

# Dynamics and Statistical Physics Division

## Fachverband Dynamik und Statistische Physik (DY)

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### Overview of Invited Talks and Sessions

(Lecture rooms: BH-N 128, BH-N 243, BH-N 333 and BH-N 334; Posters: A)

#### Invited Talks

DY 2.1	Mon	9:30–10:00	BH-N 243	<b>Chemical warfare and survival strategies in bacterial range expansions</b> — MARKUS F WEBER, GABRIELE POXLEITNER, ELKE HEBISCH, ERWIN FREY, •MADELEINE OPITZ
DY 9.1	Mon	15:00–15:30	BH-N 243	<b>universal statistics of records in random sequences</b> — •SATYA MAJUMDAR
DY 14.1	Tue	9:30–10:00	BH-N 243	<b>Basins of Attraction for Chimera States</b> — •ERIK ANDREAS MARTENS, MARK PANAGGIO, DANIEL ABRAMS
DY 14.2	Tue	10:00–10:30	BH-N 243	<b>Hysteretic transitions and chaotic chimera states in networks of Kuramoto oscillators with inertia</b> — •SIMONA OLMI
DY 14.3	Tue	10:30–11:00	BH-N 243	<b>Transient amplitude chimeras: the impact of time delay and noise</b> — •ANNA ZAKHAROVA, JULIEN SIEBERT, SARAH LOOS, ALEKSANDAR GJURCHINOVSKI, ECKEHARD SCHÖLL
DY 26.1	Wed	9:30–10:00	BH-N 243	<b>Elusiveness of experimental evidence for directed percolation critical behavior</b> — •HUGUES CHATÉ
DY 26.2	Wed	10:00–10:30	BH-N 243	<b>Spatio-temporal dynamics in pipe flow and boundary layers</b> — •BRUNO ECKHARDT
DY 27.1	Wed	9:30–10:00	BH-N 334	<b>On the use and abuse of thermodynamic entropy</b> — •PETER HÄNGGI, JOERN DUNKEL, STEFAN HILBERT
DY 32.1	Wed	15:00–15:30	BH-N 243	<b>Turbulence and Instantons</b> — TOBIAS GRAFKE, •RAINER GRAUER, TOBIAS SCHÄFER, STEPHAN SCHINDEL, ERIC VANDEN-EIJNDEN
DY 32.6	Wed	16:45–17:15	BH-N 243	<b>Particle motion and irreversibility of turbulent flows</b> — •ALAIN PUMIR, HAITAO XU, JENNIFER JUCHA, EBERHARD BODENSCHATZ
DY 41.1	Thu	9:30–10:00	BH-N 334	<b>Ultrasoft particles under out-of-equilibrium conditions</b> — •GERHARD KAHL
DY 42.1	Thu	9:30–10:00	BH-N 128	<b>Time-delayed feedback control of self-organized structures in dissipative systems</b> — •SVETLANA GUREVICH, FELIX TABBERT, ALEXANDER KRAFT
DY 50.1	Thu	15:00–15:30	BH-N 243	<b>Branched Flows, Extreme Waves and the Random Focusing of Tsunami Waves</b> — •RAGNAR FLEISCHMANN
DY 51.1	Thu	15:00–15:30	BH-N 334	<b>Melting of soft disks: From liquid-hexatic coexistence to continuous transitions</b> — •SEBASTIAN C. KAPFER, MANON MICHEL, WERNER KRAUTH
DY 65.1	Fri	9:30–10:00	BH-N 243	<b>The "shear-gradient concentration coupling instability": non-uniform flow of sheared hard-sphere glasses.</b> — •JAN K.G. DHONT
DY 65.2	Fri	10:00–10:30	BH-N 243	<b>Active anisotropic fluids</b> — •SRIRAM RAMASWAMY
DY 65.3	Fri	10:30–11:00	BH-N 243	<b>Flow properties of anisotropic fluids</b> — •SEBASTIAN HEIDENREICH, SABINE H. L. KLAPP, MARKUS BÄR
DY 65.4	Fri	11:00–11:30	BH-N 243	<b>Concluding Remarks</b> — •SIEGFRIED HESS
DY 66.1	Fri	9:30–10:00	BH-N 334	<b>Demographic perspectives on the evolution of senescence</b> — •ANNETTE BAUDISCH
DY 66.2	Fri	10:00–10:30	BH-N 334	<b>Biological mechanisms of aging</b> — •BJÖRN SCHUMACHER
DY 66.3	Fri	10:30–11:00	BH-N 334	<b>Aging in out-of-equilibrium systems: an overview</b> — •JEAN-PHILIPPE BOUCHAUD

DY 66.4	Fri	11:00–11:30	BH-N 334	<b>Aging in coarsening systems with non-algebraic growth laws —</b> •MICHEL PLEIMLING
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**Invited talks of the joint symposium SYNP**

See SYNP for the full program of the symposium.

SYNP 1.1	Tue	9:30–10:00	H 0105	<b>Connectomics: The dense reconstruction of neuronal circuits —</b> •MORITZ HELMSTÄDTER
SYNP 1.2	Tue	10:00–10:30	H 0105	<b>Whole-brain imaging and analysis of network activity in behaving zebrafish —</b> •MISHA AHRENS
SYNP 1.3	Tue	10:30–11:00	H 0105	<b>Circuit neurophysics: Theory and biophysics of information-flow through large-scale neuronal systems —</b> •FRED WOLF
SYNP 1.4	Tue	11:15–11:45	H 0105	<b>Cognitive devices based on ion currents in oxide thin films —</b> •STUART PARKIN
SYNP 1.5	Tue	11:45–12:15	H 0105	<b>Distributed neuro-physical interfaces: technology and "exciting" biophysics —</b> •SHY SHOHAM

**Invited talks of the joint symposium SYPS**

See SYPS for the full program of the symposium.

SYPS 1.1	Wed	9:30–10:00	H 0105	<b>Anticipating and avoiding tipping points —</b> •TIMOTHY M. LENTON
SYPS 1.2	Wed	10:00–10:30	H 0105	<b>Climate investment under uncertainty: the two degree target and the desire for dynamic consistency —</b> •HERMANN HELD, DELF NEUBERSCH
SYPS 1.3	Wed	10:30–11:00	H 0105	<b>What are the resources required to fulfil human needs? —</b> •JULIA STEINBERGER
SYPS 1.4	Wed	11:15–11:45	H 0105	<b>Design of Sustainable Supply Chains for Sustainable Cities —</b> •ANNA NAGURNEY
SYPS 1.5	Wed	11:45–12:15	H 0105	<b>Ecological econophysics for degrowth —</b> •SALVADOR PUEYO

**Invited talks of the joint symposium SYHM**

See SYHM for the full program of the symposium.

SYHM 1.1	Wed	15:00–15:30	H 0105	<b>Amplitude or Higgs Modes in Condensed Matter —</b> •CHANDRA VARMA
SYHM 1.2	Wed	15:30–16:00	H 0105	<b>Higgs Particles for Systems with U(1) Symmetry in Two Dimensions —</b> •LODE POLLET
SYHM 1.3	Wed	16:00–16:30	H 0105	<b>Massive Photons and the Anderson-Higgs Mechanism in Superconductors —</b> •DIRK VAN DER MAREL
SYHM 1.4	Wed	16:45–17:15	H 0105	<b>Amplitude Higgs Mode in 2H-NbSe<sub>2</sub> Superconductor —</b> •MARIE-AUDE MÉASSON, ROMAIN GRASSET, YANN GALLAIS, MAX CAZAYOUS, ALAIN SACUTO, PIERRE RODIÈRE, LAURENT CARIO
SYHM 1.5	Wed	17:15–17:45	H 0105	<b>The Higgs Mode in Disordered Superconductors Close to a Quantum Phase Transition —</b> •AVIAD FRYDMAN, DANIEL SHERMAN, UWE S. PRACHT, BORIS GORSHUNOV, MARTIN DRESSEL

**Sessions**

DY 1.1–1.3	Sun	16:00–18:30	H 0104	<b>Tutorial: From spin models to macroeconomics (joint tutorial SOE/ DY/ jDPG)</b>
DY 2.1–2.9	Mon	9:30–12:15	BH-N 243	<b>Statistical Physics in Biological Systems (joint session DY/ BP/ CPP)</b>
DY 3.1–3.9	Mon	9:30–12:00	BH-N 334	<b>Anomalous Diffusion (joint session DY/ CPP)</b>
DY 4.1–4.11	Mon	9:30–12:30	BH-N 128	<b>Granular Matter / Contact Dynamics Part I</b>
DY 5.1–5.12	Mon	9:30–12:45	C 130	<b>Colloids and Complex Liquids I (joint session CPP/ BP/ DY)</b>
DY 6.1–6.7	Mon	9:30–11:30	PC 203	<b>Crystallization, Nucleation and Self Assembly I (joint session CPP/ DY)</b>

DY 7.1–7.12	Mon	9:30–13:00	H 0104	Correlated Electrons: Nonequilibrium Quantum Many-Body Systems 1 (joint session TT/ DY)
DY 8.1–8.4	Mon	12:15–13:15	MA 001	Networks - From Topology to Dynamics Part I (joint session SOE/ DY / BP)
DY 9.1–9.13	Mon	15:00–18:45	BH-N 243	Brownian Motion and Transport (Joint session DY/ CPP/ TT)
DY 10.1–10.13	Mon	15:00–18:30	BH-N 334	Quantum Dynamics, Decoherence and Quantum Information (joint session DY/ TT)
DY 11.1–11.14	Mon	15:00–18:45	C 130	Colloids and Complex Liquids II (joint session CPP/ DY)
DY 12.1–12.6	Mon	15:30–17:00	BH-N 128	Granular Matter / Contact Dynamics Part II
DY 13.1–13.9	Mon	15:45–18:30	PC 203	Crystallization, Nucleation and Self Assembly II (joint session CPP/ DY)
DY 14.1–14.8	Tue	9:30–12:30	BH-N 243	Focus Session: Chimera states: symmetry-breaking in dynamical networks (joint session DY/ BP)
DY 15.1–15.11	Tue	9:30–12:30	BH-N 334	Statistical Physics - general
DY 16.1–16.11	Tue	9:30–12:30	BH-N 128	Microswimmers - Part I (joint session DY/ BP/ CPP)
DY 17.1–17.9	Tue	9:30–12:00	BH-N 333	Modeling and Data Analysis
DY 18.1–18.8	Tue	9:30–13:00	H 0104	Focus Session: Dynamics in Many-Body Systems: Equilibration and Localization (joint session TT/DY)
DY 19.1–19.10	Tue	9:30–12:15	A 053	Transport: Graphene (joint session TT/ CPP/ DS/ DY/ HL/ MA/ O)
DY 20.1–20.10	Tue	10:15–13:15	MA 001	Focus Session: Complex Contagion Phenomena (joint session SOE/ DY / BP)
DY 21.1–21.8	Tue	14:00–16:00	H 3010	Correlated Electrons: Nonequilibrium Quantum Many-Body Systems 3 (joint session TT/ DY)
DY 22.1–22.9	Tue	14:00–16:15	MA 001	Evolutionary Game Theory II (joint session SOE/ BP / DY)
DY 23.1–23.7	Tue	14:30–16:15	BH-N 243	Reaction-Diffusion Systems
DY 24.1–24.6	Tue	14:30–16:00	BH-N 334	Quantum Chaos (joint session DY/ TT)
DY 25.1–25.5	Tue	15:00–16:15	BH-N 128	Nonlinear Stochastic Systems
DY 26.1–26.9	Wed	9:30–12:30	BH-N 243	Focus Session: Percolation and turbulent transition
DY 27.1–27.9	Wed	9:30–12:15	BH-N 334	Statistical Physics far from Thermal Equilibrium - Part I
DY 28.1–28.9	Wed	9:30–12:00	BH-N 128	Nonlinear Dynamics, Synchronization and Chaos - Part I
DY 29.1–29.12	Wed	9:30–13:15	H 1028	Statistical Physics of Biological Systems - Part II (joint session BP/DY/ CPP)
DY 30.1–30.5	Wed	9:30–12:15	H 0105	SYPS: Physics of Sustainability and Human-Nature Interactions (joint symposium SOE/ AKE/ BP/ DY/ jDPG)
DY 31.1–31.5	Wed	11:30–12:45	H 3005	Transport: Fluctuations and Noise (joint session TT/ CPP/ DY)
DY 32.1–32.12	Wed	15:00–18:45	BH-N 243	Focus Session: Statistics of fully developed turbulence
DY 33.1–33.12	Wed	15:00–18:15	BH-N 334	Critical Phenomena and Phase Transitions
DY 34.1–34.5	Wed	15:00–16:15	BH-N 128	Nonlinear Dynamics, Synchronization and Chaos - Part II
DY 35.1–35.7	Wed	15:00–16:45	BH-N 333	Complex Fluids and Soft Matter - Part I (joint session DY/ CPP / BP)
DY 36.1–36.5	Wed	15:00–17:45	H 0105	SYHM Higgs Modes in Condensed Matter and Quantum Gases
DY 37.1–37.5	Wed	15:00–16:30	A 151	Fluctuating Electricity Supply: Modelling of Generation, Backup and Storage (joint session AKE / DY / SOE)
DY 38.1–38.12	Wed	15:00–18:15	C 243	Wetting, Micro and Nanofluidics (joint session CPP/ DY)
DY 39.1–39.12	Wed	15:00–18:30	C 264	Flow-Induced Structures in Complex Fluids (joint session CPP/ DRG, Deutsche Rheologische Gesellschaft/ DY)
DY 40.1–40.6	Wed	16:45–18:30	MA 001	Physics of Sustainability and Human-Nature Interactions - Part I (joint session SOE/ DY/ jDPG/ BP/ AKE)
DY 41.1–41.7	Thu	9:30–11:45	BH-N 334	Complex Fluids and Soft Matter - Part II (joint session DY/ CPP / BP)
DY 42.1–42.5	Thu	9:30–11:00	BH-N 128	Delay and Feedback Dynamics
DY 43.1–43.12	Thu	9:30–12:45	BH-N 243	Energy Systems and Power Grid (joint session DY/ AK Energy /SOE)
DY 44.1–44.10	Thu	9:30–12:15	BH-N 333	Pattern Formation
DY 45.1–45.11	Thu	9:30–13:00	C 243	Focus: Disordered Systems, Glasses under Shear I (joint session CPP/ DY)

DY 46.1–46.9	Thu	9:30–12:00	C 264	<b>Flow-Induced Structures in Complex Fluids - Part II</b> (joint session CPP/ DRG, Deutsche Rheologische Gesellschaft/ DY)
DY 47.1–47.6	Thu	9:30–11:15	H 2053	<b>Superconductivity: Higgs Modes in Condensed Matter and Quantum Gases</b> (joint session TT/ DY/ MA/ O)
DY 48.1–48.5	Thu	12:00–13:15	MA 001	<b>Networks: From Topology to Dynamics - Part II</b> (joint session SOE/ DY/ BP)
DY 49.1–49.5	Thu	12:00–13:15	MA 001	<b>Dynamics on and of Networks</b> (joint session SOE/ DY / BP)
DY 50.1–50.7	Thu	15:00–17:00	BH-N 243	<b>Extreme Events</b> (joint session DY/ SOE)
DY 51.1–51.6	Thu	15:00–16:45	BH-N 334	<b>Complex Fluids and Soft Matter - Part III</b> (joint session DY/ CPP / BP)
DY 52.1–52.9	Thu	15:00–17:30	BH-N 128	<b>Glasses and Glass transition</b> (joint session DY/ DF/ CPP)
DY 53.1–53.5	Thu	15:30–17:00	C 243	<b>Focus: Disordered Systems/Glasses under Shear</b> (joint session CPP/ DY)
DY 54.1–54.7	Thu	15:45–18:00	PC 203	<b>Microswimmers, Active Liquids - Part II</b> (joint session CPP/ BP/ DY)
DY 55.1–55.6	Thu	16:00–18:00	Poster A	<b>Poster - Quantum Systems</b>
DY 56.1–56.23	Thu	16:00–18:00	Poster A	<b>Poster - Statistical Physics</b>
DY 57.1–57.16	Thu	16:00–18:00	Poster A	<b>Poster - Diffusion</b>
DY 58.1–58.14	Thu	16:00–18:00	Poster A	<b>Poster - Fluids</b>
DY 59.1–59.7	Thu	16:00–18:00	Poster A	<b>Poster - networks</b>
DY 60.1–60.9	Thu	16:00–18:00	Poster A	<b>Poster - complex systems and data analysis</b>
DY 61.1–61.4	Thu	16:00–18:00	Poster A	<b>Poster - Glasses</b>
DY 62.1–62.24	Thu	16:00–18:00	Poster A	<b>Poster - Dynamics</b>
DY 63.1–63.5	Thu	17:00–18:30	MA 001	<b>Physics of Sustainability and Human-Nature Interactions II</b> (joint session SOE/ DY/ jDPG/ BP)
DY 64	Thu	18:00–19:00	BH-N 334	<b>Annual General Meeting of the Dynamics and Statistical Physics Division</b>
DY 65.1–65.4	Fri	9:30–11:30	BH-N 243	<b>Special Session in Honor of the 75th Birthday of Siegfried Hess: Non-equilibrium dynamics of anisotropic fluids</b>
DY 66.1–66.6	Fri	9:30–12:00	BH-N 334	<b>Focus Session: Aging in Physical and Biological Systems</b> (joint session DY/ BP)
DY 67.1–67.12	Fri	9:30–12:45	BH-N 128	<b>Networks: From Topology to Dynamics</b> (joint session DY/ BP/SOE)
DY 68.1–68.7	Fri	9:30–11:15	C 243	<b>Glasses and Glass Transition</b> (joint session CPP/ DF/ DY)
DY 69.1–69.10	Fri	9:30–12:15	H 1058	<b>Complex Fluids and Soft Matter</b> (joint session BP/DY/ CPP)
DY 70.1–70.7	Fri	9:30–11:30	C 264	<b>Microswimmers, Active Liquids - Part III</b> (joint session CPP/ BP/ DY)

## Annual General Meeting of the Dynamics and Statistical Physics Division

Donnerstag 18:00–19:00 BH-N 334

- Bericht
- Wahl
- Verschiedenes