

Biological Physics Division Fachverband Biologische Physik (BP)

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Overview of Invited Talks and Sessions

(lecture rooms H43 and H45; Posters B1 and B2)

Plenary Talks related to BP

PV I	Mon	8:30– 9:15	H1	Response of live cells to mechanical stress — ●SAMUEL SAFRAN
PV V	Tue	8:30– 9:15	H1	NMR and MRI: Basic Physics for the Sake of Society — ●RICHARD R. ERNST
PV X	Thu	8:30– 9:15	H1	Complex Networks: From Statistical Physics to the Cell — ●ALBERT-LASZLO BARABASI

Invited Talks

BP 2.1	Mon	10:15–10:45	H43	Probing Cellular Events with Single Quantum Dot Imaging — ●MAXIME DAHAN
BP 3.1	Mon	14:00–14:30	H43	Exciting positional control with DNA Origami: Onwards nanoscale gadgets for Science and Technology. — ●HENDRIK DIETZ
BP 4.1	Mon	14:00–14:30	H45	Nonlinear dynamics and control of migraine waves — ●MARKUS DAHLEM
BP 9.1	Tue	9:30–10:00	H43	Mechanics of Cellular Aggregates — ●FRANÇOISE BROCHARD-WYART, CHRISTOPHE CLANET, DAMIEN CUVELIER, SYLVIE DUFOUR, DAVID GONZALEZ-RODRIGUEZ, KARINE GUEVORKIAN
BP 13.1	Tue	14:00–14:30	H45	Carbon nanotubes fluids: simple or complex? — ●MATTEO PASQUALI
BP 14.1	Tue	14:00–14:30	H44	Stochasticity and specificity in DNA repair — ●THOMAS HÖFER, MARTIJN LUIJSTERBURG, GESA VON BORNSTAEDT, ROEL VAN DRIEL
BP 21.1	Wed	14:00–14:30	H43	Deconstructing hearing: mechanisms and molecules — BJÖRN NADROWSKI, THOMAS EFFERTZ, ●MARTIN GÖPFERT
BP 23.1	Thu	10:00–10:30	H43	Single-molecule Fluorescence Studies of RNA Folding and Function — ●GERD ULRICH NIENHAUS
BP 26.1	Thu	14:00–14:30	H43	Molecular misfolding investigated by mechanically unzipping nucleic acids — ●FELIX RITORT
BP 37.1	Fri	10:00–10:30	H43	Pearls and Feathers: New Concepts and Inspiration for Plant's Design — ●INGRID WEISS, EDUARD ARZT, HELMUT KIRCHNER

Invited talks of the joint symposium SYMR

See SYMR for the full program of the Symposium.

SYMR 4.1	Tue	9:30–10:00	H1	NMR with a Magnetic Resonance Force Microscope — ●BEAT H. MEIER, KAI EBERHARDT, JOSS ROSMARIE, TOMKA IVAN
SYMR 4.2	Tue	10:00–10:30	H1	Probing Novel Electronic States in Strongly Correlated Electron Materials Using NMR and NQR — ●NICHOLAS CURRO
SYMR 4.3	Tue	10:30–11:00	H1	Interplay of Structure and Dynamics in Macromolecular and Supramolecular Systems as Revealed by NMR Spectroscopy — ●HANS WOLFGANG SPIESS
SYMR 4.4	Tue	11:15–11:45	H1	Big times for small NMR — ●BERNHARD BLÜMICH
SYMR 4.5	Tue	11:45–12:15	H1	Traveling-Wave MRI — ●KLAAS PRÜSSMANN

SYMR 4.6	Tue	12:15–12:45	H1	Life on the Edge: The Origins and Proliferation of Protein Misfolding Diseases — •CHRISTOPHER M. DOBSON
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Invited talks of the joint symposium SYMM

See SYMM for the full program of the Symposium.

SYMM 1.1	Wed	9:30–10:00	H1	Magnetic resonance imaging: an ongoing success story — •JENS FRAHM
SYMM 1.2	Wed	10:00–10:30	H1	Biomedical nanomagnetism: A spin through new possibilities — •KANNAN KRISHNAN
SYMM 1.3	Wed	10:30–11:00	H1	Recent SQUID applications in medicine — •HANS KOCH
SYMM 1.4	Wed	11:00–11:30	H1	Biomedical Magnetic Resonance using Hyperpolarized Gases and Liquids — •LAURA SCHREIBER
SYMM 1.5	Wed	11:30–12:00	H1	Recent Developments in Healthcare Biomagnetics — •QUENTIN PANKHURST
SYMM 1.6	Wed	12:00–12:30	H1	SQUIDS for Noninvasive Magnetogastrography — •ALAN BRADSHAW, LEO CHENG, ANDREW PULLAN, WILLIAM RICHARDS

Invited talks of the joint symposium SYAT

See SYAT for the full program of the Symposium.

SYAT 1.1	Wed	14:30–15:00	H1	Aging, ergodicity breaking and universal fluctuations in continuous time random walks: Theory and (possible) experimental manifestations — •IGOR SOKOLOV
SYAT 1.2	Wed	15:00–15:30	H1	Distinguishing anomalous from simple diffusion in crowded solutions and in cells with fluorescence correlation spectroscopy — •CECILE FRADIN, DANIEL BANKS, SHYEMAA SHEHATA, FELIX WONG, ROBERT PETERS
SYAT 1.3	Wed	15:30–16:00	H1	Exploring Diffusion in Nanostructured Systems with Single Molecule Probes: From Nanoporous Materials to Living Cells — •CHRISTOPH BRÄUCHLE
SYAT 2.1	Wed	16:30–17:00	H1	The Lorentz model: a paradigm of anomalous transport — •FELIX HÖFLING
SYAT 2.2	Wed	17:00–17:30	H1	Viscoelastic subdiffusion: from anomalous to normal — •IGOR GOYCHUK
SYAT 2.3	Wed	17:30–18:00	H1	Phase transitions, liquid micro-compartments, and embryonic patterning — •CLIFFORD BRANGWYNNE, JÖBIN GHARAKHANI, ANTHONY HYMAN, FRANK JÜLICHER

Sessions

BP 1.1–1.10	Mon	10:15–13:00	H45	Statistical Physics of Biological Systems I (joint BP, DY)
BP 2.1–2.9	Mon	10:15–13:00	H43	New Technologies
BP 3.1–3.9	Mon	14:00–16:45	H43	DNA, RNA and Associated Enzymes
BP 4.1–4.10	Mon	14:00–17:00	H45	Statistical Physics of Biological Systems II (joint BP, DY)
BP 5.1–5.41	Mon	17:15–20:00	Poster B1	Posters: Biopolymers and Biomaterials
BP 6.1–6.11	Mon	17:15–20:00	Poster B1	Posters: DNA and DNA Enzymes
BP 7.1–7.11	Mon	17:15–20:00	Poster B1	Posters: Biological Machines, Motor Proteins
BP 8.1–8.6	Tue	9:30–12:45	H1	SYMR: Nuclear Magnetic Resonance: From Applications in Condensed Matter Physics to New Frontiers
BP 9.1–9.11	Tue	9:30–12:45	H43	Physics of Cells I
BP 10.1–10.5	Tue	9:30–11:00	H44	Evolutionary Game Theory I (joint SOE, BP)
BP 11.1–11.5	Tue	11:15–12:30	H44	Evolutionary Game Theory II (joint SOE, BP)
BP 12.1–12.10	Tue	13:45–16:15	H48	Nuclear Magnetic Resonance: Frontiers and Applications (joint CPP, BP)
BP 13.1–13.8	Tue	14:00–16:30	H45	Nanoparticles and Viruses
BP 14.1–14.7	Tue	14:00–16:00	H44	Evolutionary Game Theory III (joint SOE, BP)
BP 15.1–15.9	Tue	14:30–17:00	H43	Physics of Cells II
BP 16.1–16.6	Wed	9:30–12:30	H1	SYMM: Magnetism and Medicine
BP 17.1–17.6	Wed	9:30–11:00	H38	Anomalous Transport I (joint BP, DY)
BP 18.1–18.7	Wed	11:15–13:15	H38	Anomalous Transport II (joint BP, DY)

BP 19.1–19.10	Wed	10:00–12:45	H43	Membranes and Vesicles
BP 20.1–20.9	Wed	10:15–12:45	H44	Networks: From Topology to Dynamics I (joint DY, BP, SOE)
BP 21.1–21.10	Wed	14:00–17:00	H43	Neurobiophysics and Sensory Transduction
BP 22.1–22.1	Thu	9:30–10:15	H44	Networks: From Topology to Dynamics II (joint DY, BP, SOE)
BP 23.1–23.10	Thu	10:00–13:00	H43	Biopolymers
BP 24.1–24.10	Thu	10:15–13:00	H44	Networks: From Topology to Dynamics III (joint DY, BP, SOE)
BP 25.1–25.5	Thu	11:00–12:45	H45	Focus: Charge Effects in Soft and Biological Matter I (joint CPP, BP, ST)
BP 26.1–26.11	Thu	14:00–17:15	H43	From Single-Molecule to Tissue Dynamics
BP 27.1–27.7	Thu	14:00–16:00	H44	Networks: From Topology to Dynamics IV (joint DY, BP, SOE)
BP 28.1–28.12	Thu	14:00–17:45	H37	Focus: Charge Effects in Soft and Biological Matter II (joint CPP, BP, ST)
BP 29.1–29.9	Thu	14:30–17:00	H45	Biomolecular Spectroscopy
BP 30.1–30.5	Thu	16:00–17:15	H44	Networks: From Topology to Dynamics V (joint DY, BP, SOE)
BP 31.1–31.18	Thu	17:15–20:00	Poster B1	Posters: Membranes and Vesicles
BP 32.1–32.49	Thu	17:15–20:00	Poster B1	Posters: Physics of Cells
BP 33.1–33.7	Thu	17:15–20:00	Poster B1	Posters: Neurobiophysics
BP 34.1–34.16	Thu	17:15–20:00	Poster B2	Posters: New Technologies
BP 35.1–35.15	Thu	17:15–20:00	Poster B2	Posters: Statistical Physics, Evolution, and Networks
BP 36.1–36.11	Thu	17:15–20:00	Poster B2	Posters: Tissue Dynamics, Charge Effects, and Anomalous Transport
BP 37.1–37.10	Fri	10:00–13:00	H43	Biomaterials
BP 38.1–38.6	Fri	10:15–12:00	H45	Focus: Charge Effects in Soft and Biological Matter III (joint CPP, BP, ST)

Annual General Meeting of the Biological Physics Division

Wednesday 18:30–19:30 H45

- Bericht
- Verschiedenes