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Overview of Invited Talks and Sessions

(Lecture halls H 0104, H 1012, H 1028, and H 2032; Poster B-F)

Invited Talks

BP 1.1	Mon	9:30–10:00	H 0112	**Co-evolution of RNA viruses and the human immune system** — •Richard Neher
BP 2.7	Mon	11:15–11:45	H 2032	**The fascinating membrane morphology of the endoplasmic reticulum** — •Reinhard Lipowsky
BP 5.6	Mon	16:30–17:00	H 0110	**Sculpting embryos through fluid-to-solid phase transitions** — •Otger Campas
BP 6.1	Mon	15:00–15:30	H 1028	**Proton:ion antiporters generate membrane potential, and thus proton motive force in E.coli** — •Teuta Pilizota
BP 10.7	Tue	11:15–11:45	H 0112	**RNA Contact Prediction by Data Efficient Deep Learning** — Oskar Taubert, Fabrice von der Lehr, Alina Bazarova, Christian Faber, Philipp Knechtges, Marie Weiel, Charlotte Debus, Daniel Coquelin, Achim Basermann, Achim Streit, Stefan Kesselheim, Markus Götz, •Alexander Schug
BP 11.1	Tue	9:30–10:00	H 2032	**Mechanochemical regulation of epithelial barrier formation and function** — •Carien Niessen
BP 17.5	Wed	10:30–11:00	H 2032	**Red photocontrollable fluorescent proteins in nanoscopy** — •Francesca Pennacchietti
BP 18.1	Wed	9:30–10:00	H 1028	**Production and applications of artificial spider silk fibers and hydrogels** — •Anna Rising
BP 23.1	Wed	15:00–15:30	H 2032	**Inhibitor-induced transitions in pattern formation and their role to morphogenesis robustness** — •Silvia Grigolon
BP 23.6	Wed	16:45–17:15	H 2032	**Bayesian inference of chromatin looping dynamics from live-cell measurements** — •Christoph Zechner, Michele Gabriele, Hugo B Brandão, Simon Grosse-Holz, Asmita Jha, Gina M Daily, Claudia Cattoglio, Tsung-Han Hsieh, Leonid Mirny, Anders S Hansen
BP 24.1	Wed	15:00–15:30	H 1028	**Steps towards the de-novo synthesis of life** — •Sijbren Otto
BP 27.7	Thu	11:15–11:45	H 0112	**Integrative dynamic structural biology with multi-modal fluorescence spectroscopy and nanoscopy: From single molecules to live cells** — •Claus Seidel
BP 28.4	Thu	10:30–11:00	H 2032	**Quantifying the actin cortex of cells in different states** — •Franziska Lautenschläger, Daniel Flormann, Christoph Anton, Rhoda Hawkins
BP 31.4	Thu	15:45–16:15	H 0112	**Polarizing nuclear spins at the interface between ESR and NMR spectroscopy** — •Marina Bennati
BP 33.1	Thu	15:00–15:30	H 1028	**Symmetry breaking in early embryonic organoids: bridging networks, mechanics and metabolism** — •Vikas Trivedi
BP 34.3	Fri	10:00–10:30	H 2032	**Bacterial transport in dilute and porous environments** — •Christina Kurzthaler
BP 35.7	Fri	11:15–11:45	H 1028	**Large scale collective dynamics of bacteria suspensions** — •Eric Clement, Benjamin Perez Estay, Anke Lindner, Carine Douarche, Jochen Arlt, Vincent Martinez, Wilson Poon, Alexander Morosov

BP 37.1	Fri	13:15–14:00	H 0104	**Virus traps and other molecular machines of the future** — •Hendrik Dietz

Invited Talks of the joint Symposium SKM Dissertation Prize 2024 (SYSD)

See SYSD for the full program of the symposium.

SYSD 1.1	Mon	9:30–10:00	H 1012	**Nonequilibrium dynamics in constrained quantum many-body systems** — •Johannes Feldmeier
SYSD 1.2	Mon	10:00–10:30	H 1012	**Controlled Manipulation of Magnetic Skyrmions: Generation, Motion and Dynamics** — •Lisa-Marie Kern
SYSD 1.3	Mon	10:30–11:00	H 1012	**Interactions within and between cytoskeletal filaments** — •Charlotta Lorenz
SYSD 1.4	Mon	11:00–11:30	H 1012	**Field theories in nonequilibrium statistical mechanics: from molecules to galaxies** — •Michael te Vrugt
SYSD 1.5	Mon	11:30–12:00	H 1012	**Lightwave control of electrons in graphene** — •Tobias Weitz

Invited Talks of the joint Symposium New Trends in Nonequilibrium Physics: Conservation Laws and Nonreciprocal Interactions (SYNP)

See SYNP for the full program of the symposium.

SYNP 1.1	Thu	15:00–15:30	H 0105	**Universality classes of nonequilibrium phase transitions with conservation constraints** — •Walter Zimmermann
SYNP 1.2	Thu	15:30–16:00	H 0105	**The many faces of living chiral crystals** — •Nikta Fakhri
SYNP 1.3	Thu	16:00–16:30	H 0105	**Non-reciprocal pattern formation of conserved fields** — •Fridtjof Brauns, M Cristina Marchetti
SYNP 1.4	Thu	16:45–17:15	H 0105	**Phase transitions and fluctuations of nonreciprocal systems** — •Sarah A.M. Loos
SYNP 1.5	Thu	17:15–17:45	H 0105	**Chiral matters** — •William Irvine

Sessions

BP 1.1–1.10	Mon	9:30–12:45	H 0112	**Systems and Network Biophysics**
BP 2.1–2.12	Mon	9:30–13:00	H 2032	**Membranes and Vesicles I**
BP 3.1–3.12	Mon	9:30–12:45	H 1028	**Active Matter I (joint session BP/CPP/DY)**
BP 4.1–4.11	Mon	15:00–18:00	H 0112	**Computational Biophysics I**
BP 5.1–5.10	Mon	15:00–18:00	H 0110	**Tissue Mechanics I**
BP 6.1–6.10	Mon	15:00–18:00	H 1028	**Bacterial Biophysics I**
BP 7.1–7.12	Mon	15:00–18:30	BH-N 243	**Active Fluids and Microswimmers (joint session DY/BP/CPP)**
BP 8.1–8.44	Mon	18:00–20:30	Poster C	**Poster Session Ia**
BP 9.1–9.16	Mon	18:00–20:30	Poster D	**Poster Session Ib**
BP 10.1–10.11	Tue	9:30–12:45	H 0112	**Computational Biophysics II**
BP 11.1–11.10	Tue	9:30–12:45	H 2032	**Cell Mechanics I**
BP 12.1–12.13	Tue	9:30–13:00	H 1028	**Active Matter II (joint session BP/CPP/DY)**
BP 13.1–13.12	Tue	9:30–13:00	BH-N 334	**Statistical Physics of Biological Systems I (joint session DY/BP)**
BP 14.1–14.19	Tue	18:00–20:30	Poster E	**Poster IIa**
BP 15.1–15.28	Tue	18:00–20:30	Poster F	**Poster IIb**
BP 16.1–16.11	Wed	9:30–12:30	H 0112	**Membranes and Vesicles II**
BP 17.1–17.11	Wed	9:30–12:45	H 2032	**Bioimaging**
BP 18.1–18.12	Wed	9:30–13:00	H 1028	**Biomaterials and Biopolymers (joint session BP/CPP)**
BP 19.1–19.12	Wed	9:30–13:00	BH-N 334	**Active Matter III (joint session DY/BP/CPP)**
BP 20.1–20.37	Wed	11:00–14:30	Poster B	**Poster IIIa**
BP 21.1–21.34	Wed	11:00–14:30	Poster C	**Poster IIIb**
BP 22.1–22.8	Wed	15:00–17:15	H 0112	**Bacterial Biophysics II**
BP 23.1–23.8	Wed	15:00–17:45	H 2032	**Focus Session: Inference Methods and Biological Data (German-French Focus Session) (joint session BP/DY)**

BP 24.1–24.10	Wed	15:00–18:00	H 1028	**Synthetic life-like systems and Origins of Life**
BP 25	Wed	18:15–19:15	H 1028	**Members' Assembly**
BP 26.1–26.12	Thu	9:30–13:00	H 0111	**Biopolymers, Biomaterials and Bioinspired Functional Materials (joint session CPP/BP)**
BP 27.1–27.12	Thu	9:30–13:00	H 0112	**Single Molecule Biophysics**
BP 28.1–28.11	Thu	9:30–13:00	H 2032	**Cytoskeleton**
BP 29.1–29.9	Thu	9:30–12:00	H 1028	**Statistical Physics of Biological Systems II (joint session BP/DY)**
BP 30.1–30.11	Thu	9:30–13:00	BH-N 334	**Active Matter IV (joint session DY/BP/CPP)**
BP 31.1–31.10	Thu	15:00–18:00	H 0112	**Protein Structure and Dynamics**
BP 32.1–32.10	Thu	15:00–17:45	H 2032	**Tissue Mechanics II**
BP 33.1–33.8	Thu	15:00–17:30	H 1028	**Focus session: Physics of organoids**
BP 34.1–34.12	Fri	9:30–13:00	H 2032	**Statistical Physics of Biological Systems III (joint session BP/DY)**
BP 35.1–35.12	Fri	9:30–13:00	H 1028	**Active Matter V (joint session BP/DY)**
BP 36.1–36.11	Fri	10:00–13:00	H 0112	**Cell Mechanics II**
BP 37.1–37.1	Fri	13:15–14:00	H 0104	**Closing Talk (joint session BP/CPP/DY)**

Members' Assembly of the Biological Physics Division

Wednesday 18:15–19:15 H 1028