tactic Response of Synthetic Microswimmers in Gravitational and Optical Fields — ●CLEMENS BECHINGER
DY 14.7	Tue	11:30–12:00	HÜL 186	Emergent structures in actuated magnetic and active colloidal suspensions — ●IGNACIO PAGONABARRAGA
DY 16.1	Tue	9:30–10:00	ZEU 118	The Geostrophic Branch of Rotating Convection — ●STEPHAN STELLMACH, MEREDITH PLUMLEY, KEITH JULIEN, PHILIPPE MARTI
DY 16.7	Tue	11:30–12:00	ZEU 118	Convection rolls and fingers in double diffusive convection — ●ANDREAS TILGNER
DY 20.1	Tue	14:00–14:30	ZEU 160	Particle based simulations of viscoelastic Soft Matter — ●WIM BRIELS
DY 30.1	Wed	9:30–10:00	HÜL 186	Fast quantum processes without excitations: shortcuts to adiabaticity — ●SEBASTIAN DEFFNER
DY 31.1	Wed	9:30–10:00	ZEU 118	Magnetocapillary interactions for self-assembling dynamical systems — ●NICOLAS VANDEWALLE, GALIEN GROSJEAN, MAXIME HUBERT
DY 31.2	Wed	10:00–10:30	ZEU 118	Influences of fluxes in nonequilibrium soft matter — ●MARCO G. MAZZA
DY 32.6	Wed	11:30–12:00	HÜL 186	Semiclassical Classification of Periodic Orbits in Quantum Many-Body Systems — ●DANIEL WALTNER, MARAM AKILA, BORIS GUTKIN, PETR BRAUN, THOMAS GUHR
DY 38.1	Wed	15:00–15:30	ZEU 160	Asymmetry-Induced Synchronization Stability in Power-Grid Networks — ●ADILSON MOTTER
DY 38.7	Wed	17:00–17:30	ZEU 160	Nonlinear Rerouting and Response in Electric Power Networks — ●MARC TIMME, DIRK WITTHAUT, XIAOZHU ZHANG
DY 39.1	Wed	15:00–15:30	ZEU 118	Granular Materials: From solid to fluid with a variable jamming density — ●STEFAN LUDING
DY 41.1	Thu	9:30–10:00	HÜL 186	Rolling, rolling, rolling – a new self-propulsion mechanism — ●FALKO ZIEBERT, IGOR KULIC
DY 42.1	Thu	9:30–10:00	ZEU 160	Equilibration and ensembles in coherent quantum systems — ●FABIAN ESSLER

DY 62.1	Fri	9:30–10:00	HÜL 186	Liquid Crystals in Microgravity — ●RALF STANNARIUS
DY 63.1	Fri	9:30–10:00	ZEU 160	Influence of network topology on spreading of epileptic seizure — ●SIMONA OLMI, SPASE PETKOSKI, FABRICE BARTOLOMEI, MAXIME GUYE, VIKTOR JIRSA
DY 63.2	Fri	10:00–10:30	ZEU 160	Chimera patterns induced by complex connectivity in Leaky Integrate-and-Fire Networks — ●ASTERO PROVATA, NEFELI TSIGKRI-DESMEDET, JOHANNE HIZANIDIS, PHILIPP HOEVEL, ECKEHARD SCHOELL

Invited talks of the joint symposium SYBM

See SYBM for the full program of the symposium.

SYBM 1.1	Tue	9:30–10:00	HSZ 02	New twists in biological photonics: circular polarisation and beyond. — ●PETE VUKUSIC, LUKE McDONALD, EWAN FINLAYSON
SYBM 1.2	Tue	10:00–10:30	HSZ 02	Bio-inspired materials and structures for technology and architecture — ●THOMAS SPECK
SYBM 1.3	Tue	10:30–11:00	HSZ 02	Cellulose bio-inspired hierarchical structures — ●SILVIA VIGNOLINI
SYBM 1.4	Tue	11:15–11:45	HSZ 02	Strong Flexible Bioenabled Nanocomposites for Sustainable Sensing — ●VLADIMIR TSUKURUK
SYBM 1.5	Tue	11:45–12:15	HSZ 02	3D laser nano-printing of rationally designed materials — ●MARTIN WEGENER

Invited talks of the joint symposium SYCM

See SYCM for the full program of the symposium.

SYCM 1.1	Wed	9:30–10:00	HSZ 02	Mobility in shareability networks — ●MICHAEL SZELL
SYCM 1.2	Wed	10:00–10:30	HSZ 02	Trail-following bacteria: from single particle dynamics to collective behaviour — ANATOLIJ GELIMSON, KUN ZHAO, CALVIN K. LEE, W. TILL KRANZ, GERARD C. L. WONG, ●RAMIN GOLESTANIAN
SYCM 1.3	Wed	10:30–11:00	HSZ 02	Mobility and Self-Organization in Multi-Layer Networks: A Meta-Foodweb example — ●THILO GROSS, ANDREAS BRECHTEL, PHILIPP GRAMLICH, DANIEL RITTERSKAMP, BARBARA DROSSEL
SYCM 1.4	Wed	11:15–11:45	HSZ 02	Temporal Percolation in Critical Collective Mobility Systems — ●ANDREAS SORGE, DEBSANKHA MANIK, JAN NAGLER, MARC TIMME
SYCM 1.5	Wed	11:45–12:15	HSZ 02	Modeling the evolution of cities — ●MARC BARTHELEMY

Sessions

DY 1.1–1.3	Sun	16:00–18:30	HSZ 04	Patterns in Nature and Materials (DY/BP/ CPP)
DY 2.1–2.10	Mon	9:30–12:30	HÜL 186	Stochastic thermodynamics and information processing
DY 3.1–3.12	Mon	9:30–13:00	ZEU 250	Computational Biophysics (joint BP/DY)
DY 4.1–4.10	Mon	9:30–13:00	SCH A251	Mechanics and Dynamics of 3D Tissues - Joint Focus Session (BP/ CPP/DY) organized by Peter Loskill
DY 5.1–5.1	Mon	9:30–10:00	ZEU 222	Keynote Lecture I
DY 6.1–6.8	Mon	10:00–12:15	ZEU 118	Many-Body Quantum Systems (joint session DY/TT)
DY 7.1–7.9	Mon	10:15–13:15	ZEU 160	Soft Particles in Flows I (Focus session, joint DY/ CPP)
DY 8.1–8.16	Mon	15:00–19:15	ZEU 118	Statistical Physics far from Thermal Equilibrium
DY 9.1–9.10	Mon	15:00–18:00	ZEU 160	Soft Particles in Flows II (Focus session, joint DY, CPP)
DY 10.1–10.6	Mon	15:00–16:45	SCH A251	Cell Mechanics (Joint Session BP/DY)
DY 11.1–11.9	Mon	15:30–18:00	HÜL 186	Critical phenomena
DY 12.1–12.7	Mon	15:30–17:15	ZEU 147	Delay and Feedback Dynamics
DY 13.1–13.4	Mon	17:30–18:30	ZEU 147	Complex Systems
DY 14.1–14.11	Tue	9:30–13:00	HÜL 186	Microswimmers I (joint session DY/BP)
DY 15.1–15.14	Tue	9:30–13:15	ZEU 160	Quantum Dynamics, Decoherence, Quantum Information
DY 16.1–16.12	Tue	9:30–13:15	ZEU 118	Focus: Fundamental aspects of turbulent convection
DY 17.1–17.10	Tue	9:30–13:00	SCH A251	Physics of Physarum polycephalum and Other Slime Molds - Joint Focus Session (BP/DY) organized by Hans-Günther Döbereiner
DY 18.1–18.11	Tue	10:00–13:00	ZEU 147	Brownian Motion / Noise (joint session DY/TT)

DY 19.1–19.6	Tue	11:30–13:00	ZEU 255	Colloids and Complex Fluids I (joint session BP/CPP/DY, organized by CPP)
DY 20.1–20.6	Tue	14:00–15:45	ZEU 160	Soft Particles in Flows III (Focus session, joint DY/CPP)
DY 21.1–21.8	Tue	14:00–16:00	ZEU 118	Statistical Physics in Biological Systems (joint session DY/BP/CPP)
DY 22.1–22.10	Tue	14:00–16:00	P1A	Posters - Statistical Physics of Biological Systems
DY 23.1–23.5	Tue	14:30–15:45	HÜL 186	Microswimmers II (joint session DY/BP)
DY 24.1–24.5	Tue	14:30–15:45	ZEU 147	Pattern Formation / Reaction-Diffusion I
DY 25.1–25.16	Tue	18:15–21:00	P3	Posters - Soft Particles, Microswimmers, Microfluidics
DY 26.1–26.16	Tue	18:15–21:00	P3	Posters - Statistical Physics, Stochastic Thermodynamics
DY 27.1–27.6	Tue	18:15–21:00	P3	Posters - Statistical Physics Biological Systems
DY 28.1–28.4	Tue	18:15–21:00	P3	Posters - Dynamics of Many-Body Systems
DY 29.1–29.5	Wed	9:30–12:15	HSZ 02	Physics of Collective Mobility (Symposium SYCM, joint SOE / DY / BP / jDPG)
DY 30.1–30.1	Wed	9:30–10:00	HÜL 186	Invited talk
DY 31.1–31.11	Wed	9:30–13:00	ZEU 118	Particulate Matter I: From microscopic interactions to collective motion (Focus session)
DY 32.1–32.10	Wed	10:00–13:00	HÜL 186	Quantum Chaos
DY 33.1–33.12	Wed	10:00–13:15	ZEU 160	Fluid Dynamics and Turbulence
DY 34.1–34.9	Wed	10:15–13:00	ZEU 260	Colloids and Complex Fluids II (joint session BP/CPP/DY, organized by CPP)
DY 35.1–35.1	Wed	14:00–14:45	HSZ 02	Plenary Talk M. Cates
DY 36.1–36.5	Wed	15:00–17:45	HSZ 03	Collective Quantum Dynamics: From Fundamentals to New Phenomena (Focus session joint DY/TT)
DY 37.1–37.15	Wed	15:00–19:00	HÜL 186	Aktive Matter I (joint session DY/BP/CPP)
DY 38.1–38.14	Wed	15:00–19:15	ZEU 160	The Physics of Power-Grids – Fluctuations, Synchronization and Network Structures (Focus session, joint DY/SOE)
DY 39.1–39.4	Wed	15:00–16:15	ZEU 118	Particulate Matter II: From microscopic interactions to collective motion (Focus session)
DY 40.1–40.4	Wed	16:30–17:30	ZEU 118	Granular Matter
DY 41.1–41.12	Thu	9:30–13:00	HÜL 186	Active Matter II (joint session DY/BP/CPP)
DY 42.1–42.13	Thu	9:30–13:15	ZEU 160	Coherent Quantum Dynamics (joint session DY/TT)
DY 43.1–43.14	Thu	9:30–13:15	ZEU 118	Nonlinear Dynamics, Synchronisation and Chaos
DY 44.1–44.8	Thu	10:00–12:15	ZEU 147	Statistical Physics (general)
DY 45.1–45.6	Thu	11:15–12:45	ZEU 250	Microswimmers (joint session BP/DY)
DY 46.1–46.4	Thu	15:00–16:00	HÜL 186	Modelling and Data Analysis
DY 47.1–47.6	Thu	15:00–16:30	ZEU 160	Complex Fluids and Soft Matter I (joint session DY/CPP)
DY 48.1–48.8	Thu	15:00–17:00	ZEU 118	Pattern Formation / Reaction-Diffusion II (joint session DY/BP)
DY 49.1–49.5	Thu	15:00–16:15	ZEU 147	Networks: From Topology to Dynamics (joint session DY/BP/SOE)
DY 50.1–50.10	Thu	15:00–17:30	ZEU 250	Statistical Physics of Biological Systems I (Joint Session BP/DY)
DY 51.1–51.3	Thu	16:15–17:00	HÜL 186	Extreme Events
DY 52.1–52.2	Thu	16:30–17:00	ZEU 147	Chimera states: symmetry-breaking in dynamical networks (joint session DY/BP/SOE)
DY 53.1–53.10	Thu	17:00–19:30	P1A	Posters - Active Matter
DY 54.1–54.13	Thu	17:00–19:30	P1A	Posters - Pattern Formation, Reaction Diffusion, Chimera
DY 55.1–55.12	Thu	17:00–19:30	P1A	Posters - Soft Matter, Glasses
DY 56.1–56.8	Thu	17:00–19:30	P1A	Posters - Granular and Particulate Matter
DY 57.1–57.6	Thu	17:00–19:30	P1A	Posters - Turbulence
DY 58.1–58.4	Thu	17:00–19:30	P1A	Posters - Networks
DY 59.1–59.4	Thu	17:00–19:30	P1A	Posters - Nonlinear General
DY 60.1–60.5	Thu	17:00–19:30	P1A	Posters - Brownian Motion, Noise
DY 61.1–61.8	Thu	17:00–19:30	P1A	Posters - Quantum Systems
DY 62.1–62.10	Fri	9:30–12:30	HÜL 186	Complex Fluids and Soft Matter II (joint DY/CPP)
DY 63.1–63.9	Fri	9:30–12:30	ZEU 160	Controlling Complex Networks in Nature and Engineering (Focus session, joint DY/SOE/BP)
DY 64.1–64.6	Fri	9:30–12:15	SCH A251	Physics of Parasites - Joint Focus Session (BP/DY) organized by Holger Stark
DY 65.1–65.9	Fri	10:00–12:30	ZEU 118	Glasses and Glass Transition (joint session DY/CPP/DF)

Annual General Meeting of the Dynamics and Statistical Physics Division

23.3.2017 19:30–20:30 ZEU 160

- Report
- Spring Meeting 11.3.-16.3.2018 in Berlin
- Miscellaneous