

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

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

Kurt Kremer (stv. Sprecher)  
MPI für Polymerforschung  
Ackermannweg 10  
55128 Mainz  
kremer@mpip-mainz.de

### Overview of Invited Talks and Sessions

(Lecture rooms H37, H40, H42, and H51; Poster B2)

#### Invited Talks

CPP 3.1	Mon	9:30–10:00	H40	<b>Orientation effects in polymer networks</b> — ●VLADIMIR TOSHCHEVIKOV
CPP 6.1	Mon	9:30–10:00	H51	<b>Dynamics of thermosensitive core-shell dumbbells as analyzed by rheo-SANS</b> — ●MATTHIAS BALLAUFF
CPP 6.8	Mon	11:45–12:15	H51	<b>Percolation in colloidal model systems</b> — ●TANJA SCHILLING, HUGUES MEYER, MOHIT DIXIT, MARK MILLER, PAUL VAN DER SCHOOT
CPP 8.1	Mon	15:00–15:30	H40	<b>The role of nonlinearities and kinetics at phase transitions in stimuli-responsive polymer solutions and hydrogels</b> — ●MARTINE PHILIPP, WINFRIED PETRY, PETER MÜLLER-BUSCHBAUM
CPP 17.1	Tue	9:30–10:00	H40	<b>Molecular Dynamics Simulations of Compacted Polyelectrolyte Complexes</b> — ●DIDDO DIDDENS, JÖRG BASCHNAGEL, ALBERT JOHNER
CPP 20.1	Tue	9:30–10:00	H51	<b>Photoinduced Surface Patterning in Azo-Polymers: How Can Supramolecular Functionalization Strategies Serve Us?</b> — ●ARRI PRIMÄGI
CPP 20.6	Tue	11:15–11:45	H51	<b>Plasmon coupling in self-assembled colloidal monolayers</b> — ●MATTHIAS KARG
CPP 23.2	Tue	14:15–14:45	H40	<b>Challenges and opportunities of nanostructured block copolymer membranes for lithium-ion batteries</b> — ●EZZELDIN METWALLI, MAJID RASOOL, SIMON BRUNNER, PETER MÜLLER-BUSCHBAUM
CPP 25.1	Tue	14:00–14:30	H51	<b>Plasmonic heating brings dynamic control of microgel shape and locomotion</b> — ●AHMED MOURRAN, HANG ZHANG, MARTIN MOELLER
CPP 32.1	Wed	9:30–10:00	H37	<b>Towards 100% efficient OLEDs using thermally activated delayed fluorescence; how does the spin conversion work</b> — ●ANDREW MONKMAN, MARC ETHERINGTON, PAUL KLEIN, DAVID GRAVES, PRZEMYSŁAW DATA, PALOMA DOS SANTOS LAYS, ROBERTO NOBUYASU, YOUHEI TACKED, FERNANDO DIAS
CPP 32.6	Wed	11:15–11:45	H37	<b>Effects of charge and exciton diffusion on triplet-polaron quenching and triplet-triplet annihilation in disordered organic semiconductors</b> — ●REINDER COEHOORN, HARM VAN EERSEL, LE ZHANG, PETER BOBBERT, RENE JANSSEN
CPP 33.3	Wed	10:00–10:30	H40	<b>Quasi-elastic neutron scattering study of an ionic liquid confined in nanoporous carbon</b> — MARK BUSCH, TOMMY HOFMANN, BORIS DY-ATKIN, YURI GOGOTSI, ALEXEI KORNY SHEV, JAN EMBS, BERNHARD FRICK, ●PATRICK HUBER
CPP 34.1	Wed	9:30–10:00	H42	<b>Polymer crystallization and nucleation: New insights from fast scanning calorimetry</b> — ●CHRISTOPH SCHICK, EVGENY ZHURAVLEV, RENÉ ANDROSCH
CPP 35.6	Wed	11:00–11:30	H51	<b>The extraordinary mechanical properties of spider silk and its molecular foundation</b> — ●FRIEDRICH KREMER, MARKUS ANTON, PERIKLIS PAPANDOPOULOS, ROXANA FIGULI, WILHELM KOSSACK
CPP 39.1	Wed	15:00–15:30	H37	<b>The Nature of the ‘Triplet Pair State’ in Singlet Exciton Fission.</b> — ●JENNY CLARK, ANDREW MUSSER, CHAW KEONG YONG, DANIEL POLAK

CPP 40.3	Wed	15:30–16:00	H40	<b>Competing oligonucleotide macromolecules: binding preferences instead of a <i>ménage à trois</i></b> — ●ALBRECHT OTT
CPP 41.1	Wed	16:00–16:30	H42	<b>From holes to drops to toroids: Transcription of surface patterns into 3D-morphologies by dewetting</b> — ●GÜNTER REITER, SAMER AL AKHRASS, LAURANT VONNA
CPP 42.5	Wed	16:00–16:30	H51	<b>A coarse-grained model for DNA: dynamics of self-assembling biological systems and nanostructures.</b> — ●ARD LOUIS
CPP 42.8	Wed	17:15–17:45	H51	<b>Principle of Maximum Caliber and its application in biology</b> — ●KINGSHUK GHOSH
CPP 42.9	Wed	17:45–18:15	H51	<b>Coarse-graining of conservative and non-conservative interactions in molecular liquids</b> — ●NICO VAN DER VEGT
CPP 48.1	Thu	9:30–10:00	H37	<b>It is water what matters: THz absorption spectroscopy as a new tool to study solvation dynamics</b> — ●MARTINA HAVENITH
CPP 48.3	Thu	10:15–10:45	H37	<b>Dielectric and diffusional aspects of hydration water</b> — ●ROLAND NETZ, MATEJ KANDUC
CPP 48.5	Thu	11:15–11:45	H37	<b>Neutron scattering clarifies the behaviour of water in cells</b> — ●GIUSEPPE ZACCAI
CPP 48.7	Thu	12:00–12:30	H37	<b>Controlling Water Evaporation: self-assembly at air/liquid interfaces</b> — ●EMMA SPARR, KEVIN ROGER
CPP 49.1	Thu	9:30–10:00	H40	<b>Patterned organic ferroelectric memory diodes by solution micromolding</b> — ●PAUL BLOM, THOMAS LENZ, SIMON BENNECKENDORF, KAMAL ASADI, DAGO DE LEEUW
CPP 50.1	Thu	9:30–10:00	H42	<b>Provoking liquids to dewet and to slide: About concave drops and hungry droplets</b> — ●KARIN JACOBS
CPP 52.1	Thu	9:30–10:00	H51	<b>Synthesis of 2D polymers</b> — ●DIETER A. SCHLÜTER
CPP 52.2	Thu	10:00–10:30	H51	<b>Carbon nanomembranes as a platform for engineering of functional 2D materials</b> — ●ANDREY TURCHANIN
CPP 60.1	Thu	15:00–15:30	H51	<b>Evolution of mono- and bilayer graphene in chemical vapor deposition and the thinnest feasible porous membranes for ultimate mass transport</b> — ●HYUNG GYU PARK
CPP 61.1	Thu	16:15–16:45	H51	<b>Tuning of ordering in colloidal suspensions confined in thin films</b> — SEBASTIAN SCHÖN, YAN ZENG, SABINE KLAPP, ●REGINE VON KLITZING

## Tutorials

CPP 1.1	Sun	16:00–16:50	H18	<b>Perovskite photovoltaics: Synthesis, structure and device architecture</b> — ●PABLO DOCAMPO
CPP 1.2	Sun	16:50–17:40	H18	<b>Charge Carrier Generation and Recombination in Organic and Perovskite Solar Cells</b> — ●ANDREAS BAUMANN
CPP 1.3	Sun	17:40–18:30	H18	<b>The electronic structure in hybrid perovskite layers and devices</b> — ●SELINA OLTHOF

## Invited talks of the joint symposium SYHP

See SYHP for the full program of the symposium.

SYHP 1.1	Mon	9:30–10:00	H1	<b>Perovskite Semiconductors: Opportunities and Challenges for Photovoltaic Materials Design</b> — ●DAVID B. MITZI
SYHP 1.2	Mon	10:00–10:30	H1	<b>Perovskite Solar Cells: A new Paradigm in Photovoltaics</b> — ●MOHAMMAD NAZEERUDDIN
SYHP 1.3	Mon	10:30–11:00	H1	<b>Charge-Carrier Diffusion and Radiative Efficiencies in Hybrid Metal Halide Perovskites</b> — ●LAURA HERZ
SYHP 1.4	Mon	11:15–11:45	H1	<b>Photovoltage losses in perovskite solar cells</b> — ●KRISTOFER TVINGSTED
SYHP 1.5	Mon	11:45–12:15	H1	<b>Computational screening of perovskite solar energy materials</b> — ●KARSTEN W. JACOBSEN

## Invited talks of the joint symposium SYAD

See SYAD for the full program of the symposium.

SYAD 1.1	Thu	15:00–15:30	H15	<b>Phenomenology of Collective Chemotaxis in Artificial and Living Active Matter</b> — ●RAMIN GOLESTANIAN
SYAD 1.2	Thu	15:30–16:00	H15	<b>First-passage times of Markovian and non Markovian random walks in confinement</b> — ●RAPHAEL VOITURIEZ
SYAD 1.3	Thu	16:00–16:30	H15	<b>Cytoskeleton organization as an optimized, spatially inhomogeneous intermittent search strategy</b> — ●HEIKO RIEGER, YANNICK SCHRÖDER, KARSTEN SCHWARZ
SYAD 1.4	Thu	16:45–17:15	H15	<b>Ergodicity violation and ageing in living biological cells</b> — ●RALF METZLER
SYAD 1.5	Thu	17:15–17:45	H15	<b>Anomalous diffusion within cells</b> — SARAH KLEIN, ●CECILE APPERT-ROLLAND, LUDGER SANTEN

## Sessions

CPP 1.1–1.3	Sun	16:00–18:30	H18	<b>Tutorial: Hybrid and Perovskite Photovoltaics (CPP/DF/DS/HL, organized by CPP)</b>
CPP 2.1–2.5	Mon	9:30–12:15	H1	<b>Symposium SYHP: Fundamentals of Hybrid and Perovskite Photovoltaics (CPP/DS/DF/HL, organized by CPP)</b>
CPP 3.1–3.9	Mon	9:30–12:15	H40	<b>Polymer Networks and Elastomers</b>
CPP 4.1–4.10	Mon	9:30–12:15	H41	<b>Nanoparticles, Nanocrystals and Composites I</b>
CPP 5.1–5.6	Mon	9:30–11:00	H45	<b>Colloids and Complex Fluids I (joint session BP/CPP/DY, organized by BP)</b>
CPP 6.1–6.11	Mon	9:30–13:00	H51	<b>Colloids and Complex Fluids II (joint session BP/CPP/DY, organized by CPP)</b>
CPP 7.1–7.9	Mon	15:00–17:30	H38	<b>Hybrid and Perovskite Photovoltaics I (joint session CPP/DF/DS/HL, organized by CPP)</b>
CPP 8.1–8.9	Mon	15:00–17:45	H40	<b>Hydrogels and Microgels</b>
CPP 9.1–9.6	Mon	15:00–16:30	H41	<b>Nanoparticles, Nanocrystals and Composites II</b>
CPP 10.1–10.11	Mon	15:00–18:00	H42	<b>Colloids and Complex Fluids III (joint session BP/CPP/DY, organized by CPP)</b>
CPP 11.1–11.24	Mon	18:15–21:00	Poster B2	<b>Poster: Hybrid and Perovskite Photovoltaics</b>
CPP 12.1–12.18	Mon	18:15–21:00	Poster B2	<b>Poster: Colloids and Complex Fluids</b>
CPP 13.1–13.14	Mon	18:15–21:00	Poster B2	<b>Poster: Nanoparticles, Nanocrystals and Composites</b>
CPP 14.1–14.7	Mon	18:15–21:00	Poster B2	<b>Poster: Polymer Networks and Elastomers, Hydrogels, Soft Robotics</b>
CPP 15.1–15.8	Mon	18:15–21:00	Poster B2	<b>Poster: Functional Polymer Hybrids</b>
CPP 16.1–16.2	Tue	9:30–10:30	H3	<b>High Efficiency Photovoltaics (joint session AKE/CPP, organized by AKE)</b>
CPP 17.1–17.10	Tue	9:30–12:30	H40	<b>Polyelectrolytes</b>
CPP 18.1–18.12	Tue	9:30–12:45	H42	<b>Molecular Electronics and Photonics</b>
CPP 19.1–19.12	Tue	9:30–13:00	H47	<b>Microswimmers (joint session BP/CPP/DY, organized by DY)</b>
CPP 20.1–20.10	Tue	9:30–12:45	H51	<b>Focus: Functional Polymer Hybrids I</b>
CPP 21.1–21.8	Tue	10:45–13:00	H37	<b>Hybrid and Perovskite Photovoltaics II (joint session CPP/DF/DS/HL, organized by CPP)</b>
CPP 22.1–22.6	Tue	14:00–15:30	H37	<b>Organic Electronics and Photovoltaics I (CPP/DS/HL/O, organized by CPP)</b>
CPP 23.1–23.5	Tue	14:00–15:30	H40	<b>Charged Soft Matter</b>
CPP 24.1–24.5	Tue	14:00–15:15	H46	<b>Complex Fluids and Colloids IV (joint session BP/CPP/DY, organized by DY)</b>
CPP 25.1–25.6	Tue	14:00–16:00	H51	<b>Focus: Functional Polymer Hybrids II</b>
CPP 26.1–26.9	Tue	18:15–21:00	Poster B2	<b>Poster: Charged Soft Matter, Polyelectrolytes, Ionic Liquids</b>
CPP 27.1–27.8	Tue	18:15–21:00	Poster B2	<b>Poster: Soft Matter Dynamics / Glasses</b>
CPP 28.1–28.6	Tue	18:15–21:00	Poster B2	<b>Poster: Computational Physics of Soft Matter</b>
CPP 29.1–29.8	Tue	18:15–21:00	Poster B2	<b>Poster: Crystallization, Nucleation, Self Assembly</b>
CPP 30.1–30.37	Tue	18:15–21:00	Poster B2	<b>Poster: Organic Electronics and Photovoltaics</b>

CPP 31.1–31.8	Wed	9:30–11:45	H11	Hybrid and Perovskite Photovoltaics III (joint session CPP/DF/DS/HL, organized by DS)
CPP 32.1–32.10	Wed	9:30–12:45	H37	Focus: Triplet States in Organic Optoelectronics I
CPP 33.1–33.11	Wed	9:30–12:45	H40	Ionic Liquids and Water
CPP 34.1–34.9	Wed	9:30–12:15	H42	Crystallization, Nucleation, Self Assembly I (joint session CPP/DY, organized by CPP)
CPP 35.1–35.12	Wed	9:30–13:00	H51	Activated and Glassy Dynamics of Soft Matter (joint session CPP/DY, organized by CPP)
CPP 36.1–36.11	Wed	10:00–13:00	H47	Complex Fluids and Colloids V (joint session BP/ CPP/DY, organized by DY)
CPP 37.1–37.9	Wed	10:30–13:00	S054	Organic-Inorganic Systems II: Energy Level Alignment (organized by O)
CPP 38.1–38.12	Wed	14:45–18:30	H2	Organic Photovoltaics and Electronics (joint session CPP/HL, organized by HL)
CPP 39.1–39.5	Wed	15:00–16:30	H37	Focus: Triplet States in Organic Optoelectronics II
CPP 40.1–40.11	Wed	15:00–18:15	H40	Biomaterials and Biopolymers I (joint session BP/ CPP/MM, organized by CPP)
CPP 41.1–41.8	Wed	16:00–18:30	H42	Crystallization, Nucleation, Self Assembly II (joint session CPP/DY, organized by CPP)
CPP 42.1–42.9	Wed	15:00–18:15	H51	Focus: Multiscale Simulations for Soft Matter: The Challenge of Dynamics (joint session CPP/DY, organized by CPP)
CPP 43.1–43.11	Wed	18:15–21:00	Poster B2	Poster: The Physics of Water Interactions with Biological Matter
CPP 44.1–44.9	Wed	18:15–21:00	Poster B2	Poster: Biomaterials and Biopolymers
CPP 45.1–45.9	Wed	18:15–21:00	Poster B2	Poster: Two Dimensional Functional Materials
CPP 46.1–46.14	Wed	18:15–21:00	Poster B2	Poster: Wetting, Nano- and Microfluidics
CPP 47.1–47.20	Wed	18:15–21:00	Poster B2	Poster: Interfaces and Thin Films
CPP 48.1–48.8	Thu	9:30–12:45	H37	Focus: The Physics of Water Interactions with Biological Matter (joint session BP/ CPP, organized by CPP)
CPP 49.1–49.11	Thu	9:30–12:45	H40	Organic Electronics and Photovoltaics II (joint session CPP/DS/HL/O, organized by CPP)
CPP 50.1–50.11	Thu	9:30–12:45	H42	Wetting, Nano- and Microfluidics I (joint session CPP/DY, organized by CPP)
CPP 51.1–51.12	Thu	9:30–13:00	H48	Glasses (joint session CPP/DY, organized by DY)
CPP 52.1–52.9	Thu	9:30–12:30	H51	Focus: Two Dimensional Functional Materials I
CPP 53.1–53.5	Thu	11:45–13:00	H52	Biomaterials and Biopolymers II (joint session BP/ CPP/MM, organized by MM)
CPP 54.1–54.13	Thu	14:45–18:30	H2	Hybrid and Perovskite Photovoltaics IV (joint session CPP/DF/DS/HL, organized by HL)
CPP 55.1–55.5	Thu	15:00–17:45	H15	Symposium SYAD: Anomalous Diffusion in Complex Environments (BP/ CPP/DY, organized by BP)
CPP 56.1–56.11	Thu	15:00–18:00	S051	Organic-Inorganic Systems III: Electronic Structure (organized by O)
CPP 57.1–57.13	Thu	15:00–18:30	H40	Polymer Dynamics and Rheology (joint session CPP/DY, organized by CPP)
CPP 58.1–58.7	Thu	15:00–16:45	H42	Wetting, Nano- and Microfluidics II (joint session CPP/DY, organized by CPP)
CPP 59.1–59.5	Thu	15:00–16:15	H45	Biomaterials and Biopolymers III (joint session BP/ CPP/MM, organized by BP)
CPP 60.1–60.3	Thu	15:00–16:00	H51	Focus: Two Dimensional Functional Materials II
CPP 61.1–61.7	Thu	16:15–18:15	H51	Interfaces and Thin Films I (joint session CPP/DY, organized by CPP)
CPP 62.1–62.9	Fri	9:30–12:00	H40	Organic Electronics and Photovoltaics III (joint session CPP/DS/HL/O, organized by CPP)
CPP 63.1–63.9	Fri	9:30–12:00	H51	Interfaces and Thin Films II (joint session CPP/DY, organized by CPP)

## Annual General Meeting of the Chemical and Polymer Physics Division

Donnerstag 19:00–19:30 H51

- Bericht
- Posterpreis (gestiftet von Asylum Research)
- Wahl stv. Sprecher