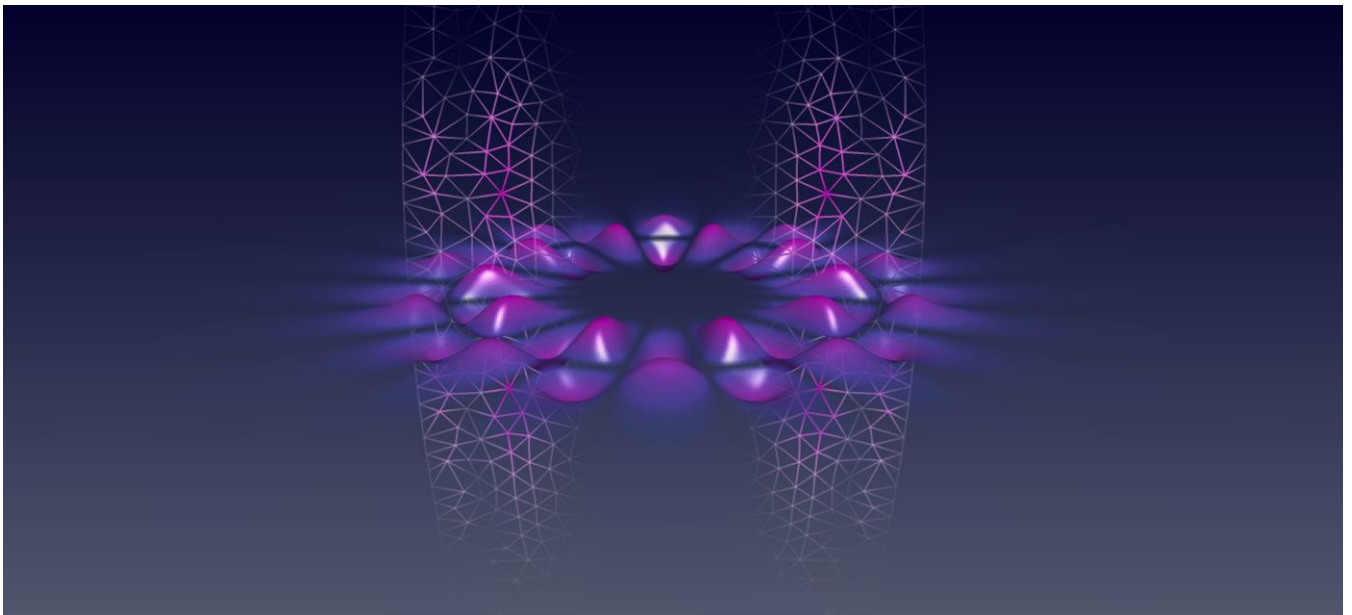


# 14<sup>th</sup> Annual Meeting Photonic Devices

## AMPD2022



Date: 28-29 April 2022  
Location: Zuse Institute Berlin, Germany

# Venue

Zuse Institute Berlin  
Takustraße 7  
14195 Berlin  
Germany



# Organizers

The Annual Meeting Photonic Devices is organized by members of the Computational Nano Optics group.  
[www.zib.de/cno](http://www.zib.de/cno)

# Corona Regulations

- 3G: persons who recovered from COVID, fully vaccinated persons or tested persons are admitted
- Mask obligation exists in all closed rooms
- Limited space in the lecture hall: if the capacity of the lecture hall is exceeded during a talk, participants may have to stay outside temporarily
- The regulations may have to be updated

Thursday

From	Speaker	Affiliation	Title
09:00	<b>Opening</b>		
09:15	Tim Liedl	Ludwig-Maximilians-Universität München	Assembling functional devices and materials with DNA origami (invited)
09:45	Igor V. Bondarev	North Carolina Central University, Durham	Broadly Tunable Unidirectional Negative Refraction with Ultrathin Periodically Aligned Carbon Nanotube Films
10:00	Despoina Petousi	ADVA Optical Networking, Berlin	Comparison of Depletion-Type PN Phase Shifters for Silicon Photonics Mach-Zehnder and Ring Modulators
10:15	Klaus Jäger	Helmholtz-Zentrum Berlin für Materialien und Energie	World-record perovskite/silicon tandem solar cells – the role of photonics
10:30	<b>Coffee Break</b>		
11:00	Stephanie Reich	Freie Universität Berlin	Nanoparticle supercrystals and ultrastrong light-matter coupling in materials (invited)
11:30	Matthias Plock	Zuse Institute Berlin	Efficient Bayesian Target-Vector Optimization for Parameter Reconstruction Applications
11:45	Richard Ciesielski	Physikalisch-Technische Bundesanstalt, Berlin	Parameter-dependent study of periodic nanostructures using soft X-ray scatterometry and model-based reconstruction
12:00	<b>Lunch Break</b>		
13:30	Dominik Lentrodt	Albert-Ludwigs-Universität Freiburg	Multi-mode quantum optics in lossy resonators (invited)
14:00	Emil V. Denning	Technische Universität Berlin	Quantum nonlinear optics with atomically thin semiconductors in electromagnetic resonators

From	Speaker	Affiliation	Title
14:15	Lara Greten	Technische Universität Berlin	Strong Exciton-plasmon coupling in hybrids of 2D semiconductors and metal supercrystals
14:30	Julius Kullig	Universität Magdeburg	Light regulation by phase-space tailoring in chaotic microcavities
14:45	Tomasz Czystanowski	Lodz University of Technology	Bound states in the continuum in all-semiconductor configurations with broken up-down mirror symmetry
15:00	Jose M. Llorens	Instituto de Micro y Nanotecnología IMN-CNM (CSIC), Madrid	Mie-Tamm optical cavity structure for high-performance single-photon sources
15:15	<b>Coffee Break</b>		
16:00	Ora Bitton	Weizmann Institute of Science, Rehovot	Strong coupling in plasmonic cavities at the single quantum emitter limit (invited)
16:30	Paweł Mrowiński	Wrocław University of Science and Technology	Towards Si-waveguide coupled quantum dot single-photon source emitting in the telecom C-band
16:45	Yujing Wang	Technical University of Denmark, Lyngby	Near-unity efficiency in ridge waveguide-based on-chip single-photon source
17:00	Mohamed S. Abdelkhalik	Eindhoven University of Technology	Bringing nanophotonics into Light-Emitting Diodes (LEDs) for ultra-high brightness
17:15	Alexander N. Sprafke	Martin Luther University Halle-Wittenberg	Hyperuniform Disorder for Tailored Light Scattering Metasurfaces
17:30	Carsten Henkel	Universität Potsdam	Extinction spectra of Au nano-particles coated with resonant absorbers
17:45	<b>End of Day</b>		

## Friday

From	Speaker	Affiliation	Title
09:00	Manuel Katzer	Technische Universität Berlin	Impact of dark excitons on Förster type resonant energy transfer between dye molecules and atomically thin semiconductors (invited)
09:30	Anna Andrie	Physikalisch-Technische Bundesanstalt, Berlin	The reconstruction of nanostructures from grazing incidence X-ray fluorescence measurements with a model-free parameterization and machine learning
09:45	Nils Wauschkuhn	Physikalisch-Technische Bundesanstalt, Berlin	Simultaneous dimensional and analytical characterization of ordered nanostructures using grazing emission X-ray fluorescence
10:00	Jan Krüger, Bernd Bodermann	Physikalisch-Technische Bundesanstalt, Braunschweig	Simulation and Machine Learning for high-accuracy dimensional Microscopy
10:15	<b>Coffee Break</b>		
11:00	Tobias Kraus	temicon GmbH	Manufacturing, characterization and simulation of interference lithographic stochastic gaussian surface diffusers of varying feature size
11:15	Philipp Schneeweiß	Humboldt-Universität zu Berlin	Atomic spin-controlled non-reciprocal Raman amplification of fibre-guided light
11:30	Simone Zanotto	CNR – Istituto Nanoscienze & Scuola Normale Superiore, Pisa	Photonic and Phononic metasurfaces for optomechanics
11:45	Mohamed M. Ghobara	Freie Universität Berlin	Photonic jets generated by pennate diatom valves
12:00	<b>Lunch Break</b>		

Friday

From	Speaker	Affiliation	Title
14:00	Stephan Reitzenstein	Technische Universität Berlin	Numerical optimization and deterministic fabrication of quantum devices for applications in photonic quantum technology (invited)
14:30	Gregor Posnjak	Ludwig-Maximilians-Universität München	Self-assembled inverse diamond lattice with visible wavelength periodicity
14:45	Devashish Pandey	Technical University of Denmark, Lyngby	Transfer Matrix Approach to Identify the Effect of Interlayer Distances of Graphene Multilayers in The Far and Near Field
15:00	Maximilian A. Weissflog	Friedrich Schiller University Jena	A Quasinormal Mode Description of SPDC in Dielectric Nanoresonators
15:15	Fridtjof Betz	Zuse Institute Berlin	Riesz projection expansion of optical far-field quantities

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