

Chemical and Polymer Physics Division Fachverband Chemische Physik und Polymerphysik (CPP)

Dieter Neher (Sprecher)
Universität Potsdam
Institut für Physik und Astronomie
Karl-Liebknecht-Str. 24-25
14476 Potsdam
neher@uni-potsdam.de

Andreas Fery (stv. Sprecher)
Leibniz-Institut für
Polymerforschung Dresden e.V.
und Technische Universität Dresden
Hohe Str. 6
01069 Dresden
fery@ipfdd.de

Overview of Invited Talks and Sessions

(Lecture rooms ZEU 114, ZEU 160, ZEU 222, ZEU 250, ZEU 255, ZEU 260, HSZ 02, and SCH A251;
Poster P1A, P1C, P2-OG1, and P3)

Invited Talks

CPP 1.1	Mon	9:30–10:00	ZEU 222	Dynamically Reconfigurable Soft Matter in External Fields: Smart Particle Gels, Shape-Changing Clusters and Self-Propelling Microbots — ●ORLIN D VELEV
CPP 3.1	Mon	10:15–10:45	ZEU 222	The Versatility of Mesoscopic Solar Cells — ●ANDERS HAGFELDT
CPP 4.1	Mon	10:15–10:45	ZEU 114	Membrane nanotube formation in giant vesicles — ●RUMIANA DIMOVA
CPP 5.1	Mon	10:15–10:45	ZEU 255	A Combined Rheological and Dielectric Analysis of Filler Networking in Elastomer Nano-Composites — ●MANFRED KLÜPPEL
CPP 8.1	Mon	15:00–15:30	ZEU 222	Visualizing Charge Carrier Diffusion In Hybrid Halide Perovskite Thin Films — ●ACHIM HARTSCHUH, KATHRIN HANDLOSER, IRENE GRILL, NICOLAI HARTMANN, NADJA GIESBRECHT, MELTEM AYGÜLER, MATHHIAS HANDLOSER, THOMAS BEIN, PABLO DOCAMPO
CPP 8.2	Mon	15:30–16:00	ZEU 222	Photon recycling in hybrid lead-halide perovskite semiconductors — ●FELIX DESCHLER
CPP 8.5	Mon	16:45–17:15	ZEU 222	Interface engineering: the route towards high efficiency and stable hybrid perovskite solar cells — ●GIULIA GRANCINI
CPP 9.1	Mon	15:00–15:30	ZEU 260	Molecular Electrical Doping of Organic Semiconductors — ●INGO SALZMANN
CPP 20.1	Tue	9:30–10:00	ZEU 222	Investigation of hybrid organic/inorganic perovskite systems and interfaces by photoelectron spectroscopy — ●SELINA OLT Hof
CPP 22.7	Tue	11:15–11:45	ZEU 250	Structure/dynamics interplay in interfacial layers: how adsorption influences thermal glass transition and segmental relaxation — ●SIMONE NAPOLITANO
CPP 22.10	Tue	12:15–12:45	ZEU 250	Molecular-level framework for the dynamic mechanical response and yielding of polymer glasses — ●ALESSIO ZACCONE, VLADIMIR PLYULIN, CHRIS NESS, ROBERT ELDER, RICO MILKUS, TIMOTHY SIRK
CPP 25.1	Tue	14:00–14:30	ZEU 222	Ultrafast transient absorption spectroscopy of organic-inorganic hybrid perovskites on mesoporous titanium dioxide in contact with hole transport materials — ●THOMAS LENZER
CPP 31.1	Wed	9:30–10:00	ZEU 222	Using classical polymer science tools to manipulate phase transformations, solid-state order and properties of semiconducting plastics – and beyond — ●NATALIE STINGELIN
CPP 35.6	Wed	11:45–12:15	ZEU 222	Density functional theory of crystallization: from anisotropic particles to polymers — ●HARTMUT LOEWEN
CPP 36.1	Wed	10:15–10:45	ZEU 260	Computer simulations of colloidal systems under flow — ●ARASH NIKOUBASHMAN
CPP 37.5	Wed	11:15–11:45	ZEU 255	Nonlinear dielectric spectroscopy in supercooled liquids — PETER LUNKENHEIMER, MARION MICHL, THOMAS BAUER, FRANCOIS LADIEU, SAMUEL ALBERT, ●ALOIS LOIDL

CPP 38.1	Wed	10:15–10:45	ZEU 250	Light-induced degradation of methylammonium and formamidinium PbI₃ perovskites — •NORBERT H. NICKEL, FELIX LANG, VICTOR V. BRUS, JÖRG RAPPICH
CPP 40.1	Wed	15:00–15:30	ZEU 222	Architectural Engineering of Semi-Crystalline Elastomers — •SERGEI SHEIKO
CPP 40.5	Wed	16:30–17:00	ZEU 222	Chain Trajectory of Semicrystalline Polymers as Revealed by Solid-State NMR Spectroscopy — •TOSHIKAZU MIYOSHI
CPP 40.9	Wed	17:45–18:15	ZEU 222	The Role of Entanglement in Polymer Crystallization — •CHUANFU LUO
CPP 41.1	Wed	15:00–15:30	ZEU 260	The role of incoherent hopping in the photogeneration of charges in organic semiconductors — •ANNA KÖHLER
CPP 42.5	Wed	16:00–16:30	ZEU 114	Aqueous Ionic Liquids and Their Influence on Peptide Conformations: Denaturation and Dehydration Mechanisms — •JENS SMIA TEK
CPP 47.1	Wed	16:15–16:45	ZEU 255	Hard science with soft spheres: learning from foams and emulsions — •WIEBKE DRENCKHAN-ANDREATTA
CPP 53.1	Thu	9:30–10:00	ZEU 222	Interplay of Order and Disorder in Self-assembled Optical Metamaterials — •ULLRICH STEINER
CPP 55.1	Thu	10:15–10:45	ZEU 222	Understanding charge transport in crystalline organic semiconductors — •SIMONE FRATINI, SERGIO CIUCHI, ALESSANDRO TROISI, DIDIER MAYOU
CPP 55.2	Thu	10:45–11:15	ZEU 222	Mapping of trap densities and contact resistance in organic devices and their relation to structural disorder — •BERT NICKEL, CLEMENS LIEWALD, SIMONE STROHM AIR, ERIC GLOWACKI, ANDREY TURCHANIN
CPP 56.1	Thu	10:15–10:45	ZEU 260	Functional microgels: simple matter where complexity matters — •WALTER RICHTERING
CPP 58.4	Thu	11:00–11:30	ZEU 255	Molecular Scale Structure of Ionic Liquid Surfaces — •MARKUS MEZGER
CPP 59.1	Thu	15:00–15:30	ZEU 222	Charge transport modeling in disordered molecular semiconductors: from the molecule to the device — ANDREA MASSÉ, FEILONG LIU, PASCAL FRIEDERICH, FRANZ SYMALLA, VELIMIR MEDED, WOLFGANG WENZEL, REINDER COEHOORN, •PETER A. BOBBERT
CPP 59.2	Thu	15:30–16:00	ZEU 222	Charge transport in high mobility molecular semiconductors — •HENNING SIRRINGHAUS
CPP 60.1	Thu	15:00–15:30	ZEU 260	Polymers in the cell nucleus — •MARIA BARBI, ANTONY LESAGE, JEAN-MARC VICTOR
CPP 60.6	Thu	16:45–17:15	ZEU 260	Knots as Stable Topological Order Parameter for Semiflexible Polymers — •WOLF HARD JANKE, MARTIN MARENZ
CPP 63.1	Fri	9:30–10:00	ZEU 222	Stimuli-Responsive and Switchable Polymer Brushes: Theoretical Concepts and Computer Simulations — •JENS-UWE SOMMER
CPP 67.4	Fri	11:00–11:30	ZEU 222	Protein Folding under Mechanical Load — •MATTHIAS RIEF
CPP 67.6	Fri	12:00–12:30	ZEU 222	All-atom simulations of folding of proteins with topologically complex native structures. — •PIETRO FACCIOLI, SILVIO A BECCARA
CPP 70.5	Fri	11:15–11:45	ZEU 255	Charge transfer states for organic opto-electronics — •KOEN VAN-DEWAL

Tutorial Patterns in Nature und Materials

DY 1.1	Sun	16:00–16:50	HSZ 04	The fascination of pattern formation: Basic principles, applications, future directions — •WALTER ZIMMERMANN
DY 1.2	Sun	16:50–17:40	HSZ 04	On growth and forms in nature — •CHAOUQI MISBAH
DY 1.3	Sun	17:40–18:30	HSZ 04	What can pattern formation theory tell us about ecosystem response to climate change? — •EHUD MERON

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 SYES

See SYES for the full program of the symposium.

SYES 1.1	Fri	10:30–11:00	HSZ 02	Going Beyond Conventional Functionals with Scaling Corrections and Pairing Fluctuations — ●WEITAO YANG
SYES 1.2	Fri	11:00–11:30	HSZ 02	Multi-reference density functional theory — ●ANDREAS SAVIN
SYES 1.3	Fri	11:30–12:00	HSZ 02	Density functionals from machine learning — ●KIERON BURKE
SYES 1.4	Fri	12:00–12:30	HSZ 02	Taming Memory-Dependence in Time-Dependent Density Functional Theory — ●NEEPA MAITRA
SYES 1.5	Fri	12:30–13:00	HSZ 02	Quantum Embedding Theories — ●FRED MANBY

Sessions

CPP 1.1–1.1	Mon	9:30–10:00	ZEU 222	Keynote Lecture I
CPP 2.1–2.10	Mon	9:30–13:00	SCH A251	Mechanics and Dynamics of 3D Tissues (joint focus session BP/CPP, organized by BP)
CPP 3.1–3.9	Mon	10:15–13:00	ZEU 222	Fundamentals of Perovskite Photovoltaics I (joint session CPP/DS/HL)
CPP 4.1–4.9	Mon	10:15–13:00	ZEU 114	Bioinspired Functional Materials I
CPP 5.1–5.9	Mon	10:15–13:00	ZEU 255	Polymer Networks and Dynamics I: Elastomers and Magnetic Materials
CPP 6.1–6.9	Mon	10:15–13:15	ZEU 160	Focus: Soft Particles in Flows I (joint focus session CPP/DY)
CPP 7.1–7.8	Mon	11:00–13:00	ZEU 260	Organic Electronics and Photovoltaics I: Light-Emitting Devices (joint session CPP/DS/HL, organized by CPP)
CPP 8.1–8.9	Mon	15:00–18:15	ZEU 222	Fundamentals of Perovskite Photovoltaics II (joint session CPP/DS/HL)
CPP 9.1–9.11	Mon	15:00–18:15	ZEU 260	Organic Electronics and Photovoltaics II: Doping (joint session CPP/DS/HL, organized by CPP)
CPP 10.1–10.12	Mon	15:00–18:15	ZEU 114	Bioinspired Functional Materials II
CPP 11.1–11.12	Mon	15:00–18:15	ZEU 255	Modelling and Simulation of Soft Matter
CPP 12.1–12.10	Mon	15:00–18:00	ZEU 160	Focus: Soft Particles in Flows II (joint focus session CPP/DY)
CPP 13.1–13.30	Mon	18:30–21:00	P1A	Poster: Fundamentals of Perovskite Photovoltaics (joint session CPP, DS, HL)
CPP 14.1–14.8	Mon	18:30–21:00	P1C	Poster: Bioinspired Functional Materials
CPP 15.1–15.13	Mon	18:30–21:00	P1C	Poster: Membranes, Biomaterials, Biopolymers
CPP 16.1–16.6	Mon	18:30–21:00	P1C	Poster: Modelling and Simulation of Soft Matter
CPP 17.1–17.10	Mon	18:30–21:00	P1C	Poster: Polymer Networks and Dynamics
CPP 18.1–18.14	Mon	18:30–21:00	P1C	Poster: Colloids and Complex Fluids
CPP 19.1–19.5	Tue	9:30–12:15	HSZ 02	Symposium on Bioinspired Functional Materials: From Nature’s Nanoarchitectures to Nanofabricated Designs
CPP 20.1–20.10	Tue	9:30–12:30	ZEU 222	Fundamentals of Perovskite Photovoltaics III (joint session CPP/DS/HL)
CPP 21.1–21.12	Tue	9:30–12:45	ZEU 260	Organic Electronics and Photovoltaics III: Mobile and Trapped Charges (joint session CPP/DS/HL, organized by CPP)
CPP 22.1–22.10	Tue	9:30–12:45	ZEU 250	Polymer Networks and Dynamics II: Structure and Dynamics
CPP 23.1–23.13	Tue	9:30–13:15	POT 251	Organic Semiconductors (joint session CPP/DS/HL, organized by HL)

CPP 24.1–24.6	Tue	11:30–13:00	ZEU 255	Colloids and Complex Fluids I (joint session BP/CPP/DY, organized by CPP)
CPP 25.1–25.7	Tue	14:00–16:00	ZEU 222	Fundamentals of Perovskite Photovoltaics IV (joint session CPP/DS/HL)
CPP 26.1–26.8	Tue	14:00–16:00	ZEU 260	Molecular Electronics and Excited State Properties
CPP 27.1–27.7	Tue	14:00–15:45	ZEU 114	Photoswitchable Materials
CPP 28.1–28.6	Tue	14:00–15:45	ZEU 160	Focus: Soft Particles in Flows III (joint focus session CPP/DY)
CPP 29.1–29.8	Tue	14:00–16:00	ZEU 250	Polymer Networks and Dynamics III: Mechanical Properties
CPP 30.1–30.12	Wed	9:30–12:45	HSZ 201	Transport: Molecular Electronics and Photonics (jointly with CPP, HL, MA, O)
CPP 31.1–31.1	Wed	9:30–10:00	ZEU 222	Keynote Lecture II
CPP 32.1–32.14	Wed	9:30–13:15	CHE 91	Organic Thin Films I (joint session CPP/DS/HL, organized by DS)
CPP 33.1–33.11	Wed	9:30–12:45	POT 81	Organic Photovoltaics and Electronics I (joint session CPP/DS/HL, organized by HL)
CPP 34.1–34.6	Wed	9:30–12:30	GER 37	Focus: Spatio-Temporal Multiscale Optical Spectroscopy Meets Functional Materials (joint session DF/CPP/O, organized by DF)
CPP 35.1–35.9	Wed	10:15–13:00	ZEU 222	Focus: Polymer Crystallization - from Model Systems to New Materials I
CPP 36.1–36.9	Wed	10:15–13:00	ZEU 260	Colloids and Complex Fluids II (joint session BP/CPP/DY, organized by CPP)
CPP 37.1–37.9	Wed	10:15–13:00	ZEU 255	Fluids and Glasses I
CPP 38.1–38.8	Wed	10:15–12:45	ZEU 250	Fundamentals of Perovskite Photovoltaics V (joint session CPP/DS/HL)
CPP 39.1–39.10	Wed	14:45–17:45	POT 81	Organic Photovoltaics and Electronics II (joint session CPP/DS/HL, organized by HL)
CPP 40.1–40.9	Wed	15:00–18:15	ZEU 222	Focus: Polymer Crystallization - from Model Systems to New Materials II
CPP 41.1–41.12	Wed	15:00–18:30	ZEU 260	Organic Electronics and Photovoltaics IV: OPV (joint session CPP/DS/HL, organized by CPP)
CPP 42.1–42.10	Wed	15:00–18:00	ZEU 114	Charged Soft Matter, Ionic Liquids and Polyions I
CPP 43.1–43.4	Wed	15:00–16:00	ZEU 255	Fluids and Glasses II
CPP 44.1–44.15	Wed	15:00–19:00	HÜL 186	Aktive Matter I (joint session DY/BP/CPP, organized by DY)
CPP 45.1–45.8	Wed	15:00–17:15	SCH A251	Biomaterials and Biopolymers (joint session BP/CPP, organized by BP)
CPP 46.1–46.8	Wed	15:00–17:00	CHE 91	Organic Thin Films II (joint session CPP/DS/HL, organized by DS)
CPP 47.1–47.7	Wed	16:15–18:15	ZEU 255	Fluids and Interfaces I
CPP 48.1–48.13	Wed	18:30–21:00	P2-OG1	Poster: Polymer Crystallization, Nucleation and Selfassembly
CPP 49.1–49.16	Wed	18:30–21:00	P2-OG1	Poster: Surfaces, Interfaces, Thin Films, Nanostructures
CPP 50.1–50.38	Wed	18:30–21:00	P3	Poster: Organic Electronics and Photovoltaics, Molecular Excitations
CPP 51.1–51.10	Wed	18:30–21:00	P3	Poster: Charged Soft Matter, Polyelectrolytes, Ionic Liquids
CPP 52.1–52.12	Wed	18:30–21:00	P3	Poster: Hydrogels, Microgels, Responsive Polymers
CPP 53.1–53.1	Thu	9:30–10:00	ZEU 222	Keynote Lecture III
CPP 54.1–54.12	Thu	9:30–13:00	HÜL 186	Active Matter II (joint session DY/BP/CPP, organized by DY)
CPP 55.1–55.8	Thu	10:15–13:00	ZEU 222	Focus: Static and Dynamic Disorder Phenomena on the Transport in Organic Semiconductors I
CPP 56.1–56.9	Thu	10:15–13:00	ZEU 260	Hydrogels and Microgels I
CPP 57.1–57.10	Thu	10:15–13:00	ZEU 114	Thin Films, Nanostructures and Nanoparticles I
CPP 58.1–58.8	Thu	10:15–12:45	ZEU 255	Fluids and Interfaces II
CPP 59.1–59.9	Thu	15:00–18:00	ZEU 222	Focus: Static and Dynamic Disorder Phenomena on the Transport in Organic Semiconductors II

CPP 60.1–60.9	Thu	15:00–18:00	ZEU 260	Focus: Topological Problems in the Physics of Polymers, Biopolymers and Fibers I (joint session BP/CPP, organized by CPP)
CPP 61.1–61.8	Thu	15:00–17:00	ZEU 114	Charged Soft Matter, Ionic Liquids and Polyions II
CPP 62.1–62.12	Thu	15:00–18:15	ZEU 255	Fluids and Interfaces III
CPP 63.1–63.1	Fri	9:30–10:00	ZEU 222	Keynote Lecture IV
CPP 64.1–64.8	Fri	9:30–11:45	CHE 91	Organic-Inorganic Hybride Interfaces (joint session CPP/DS/HL, organized by DS)
CPP 65.1–65.10	Fri	9:30–12:30	HÜL 186	Complex Fluids and Soft Matter (organized by DY)
CPP 66.1–66.9	Fri	10:00–12:30	ZEU 118	Glasses and Glass Transition (joint session DY/CPP/DF, organized by DY)
CPP 67.1–67.6	Fri	10:15–13:00	ZEU 222	Focus: Topological Problems in the Physics of Polymers, Biopolymers and Fibers II (joint session BP/CPP, organized by CPP)
CPP 68.1–68.11	Fri	10:15–13:15	ZEU 260	Hydrogels and Microgels II
CPP 69.1–69.10	Fri	10:15–13:00	ZEU 114	Thin Films, Nanostructures and Nanoparticles II
CPP 70.1–70.10	Fri	10:15–13:15	ZEU 255	Organic Electronics and Photovoltaics V: OPV (joint session CPP/DS/HL, organized by CPP)
CPP 71.1–71.5	Fri	10:30–13:00	HSZ 02	Frontiers of Electronic-Structure Theory: New Concepts and Developments in Density Functional Theory and Beyond

Annual General Meeting of the Chemical and Polymer Physics Division

Thursday 18:30–19:15 ZEU 222

- Bericht
- Wahl des Sprechers
- Verschiedenes