

SEMICONDUCTOR PHYSICS

HALBLEITERPHYSIK (HL)

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OVERVIEW OF INVITED TALKS AND SESSIONS

(lecture rooms HSZ 01, BEY 118, BEY 154, POT 51, POT 151)

Invited Talks

- HL 1.1 Mon 09:30 (HSZ 01) **From ultraviolet light emitting diodes to microcavity disk lasers - New frontiers in InAlGaN optoelectronics**, [Michael Kneissl](#)
- HL 8.1 Mon 14:30 (HSZ 01) **Counting statistics of single electron transport in a quantum dot**, [Renaud Leturcq](#), [Simon Gustavsson](#), [Barbara Simovic](#), [Roland Schleser](#), [Thomas Ihn](#), [Paul Studerus](#), [Klaus Ensslin](#), [Dan C. Driscoll](#), [Art C. Gossard](#)
- HL 10.1 Tue 09:30 (HSZ 01) **Coherent spin transport by acoustic fields in GaAs quantum wells**, [Paulo Santos](#), [James Stotz](#), [Odilon Couto](#), [Fernando Iikawa](#), [Rudolph Hey](#), [Klaus Ploog](#)
- HL 11.1 Tue 10:15 (HSZ 01) **Spin accumulation dynamics in semiconductors close to ferromagnetic contacts**, [Gerrit E.W. Bauer](#)
- HL 17.1 Tue 14:30 (HSZ 01) **QED in a Pencil Trace**, [Andre Geim](#), [Kostya Novoselov](#)
- HL 37.1 Thu 09:30 (HSZ 01) **Superconducting boron-doped single crystal diamond**, [Etienne Bustarret](#), [Jozef Kacmarcik](#), [Thierry Klein](#), [Benjamin Sacépé](#), [Claude Chapelier](#), [Christophe Marcenat](#), [Emmanuel Bourgeois](#), [Xavier Blase](#)
- HL 38.1 Thu 10:15 (HSZ 01) **Coherent optical generation and decay of charge and spin currents in semiconductor heterostructures analyzed by microscopic theory**, [Torsten Meier](#), [Quang Tuyen Vu](#), [Huynh Thanh Duc](#), [Hartmut Haug](#), [Stephan W. Koch](#)
- HL 45.1 Thu 14:30 (HSZ 01) **Atomic scale analysis of magnetic doping atoms and self-assembled III/V semiconductor nanostructures**, [P.M. Koenraad](#)
- HL 51.1 Fri 10:15 (HSZ 01) **Andreev reflection in Nb-InAs structures: Phase-coherence, ballistic transport and edge channels**, [Jonathan Eroms](#), [Dieter Weiss](#)

Internal symposia within HL

Internal symposium: THz-quantum cascade lasers

Organization: W. Wegscheider (Universität Regensburg)

- HL 2.1 Mon 10:15 (HSZ 01) **Designing the emission of THz Quantum Cascade Lasers with surface plasmon photonic structures**, [Alessandro Tredicucci](#)
- HL 2.2 Mon 10:45 (HSZ 01) **THz generation and mixing using Quantum Cascade Lasers**, [Carlos Sirtori](#)
- HL 2.3 Mon 11:15 (HSZ 01) **Progress in single frequency and long wavelength quantum cascade lasers**, [Jerome Faist](#), [G. Scalari](#), [L. Sirigu](#), [L. Ajili](#), [C. Walther](#), [M. Giovannini](#), [A. Dunbar](#), [R. Houdre](#)

- HL 2.4 Mon 11:45 (HSZ 01) **Growth and Processing of GaAs quantum cascade lasers**, Gottfried Strasser, Aaron Maxwell Andrews, Tomas Roch, Gernot Fasching, Alexander Benz, Sebastian Golka, Maximilian Austerer, Christian Pfluegl, Werner Schrenk, Karl Unterrainer
- HL 2.5 Mon 12:15 (HSZ 01) **GaInAs/AlAsSb quantum cascade lasers: a new approach towards 3-to-5 μm semiconductor lasers**, Joachim Wagner, Quankui Yang, Christian Manz, Wolfgang Bronner, Christian Mann, Klaus Köhler

Internal symposium: Quantum optics in semiconductors

Organization: M. Bayer (Universität Dortmund)

- HL 12.1 Tue 11:15 (HSZ 01) **Quantum Light Generation from Semiconductor Quantum Dots**, Andrew Shields
- HL 12.2 Tue 11:45 (HSZ 01) **Size-tunable exchange interaction in InAs/GaAs quantum dots**, U. W. Pohl, A. Schliwa, R. Seguin, S. Rodt, K. Pötschke, D. Bimberg
- HL 12.3 Tue 12:15 (HSZ 01) **Quantum Optics of Excitons in Semiconductors**, Heinrich Stolz
- HL 12.4 Tue 12:45 (HSZ 01) **Microscopic Theory of Semiconductor Quantum Optics**, Mackillo Kira, Stephan W. Koch
- HL 18.1 Tue 15:15 (HSZ 01) **Light Matter Interaction Effects in Quantum Dot Microcavities**, S. Reitzenstein, C. Hofmann, A. Löffler, J. P. Reithmaier, M. Kamp, A. Forchel, G. Sek, V. D. Kulakovskii, A. Bazhenov, A. Gorbunov, L. V. Keldysh, T. L. Reinecke
- HL 18.2 Tue 15:45 (HSZ 01) **CQED with II-VI nanocrystals**, Ulrike Woggon, Nicolas LeThomas, Oliver Schoeps, Mikhail Artemyev
- HL 18.3 Tue 16:00 (HSZ 01) **Deutsch-Jozsa Algorithm using Triggered Single Photons from a Single Quantum Dot**, Oliver Benson, Matthias Scholz, Thomas Aichele, Sven Ramelow
- HL 18.4 Tue 16:30 (HSZ 01) **Imaging the Local Density of Photonic States in Photonic Crystal Nanocavities**, Michael Kaniber, Felix Hofbauer, Simon Grimminger, Max Bichler, Gerhard Abstreiter, Jonathan J. Finley
- HL 18.5 Tue 16:45 (HSZ 01) **Theory of optical properties for quantum dots in microcavities**, Frank Jahnke, Jan Wiersig, Norman Baer, Christopher Gies

Internal symposium: New phenomena in edge transport of QHE systems

Organization: L. Sorba (Università di Modena e RE)

- HL 27.1 Wed 14:30 (HSZ 01) **Bending the quantum Hall effect: Novel metallic and insulating states in one dimension**, Matthew Grayson
- HL 27.2 Wed 15:00 (HSZ 01) **Particle-hole symmetric Luttinger liquids in a quantum Hall circuit**, Vittorio Pellegrini, Stefano Roddaro, Fabio Beltram, Lucia Sorba, Giorgio Biasiol, Loren N. Pfeiffer, K.W. West
- HL 27.3 Wed 15:30 (HSZ 01) **The Detection and Spectroscopy of Millimeter Wave Radiation based on the Interference of Edge-Magnetoplasmons**, Jurgen Smet, Igor Kukushkin, Chunping Jiang, Sergey Mikhailov, Klaus von Klitzing
- HL 27.4 Wed 16:00 (HSZ 01) **Selective edge excitations - inter-edge magnetoplasmon mode and inter-edge spin diode**, Frank Hohls, Gennadiy Sukhodub, Rolf J. Haug

Internal symposium: Photonic metamaterials

Organization: M. Wegener (Universität Karlsruhe)

- HL 39.1 Thu 11:00 (HSZ 01) **Magnetoinductive waves in magnetic metamaterials**, Ekaterina Shamonina
- HL 39.2 Thu 11:30 (HSZ 01) **Photonic metamaterials: Magnetism and negative index of refraction at optical frequencies**, Stefan Linden, Martin Wegener, Christian Enkrich, Matthias W. Klein, Manuel Decker, Gunnar Dolling, Nils Feth, Costas M. Soukoulis, Sven Burger, Frank Schmidt
- HL 39.3 Thu 12:00 (HSZ 01) **Metamaterials: Going Optical**, Vladimir Shalaev
- HL 39.4 Thu 12:30 (HSZ 01) **Negative refraction without absorption in the optical regime**, Michael Fleischhauer

Sessions

HL 1	Invited Talk Kneissl	Mon 09:30–10:15	HSZ 01	HL 1.1–1.1
HL 2	Symposium THz-quantum cascade lasers	Mon 10:15–12:45	HSZ 01	HL 2.1–2.5
HL 3	III-V semiconductors I	Mon 10:15–13:15	POT 51	HL 3.1–3.12
HL 4	New materials	Mon 10:15–12:15	BEY 154	HL 4.1–4.8
HL 5	SiC	Mon 12:15–13:00	BEY 154	HL 5.1–5.3
HL 6	Quantum dots and wires: Transport properties I	Mon 10:15–13:15	BEY 118	HL 6.1–6.12
HL 7	Quantum dots and wires: Optical properties I	Mon 10:15–13:00	POT 151	HL 7.1–7.11
HL 8	Invited Talk Leturcq	Mon 14:30–15:15	HSZ 01	HL 8.1–8.1
HL 9	Poster I	Mon 15:15–17:45	P3	HL 9.1–9.107
HL 10	Invited Talk Santos	Tue 09:30–10:15	HSZ 01	HL 10.1–10.1
HL 11	Invited Talk Bauer	Tue 10:15–11:00	HSZ 01	HL 11.1–11.1
HL 12	Symposium Quantum optics in semiconductors I	Tue 11:15–13:15	HSZ 01	HL 12.1–12.4
HL 13	Spin controlled transport I	Tue 11:00–13:15	BEY 118	HL 13.1–13.9
HL 14	II-VI semiconductors I	Tue 11:00–13:15	POT 151	HL 14.1–14.9
HL 15	III-V semiconductors II	Tue 11:00–13:15	POT 51	HL 15.1–15.9
HL 16	Semiconductor laser I	Tue 11:00–13:15	BEY 154	HL 16.1–16.9
HL 17	Invited Talk Geim	Tue 14:30–15:15	HSZ 01	HL 17.1–17.1
HL 18	Symposium Quantum optics in semiconductors II	Tue 15:15–17:15	HSZ 01	HL 18.1–18.5
HL 19	Quantum dots and wires: Optical properties II	Tue 17:15–19:30	HSZ 01	HL 19.1–19.9
HL 20	Spin controlled transport II	Tue 15:15–16:30	BEY 118	HL 20.1–20.5
HL 21	Transport properties I	Tue 16:30–19:30	BEY 118	HL 21.1–21.12
HL 22	Semiconductor laser II	Tue 15:15–17:15	BEY 154	HL 22.1–22.8
HL 23	Interfaces/surfaces	Tue 17:15–19:30	BEY 154	HL 23.1–23.9
HL 24	Ultra fast phenomena	Tue 15:15–18:00	POT 151	HL 24.1–24.11
HL 25	C/diamond	Tue 18:00–19:00	POT 151	HL 25.1–25.4
HL 26	II-VI semiconductors II	Tue 15:15–18:45	POT 51	HL 26.1–26.14
HL 27	Symposium New phenomena in edge transport of QHE systems	Wed 14:30–16:30	HSZ 01	HL 27.1–27.4
HL 28	Transport in high magnetic field/Quantum Hall-effect	Wed 16:30–17:00	HSZ 01	HL 28.1–28.2
HL 29	Transport properties II	Wed 17:00–18:15	HSZ 01	HL 29.1–29.5
HL 30	Quantum dots and wires: Transport properties II	Wed 18:15–19:15	HSZ 01	HL 30.1–30.4
HL 31	Organic semiconductors	Wed 14:30–19:00	POT 51	HL 31.1–31.17
HL 32	Photovoltaic	Wed 14:30–19:15	BEY 118	HL 32.1–32.18
HL 33	GaN: Preparation and characterization	Wed 14:30–17:15	BEY 154	HL 33.1–33.11
HL 34	Impurities/Amorphous semiconductors	Wed 17:15–18:30	BEY 154	HL 34.1–34.5
HL 35	II-VI semiconductors III	Wed 14:30–16:15	POT 151	HL 35.1–35.7
HL 36	Optical properties	Wed 16:15–19:15	POT 151	HL 36.1–36.12
HL 37	Invited Talk Bustarret	Thu 09:30–10:15	HSZ 01	HL 37.1–37.1
HL 38	Invited Talk Meier	Thu 10:15–11:00	HSZ 01	HL 38.1–38.1
HL 39	Symposium Photonic metamaterials	Thu 11:00–13:00	HSZ 01	HL 39.1–39.4
HL 40	Quantum dots and wires: Optical properties III	Thu 11:00–13:15	POT 151	HL 40.1–40.9
HL 41	Heterostructures	Thu 11:00–12:45	BEY 154	HL 41.1–41.7
HL 42	Quantum dots and wires: Preparation and characterization I	Thu 11:00–13:00	POT 51	HL 42.1–42.8
HL 43	GaN: Devices I	Thu 11:00–12:15	BEY 118	HL 43.1–43.5
HL 44	Si/Ge	Thu 12:15–13:15	BEY 118	HL 44.1–44.4
HL 45	Invited Talk Koenraad	Thu 14:30–15:15	HSZ 01	HL 45.1–45.1
HL 46	Quantum dots and wires: Preparation and characterization II	Thu 15:15–16:30	POT 51	HL 46.1–46.5
HL 47	GaN: Devices II	Thu 15:15–16:30	BEY 118	HL 47.1–47.5
HL 48	Preparation and characterization	Thu 15:15–16:30	POT 151	HL 48.1–48.5

HL 49	Devices	Thu	15:15–16:30	BEY 154	HL 49.1–49.5
HL 50	Poster II	Thu	16:30–19:00	P3	HL 50.1–50.109
HL 51	Invited Talk Eroms	Fri	10:15–11:00	HSZ 01	HL 51.1–51.1
HL 52	Quantum dots and wires: Optical properties IV	Fri	11:00–14:00	POT 151	HL 52.1–52.12
HL 53	Hybrid systems	Fri	11:00–11:15	BEY 154	HL 53.1–53.1
HL 54	Metal-insulator transitions	Fri	11:15–11:30	BEY 154	HL 54.1–54.1
HL 55	Photonic crystals	Fri	11:30–13:15	BEY 154	HL 55.1–55.7
HL 56	Quantum dots and wires: Preparation and characterization III	Fri	11:00–13:15	POT 51	HL 56.1–56.9
HL 57	Theory of electronic structure	Fri	11:00–12:45	BEY 118	HL 57.1–57.7

Annual General Meeting of the Section Semiconductor Physics

Thu 19:00–20:00 HSZ 01

Tagesordnung:

1. Begrüßung und Bericht
2. Stichwortkatalog
3. Verschiedenes