

Semiconductor Physics Division Fachverband Halbleiterphysik (HL)

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Overview of Invited Talks and Sessions

(Lecture halls POT 6, POT 81, POT 112, POT 151, POT 251, and POT 361; Poster P1 and P2/EG)

Plenary Talks of the Semiconductor Physics Division

PLV I	Mon	8:30– 9:15	HSZ 01	Spin-Photon Interfaces and Their Applications — ●METE ATATUERE
PLV VIII	Thu	8:30– 9:15	HSZ 01	Nanomechanics: Tunes of the nanoguitar — ●EVA WEIG
PLV IX	Thu	14:00–14:45	HSZ 01	Metal Halide Perovskites for Photovoltaic Applications — ●LAURA HERZ

Invited Talks

HL 3.1	Mon	9:30–10:00	POT 151	Schrödinger cat states of a 16-microgram mechanical oscillator — ●YIWEN CHU, MARIUS BILD, MATTEO FADEL, YU YANG, UWE VON LÜPKE, PHILLIP MARTIN, ALESSANDRO BRUNO
HL 3.2	Mon	10:00–10:30	POT 151	High-fidelity quantum information processing with spins and phonons — ●PETER RABL
HL 3.5	Mon	11:30–12:00	POT 151	Control of spin centers in silicon carbide using acoustic fields — ●ALBERTO HERNÁNDEZ-MÍNGUEZ
HL 8.9	Mon	17:30–18:00	POT 81	Time-resolved optical spectroscopy of 3R-stacked MoS₂ — ●SWARUP DEB, MICHAEL KEMPF, RICO SCHWARTZ, TOBIAS KORN
HL 9.1	Mon	15:00–15:30	POT 361	Spin and valley lifetime in graphene quantum dots — ●GUIDO BURKARD
HL 9.2	Mon	15:30–16:00	POT 361	Microscopic modelling of electrostatically induced bilayer graphene quantum dots — ●ANGELIKA KNOTHE
HL 9.4	Mon	16:45–17:15	POT 361	Single-shot spin and valley Pauli blockade read-out in bilayer graphene quantum dots — ●CHUYAO TONG, REBEKKA GARREIS, WISTER WEI HUANG, ANNIKA KURZMANN, JOCELYN TERLE, SAMUEL JELE, KENJI WATANABE, TAKASHI TANIGUCHI, THOMAS IHN, KLAUS ENSSLIN
HL 9.5	Mon	17:15–17:45	POT 361	Particle-hole symmetry protects spin-valley blockade in graphene quantum dots — ●CHRISTIAN VOLK, LUCA BANSZERUS, SAMUEL MÖLLER, KATRIN HECKER, EIKE ICKING, KENJI WATANABE, TAKASHI TANIGUCHI, FABIAN HASSLER, CHRISTOPH STAMPFER
HL 10.1	Mon	15:00–15:30	POT 151	Surface Acoustic Wave Cavity Optomechanics with 2D Materials — ●GALAN MOODY
HL 10.2	Mon	15:30–16:00	POT 151	Phononic Microresonators Coupled by Surface Acoustic Waves — ●SARAH BENCHABANE, MACIEJ BARANSKI, FENG GAO, OLIVIER GAIFFE, VALÉRIE SOUMANN, ROLAND SALUT, ABDELKRIM KHELIF
HL 23.1	Wed	9:30–10:00	POT 361	Vertical-cavity surface-emitting lasers – this is the way — ●Å. HAGLUND, G. CARDINALI, L. PERSSON, F. HJORT, J. ENSLIN, E. TORRES, C. KUHN, S. GRAUPETER, M. GRIGOLETTO, M. A. BERGMANN, N. PROKOP, M. GUTTMANN, L. SULMONI, N. LOBO PLOCH, M. COBET, T. KOLBE, J. GUSTAVSSON, F. NIPPERT, I. HÄUSLER, M. R. WAGNER, J. CIERS, T. WERNICKE, M. KNEISL

HL 23.2	Wed	10:00–10:30	POT 361	Towards GaN-based diode lasers with narrow linewidth and high reliability — ●SVEN EINFELDT, ERIK FREIER, JI-HYE KANG, HANS WENZEL, ANNA MOGILATENKO, JOHANNES GLAAB, ASMAA ABOU-SHEWARIB, VEIT HOFFMANN, JOHANNES ENSLIN, MARTIN GUTTMANN, SAAD MAKHLADI, JÖRG FRICKE, OLAF BROX, MATHIAS MATALLA, MARIA NORMAN-REINER, CHRISTOPH STÖLMACKER, MARKUS WEYERS, LUCA SULMONI, MICHAEL KNEISSL, LUKAS UHLIG, ULRICH T. SCHWARZ
HL 23.3	Wed	10:30–11:00	POT 361	Use of wafer patterning for new functionalities of InGaN light emitters — ●ANNA KAFAR, RYOTA ISHII, ATSUSHI SAKAKI, KIRAN SABA, CONNY BECHT, SZYMON GRZANKA, ULRICH SCHWARZ, MITSURU FUNATO, YOICHI KAWAKAMI, PIOTR PERLIN
HL 25.1	Wed	9:30–10:00	POT 251	Interfaces in perovskite optoelectronics: role of energy level alignment and interface chemistry — ●SELINA OLTTHOF
HL 27.1	Wed	15:00–15:30	POT 81	experimentamus! Forschendes Lernen von Physik und Chemie in der Grundschule — ●SEBASTIAN SCHLÜCKER
HL 27.4	Wed	16:00–16:30	POT 81	Under the Microscope – spotlighting materials and nano science — ●SVENJA LOHMANN, PRANOTI KSHIRSAGAR
HL 27.5	Wed	17:00–17:30	POT 81	Phyphox – A pocketful of physics — ●CHRISTOPH STAMPFER
HL 27.8	Wed	18:00–18:30	POT 81	Physics for school and the public at the LMU — ●DR. CECILIA SCORZA-LESCH
HL 28.1	Wed	15:00–15:30	POT 361	Fabrication of AlGaIn-based UV-B laser diodes on lattice-relaxed high-quality AlGaIn — ●MOTOAKI IWAYA, SHO IWAYAMA, TETSUYA TAKEUCHI, SATOSHI KAMIYAMA, HIDETO MIYAKE
HL 28.2	Wed	15:30–16:00	POT 361	Breakthrough technologies to realize room-temperature continuous-wave deep-ultraviolet laser diodes — ●MAKI KUSHIMOTO
HL 35.1	Thu	9:30–10:00	POT 361	Quantum Dynamics of Polarons in Doped Semiconductor Monolayers — ●XIAOQIN ELAINE LI, DI HUANG
HL 35.2	Thu	10:00–10:30	POT 361	Impact of phonons on time-resolved optical signals from excitons — ●DORIS E. REITER
HL 35.3	Thu	10:30–11:00	POT 361	Hot-Exciton Quantum Dynamics in Zero-Dimensional Structures — ●ALFRED LEITENSTORFER
HL 35.6	Thu	12:00–12:30	POT 361	Ultrafast dynamics and wave mixing at excitonic resonances in atomically thin semiconductors — ●ANDREAS KNORR, DOMINIK CHRISTIANSEN, FLORIAN KATSCH, MANUEL KATZER, MALTE SELIG
HL 35.7	Thu	12:30–13:00	POT 361	Spontaneous parametric down-conversion in semiconductor metasurfaces — ●MARIA CHEKHOVA
HL 43.1	Thu	15:00–15:30	POT 251	Superradiance as a witness to multipartite entanglement — ●FREDERIK LOHOF, CHRISTOPHER GIES

Invited Talks of the joint Symposium SKM Dissertation Prize 2023 (SYSD)

See SYSD for the full program of the symposium.

SYSD 1.1	Mon	9:30–10:00	HSZ 04	Diffusion of antibodies in solution: from individual proteins to phase separation domains — ●ANITA GIRELI
SYSD 1.2	Mon	10:00–10:30	HSZ 04	Intermediate Filament Mechanics Across Scales — ●ANNA V. SCHEPERS
SYSD 1.3	Mon	10:30–11:00	HSZ 04	Ultrafast Probing and Coherent Vibrational Control of a Surface Structural Phase Transition — ●JAN GERRIT HORSTMANN
SYSD 1.4	Mon	11:00–11:30	HSZ 04	Electro-active metasurfaces employing metal-to-insulator phase transitions — ●JULIAN KARST
SYSD 1.5	Mon	11:30–12:00	HSZ 04	The role of unconventional symmetries in the dynamics of many-body systems — ●PABLO SALA

Invited Talks of the joint Symposium Real-Time Measurements of Quantum Dynamics (SYQD)

See SYQD for the full program of the symposium.

SYQD 1.1	Thu	9:30–10:00	HSZ 01	Real-time measurement and control of spin dynamics in quantum dots — ●SEIGO TARUCHA
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SYQD 1.2	Thu	10:00–10:30	HSZ 01	Quantum Dot arrays for Quantum Information Transfer — •GLORIA PLATERO, DAVID FERNANDEZ-FERNANDEZ, JUAN ZURITA
SYQD 1.3	Thu	10:30–11:00	HSZ 01	Optical Detection of Real-Time Quantum Dynamics in Quantum Dots — •MARTIN GELLER, JENS KERSKI, ERIC KLEINHERBERS, JÜRGEN KÖNIG, ANNIKA KURZMANN, PIA LOCHNER, AXEL LORKE, ARNE LUDWIG, HENDRIK MANNEL, PHILIPP STEGMANN, ANDREAS WIECK, MARCEL ZÖLLNER
SYQD 1.4	Thu	11:30–12:00	HSZ 01	Cooper Pair Splitting in Real-Time — •CHRISTIAN FLINDT
SYQD 1.5	Thu	12:00–12:30	HSZ 01	Trajectory-based detection in stochastic and quantum thermodynamics — •JUKKA PEKOLA

Invited Talks of the joint Symposium Physics of van der Waals 2D Heterostructures (SYHS)

See SYHS for the full program of the symposium.

SYHS 1.1	Fri	9:30–10:00	HSZ 01	Novel moiré excitons and ultrafast optical dynamics in van der Waals 2D heterostructures — •STEVEN G. LOUIE
SYHS 1.2	Fri	10:00–10:30	HSZ 01	Interaction induced magnetism in 2D semiconductor moiré superlattices — •XIAODONG XU
SYHS 1.3	Fri	10:30–11:00	HSZ 01	Ions in tight places: intercalation and transport of ions in van der Waals heterostructures — •IRINA GRIGORIEVA
SYHS 1.4	Fri	11:15–11:45	HSZ 01	Spin-orbit proximity in van der Waals heterostructures — •FELIX CASANOVA
SYHS 1.5	Fri	11:45–12:15	HSZ 01	Plethora of many-body ground states in magic angle twisted bilayer graphene — •DMITRI EFETOV

Sessions

HL 1.1–1.10	Mon	9:30–12:30	POT 81	2D Materials I (joint session HL/CPP)
HL 2.1–2.6	Mon	9:30–11:15	POT 361	Organic Semiconductors (joint session HL/CPP)
HL 3.1–3.9	Mon	9:30–13:00	POT 151	Focus Session: Progress in Hybrid Phononic Quantum Technologies I
HL 4.1–4.10	Mon	9:30–12:30	POT 251	Perovskite and photovoltaics I (joint session HL/CPP)
HL 5.1–5.5	Mon	10:00–11:15	POT 112	Heterostructures, interfaces and surfaces
HL 6.1–6.8	Mon	10:30–13:00	TRE Ma	Focus Session: Frontiers of Electronic-Structure Theory III (joint session O/HL)
HL 7.1–7.66	Mon	13:00–15:00	P2/EG	Poster I
HL 8.1–8.10	Mon	15:00–18:15	POT 81	2D Materials II (joint session HL/CPP)
HL 9.1–9.5	Mon	15:00–17:45	POT 361	Focus Session: Graphene quantum dots (joint session HL/TT)
HL 10.1–10.10	Mon	15:00–18:30	POT 151	Focus Session: Progress in Hybrid Phononic Quantum Technologies II
HL 11.1–11.7	Mon	15:00–17:15	POT 251	Quantum transport and quantum Hall effects I (joint session HL/TT)
HL 12.1–12.7	Mon	15:00–17:15	POT 112	Semiconductor lasers I
HL 13.1–13.7	Mon	15:00–17:15	TRE Ma	Focus Session: Frontiers of Electronic-Structure Theory II (joint session O/HL)
HL 14.1–14.10	Tue	9:30–12:15	POT 81	2D Materials III (joint session HL/CPP)
HL 15.1–15.4	Tue	9:30–10:30	POT 361	Spin phenomena in semiconductors
HL 16.1–16.9	Tue	9:30–12:15	POT 151	Quantum dots: Transport (joint session HL/TT)
HL 17.1–17.11	Tue	9:30–12:45	POT 251	THz and MIR physics in semiconductors
HL 18.1–18.12	Tue	9:30–13:00	POT 112	Optical Properties (joint session HL/CPP)
HL 19.1–19.13	Tue	9:30–13:00	GÖR 226	Organic Electronics and Photovoltaics I (joint session CPP/HL)
HL 20.1–20.7	Tue	10:30–12:45	TRE Ma	Focus Session: Frontiers of Electronic-Structure Theory I (joint session O/HL)
HL 21.1–21.3	Tue	11:00–11:45	POT 361	Thermal properties
HL 22.1–22.10	Wed	9:30–12:30	POT 81	2D Materials IV (joint session HL/CPP)
HL 23.1–23.6	Wed	9:30–12:15	POT 361	Focus Session: Breakthroughs in wide-bandgap semiconductor laser diodes I
HL 24.1–24.13	Wed	9:30–13:15	POT 151	Quantum dots: Optics

HL 25.1–25.11	Wed	9:30–13:00	POT 251	Perovskite and photovoltaics II (joint session HL/CPP)
HL 26.1–26.8	Wed	10:30–13:00	TRE Ma	Focus Session: Frontiers of Electronic-Structure Theory IV (joint session O/HL)
HL 27.1–27.8	Wed	15:00–18:30	POT 81	Focus Session: Wissenschaftskommunikation / Outreach (joint session HL/O/TT)
HL 28.1–28.5	Wed	15:00–16:45	POT 361	Focus Session: Breakthroughs in wide-bandgap semiconductor laser diodes II
HL 29.1–29.10	Wed	15:00–18:00	POT 151	Materials and devices for quantum technology I
HL 30.1–30.6	Wed	15:00–17:00	POT 251	Quantum transport and quantum Hall effects II (joint session HL/TT)
HL 31.1–31.8	Wed	15:00–17:30	TRE Ma	Focus Session: Frontiers of Electronic-Structure Theory V (joint session O/HL)
HL 32.1–32.9	Wed	15:00–17:30	GÖR 226	Organic Electronics and Photovoltaics II (joint session CPP/HL)
HL 33.1–33.62	Wed	17:00–19:00	P1	Poster II
HL 34.1–34.9	Thu	9:30–12:00	POT 81	2D Materials V (joint session HL/CPP)
HL 35.1–35.9	Thu	9:30–13:30	POT 361	Focus Session: Transient multi-wave mixing on excitonic resonances
HL 36.1–36.7	Thu	9:30–11:45	POT 151	Transport properties
HL 37.1–37.9	Thu	9:30–12:15	POT 251	Materials and devices for quantum technology II
HL 38.1–38.7	Thu	9:30–11:45	POT 6	Functional semiconductors for renewable energy solutions I
HL 39.1–39.11	Thu	9:30–12:30	GÖR 226	Organic Electronics and Photovoltaics III (joint session CPP/HL)
HL 40.1–40.7	Thu	10:30–12:45	TRE Ma	Focus Session: Frontiers of Electronic-Structure Theory VI (joint session O/HL)
HL 41.1–41.7	Thu	15:00–17:00	POT 81	Oxide Semiconductors I: Ga₂O₃
HL 42.1–42.7	Thu	15:00–17:15	POT 151	Quantum dots: Growth
HL 43.1–43.6	Thu	15:00–16:45	POT 251	Semiconductor lasers II
HL 44.1–44.7	Thu	15:00–17:00	POT 112	Nitrides: Devices
HL 45.1–45.7	Thu	15:00–17:15	POT 6	Functional semiconductors for renewable energy solutions II
HL 46	Thu	18:00–19:00	POT 6	Members' Assembly
HL 47.1–47.7	Fri	9:30–11:30	POT 81	Oxide Semiconductors II
HL 48.1–48.9	Fri	9:30–12:00	POT 361	Ultra-fast Phenomena
HL 49.1–49.7	Fri	9:30–11:45	POT 151	Quantum dots: Devices
HL 50.1–50.12	Fri	9:30–13:00	POT 251	Materials and devices for quantum technology III
HL 51.1–51.10	Fri	9:30–12:15	POT 112	Nitrides: Preparation and Characterization
HL 52.1–52.8	Fri	9:30–12:30	GÖR 226	Focus: Self-Assembly of Plasmonic Nanostructures (joint session CPP/HL)

Mitgliederversammlung / Members' Assembly of the Semiconductor Physics Division

Donnerstag 18:00–19:00 POT6

Alle Mitglieder des Fachverbands Halbleiterphysik sind herzlich willkommen / All members of the Semiconductor Physics Division are invited to participate.

- Bericht
- Wahl der Fachverbandsleitung
- Informationen zur Frühjahrstagung 2024
- Verschiedenes