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28th

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July 24-28, 2006
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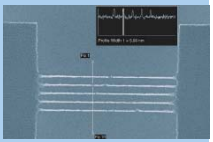
Sub 10 nm lithography


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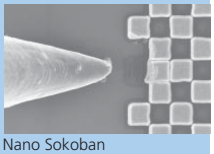
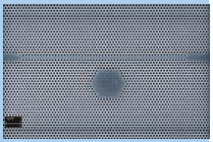
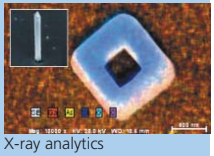

Nano Sokoban


Photonic crystal with proximity effect correction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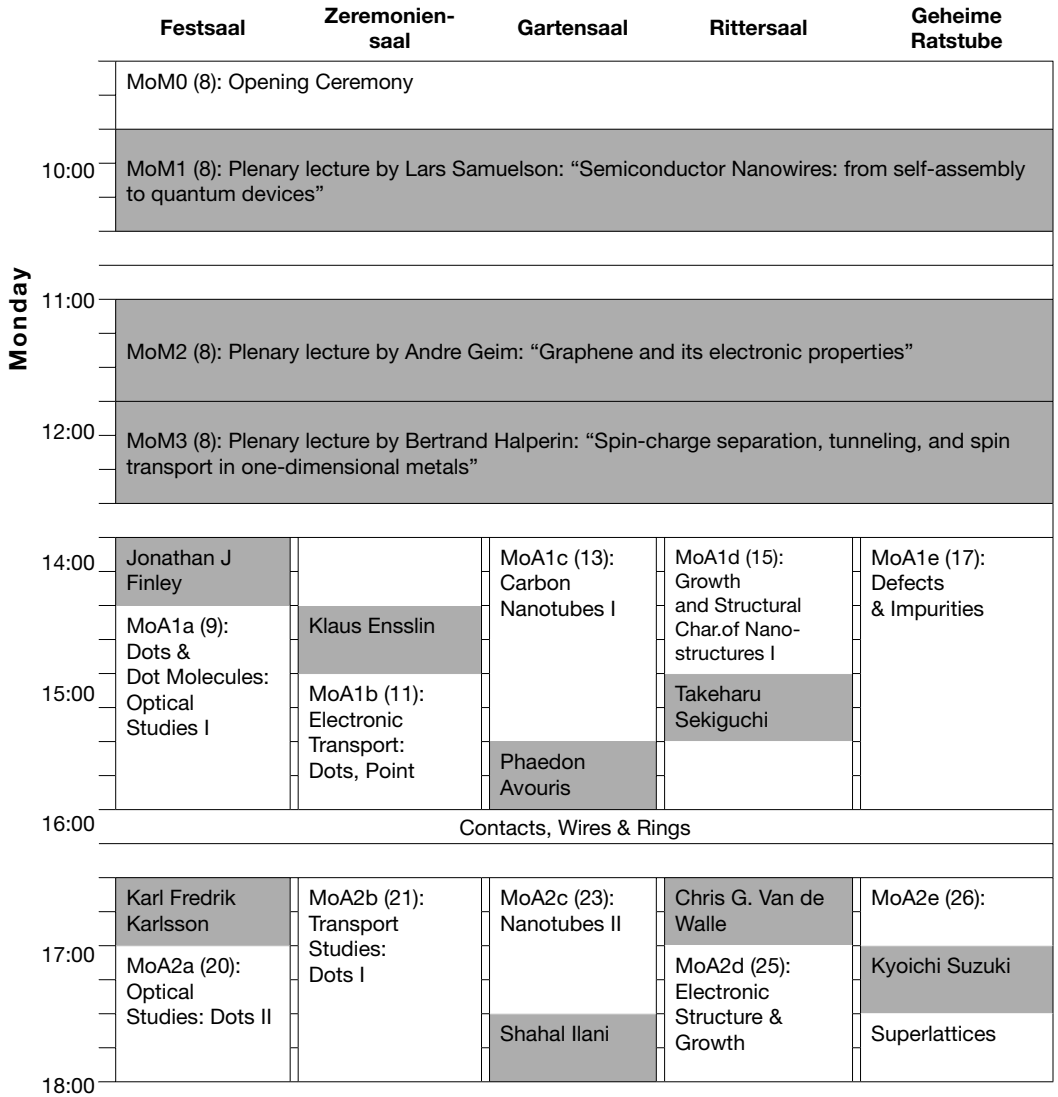


session numbering scheme:

MoM1a__ parallel sessions

day | morning or afternoon | session block

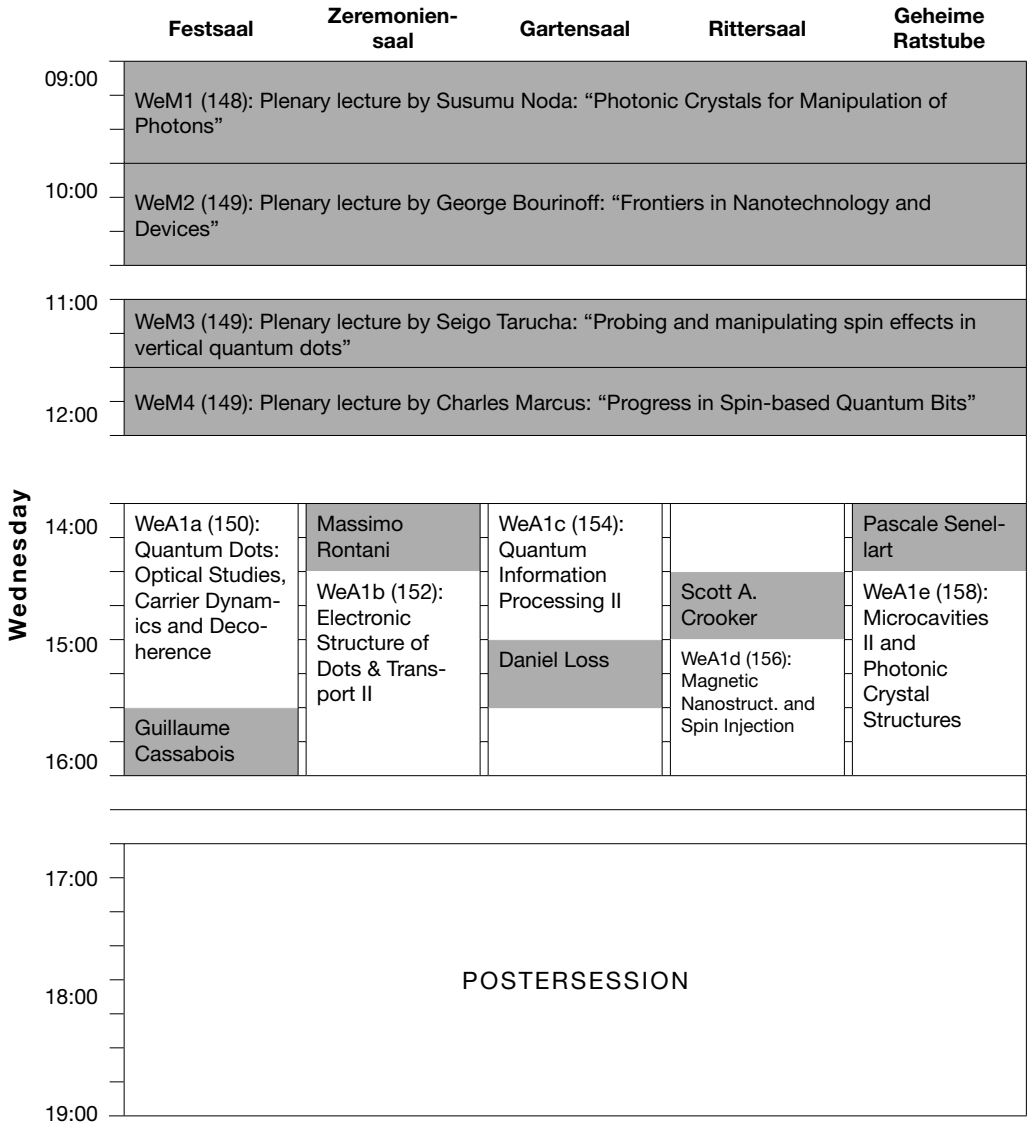
information in session boxes:

session no. (page no.): session title

invited speaker

Tuesday

	Festsaal	Zeremonien-saal	Gartensaal	Rittersaal	Geheime Ratstube
09:00	TuM1a (28):	TuM1b (29): Photonic Devices	Jose Maria Ulloa	Vladislav B Timofeev	TuM1e (34): Microcavities I
	Frank Koppens		TuM1c (31): Growth and Structural Char.of Nanos-tructures II	TuM1d (33): Excitons: Towards BEC I	
10:00	Spin Manipula-tion	Bahram Jalali			
11:00					
	TuM2a (36): QED and Quantum Information Processing I	TuM2b (38):	Pablo Jarillo-Herrero	Le Si Dang	TuM2e (42): 2D Transport
		Vanessa Sih	TuM2c (39): Nanotubes III	TuM2d (41): Excitons: Towards BEC II	
12:00	Cristiano Ciuti	Spin Currents		TuM3d (44): Semimagnetic SC I	
14:00	Andrew J Shields	TuA1b (47): Magnetic & Semimagnetic Semiconduc-tors II	TuA1c (49): Physics in the QHE Regime I and Graphene	TuA1d (51): THz & Quantum Cascade Structures	TuA1e (54): Applications & Devices
	Nikolay Ako-pian				
15:00	TuA1a (45): Single Photons and Photon Entanglement			Carlo Sirtori	
16:00		Lucien Besombes			Khaled Karrai
17:00	TuA2 (56): Late News Plenary Session: G. Bester (US), S. Rigamonti (Argentina), A. Lochmann (Germany), A. Greilich (Germany), Jorden van Dam (The Netherlands), M. Scheibner (US)				
18:00	POSTERSESSION				
19:00					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Wednesday
09:00
10:00
11:00
12:00
14:00
15:00
16:00
17:00
18:00
19:00
WeM1 (148): Plenary lecture by Susumu Noda: “Photonic Crystals for Manipulation of Photons”
WeM2 (149): Plenary lecture by George Bourinoff: “Frontiers in Nanotechnology and Devices”
WeM3 (149): Plenary lecture by Seigo Tarucha: “Probing and manipulating spin effects in vertical quantum dots”
WeM4 (149): Plenary lecture by Charles Marcus: “Progress in Spin-based Quantum Bits”
WeA1a (150): Quantum Dots: Optical Studies, Carrier Dynamics and Decoherence
Guillaume Cassabois
Massimo Rontani
WeA1b (152): Electronic Structure of Dots & Transport II
WeA1c (154): Quantum Information Processing II
Daniel Loss
Scott A. Crooker
WeA1d (156): Magnetic Nanostruct. and Spin Injection
Pascale Senellart
WeA1e (158): Microcavities II and Photonic Crystal Structures
POSTERSESSION

		Festsaal	Zeremonien-saal	Gartensaal	Rittersaal	Geheime Ratstube
Thursday	09:00	ThM1a (256): Transport in Wires	ThM1b (257):	ThM1c (259): Struct., Electronic and Optical Prop. of Bulk Materials	Vittorio Pellegrini	ThM1e (262): Group IV: Surfaces and Bulk
			Go Yusa		ThM1d (260): Physics in the QHE Regime II	
	10:00		Nuclear Spin Interactions	L. Vina		Marilia J Caldas
	11:00	Kazuya Take-moto	Izhar Neder	ThM2c (267):	ThM2d (268): Electronic Transport in 1D Systems	ThM2e (270):
		ThM2a (263): Optical Studies: Dots III	ThM2b (265): Transport in Low Dimen-sional Systems	Lu J Sham		Wolfgang Heiss
	12:00			SC Spintronics and Spin Relaxation	Grzegorz Grabecki	Growth & Struc-tural Studies of Nanosystems
Friday	09:00	Hadar Stein-berg	FrM1b (273): Nitrides:	M.L.T Thewalt	FrM1d (277): Organic Semiconduc-tors	FrM1e (278):
		FrM1a (271): 1D Transport and Optics	Henning Riechert	FrM1c (275): Bulk: Excitons, Lattice and Car-rier Dynamics		Peter Kratzer
	10:00		Electronic Proper-ties and Optical Studies		Karl Leo	New Materials, Concepts, Techniques
	11:00	POSTERSESSION				
	12:00					
	14:00	FrA1a (368): Optical Studies: Dots IV: Spins and Spin Dynamics	FrA1b (370): Electronic Trans-port inDots and Coupled Dots	FrA1c (372):	Giacomo Scalari	FrA1e (376): Nanocrystals
				Masashi Kawasaki	FrA1d (374): THz, Intersub-band and Ultrafast Phenomena	
	15:00		David A Williams	Wide Gap Semiconductors		Ulrike Woggon
	16:00	FrA2 (378): Plenary lecture by Atac Imamoglu: “Semiconductor cavity quantum electrody-namics for quantum information processing”				
		FrA3 (378): Closing Ceremony				
	17:00					

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Plenary Talks

George Bourianoff (Intel, USA): Frontiers in Nanotechnology and Devices (WeM2.1)

Andre Geim (Univ. Manchester, UK): Graphene and its electronic properties (MoM2.1)

Bertrand Halperin (Harvard Univ., USA): Spin-charge separation, tunneling, and spin transport in one-dimensional metals (MoM3.1)

Atac Imamoglu (ETH Zürich, Switzerland): Semiconductor cavity quantum electrodynamics for quantum information processing (FrA2.1)

Charles Marcus (Harvard Univ., USA): Progress in Spin-based Quantum Bits (WeM4.1)

Susumu Noda (Univ. Kyoto, Japan): Photonic Crystals for Manipulation of Photons (WeM1.1)

Lars Samuelson (Lund Univ., Sweden): Semiconductor Nanowires: from self-assembly to quantum devices (MoM1.1)

Seigo Tarucha (Univ. Tokyo, Japan): Probing and manipulating spin effects in vertical quantum dots (WeM3.1)

Invited Talks

Nikolay Akopian (Technion - Israel Institute of Technology, Haifa, Israel): Entangled Photon Pairs from Semiconductor Quantum Dots (TuA1a.2)

Phaedon Avouris (IBM, New York, USA): Carbon Nanotube Electronics and Optoelectronics (MoA1c.7)

Lucien Besombes (CEA Grenoble, France): Optical probing of the spin state of a single magnetic atom in a self-assembled quantum dot (TuA1b.7)

Marilia J Caldas (Univ. de S˜ao Paulo, S˜ao Paulo, Brazil): Trimming and taming silicon surfaces: a first-principles study (ThM1e.5)

Guillaume Cassabois (Ecole Normale Sup´erieure, Paris, France): Motional narrowing in a semiconductor quantum dot (WeA1a.7)

Cristiano Ciuti (Ecole Normale Sup´erieure, Paris, France): Cavity quantum electrodynamics of semiconductor intersub-band transitions in the ultra-strong vacuum Rabi coupling regime (TuM2a.5)

Scott A. Crooker (Los Alamos National Laboratory, USA): Imaging electrical spin injection and accumulation in lateral ferromagnet/semiconductor devices (WeA1d.3)

Le Si Dang (Univ. J. Fourier, Grenoble, France): Towards Bose-Einstein condensation of microcavity polaritons? (TuM2d.1)

Klaus Ensslin (ETH Zurich, Switzerland): Is inelastic tunneling phase coherent? (MoA1b.3)

Jonathan J. Finley (TU Munich, Germany): Optically probing charge and spin couplings in electric field tunable quantum dot molecules (MoA1a.1)

Grzegorz Grabecki (Polish Academy of Sciences, Warszawa, Poland): Ballistic transport in hybrid nanostructures of paraelectric PbTe (ThM2d.5)

Wolfgang Heiss (Univ.Linz, Austria): Quantum dots with coherent interfaces between rocksalt-PbTe and zincblende-CdTe (ThM2e.3)

Shahal Ilani (Cornell Univ., USA): Measurement of the Quantum Capacitance of Individual Carbon Nanotubes (MoA2c.5)

Bahram Jalali (Univ. of California at Los Angeles, USA): Raman based Silicon photonics (TuM1b.5)

Pablo Jarillo-Herrero (Kavli Inst., TU Delft, Netherlands): Quantum supercurrent transistors in carbon nanotubes (TuM2c.1)

Karl Fredrik Karlsson (Ecole Polytechnique F´ed´erale de Lausanne (EPFL), Lausanne, Switzerland): New Excitonic States Observed in Semiconductor Quantum Dots Using Polarization Resolved Optical Spectroscopy (MoA2a.1)

Khaled Karrai (Univ. Munich, Germany): Optical cooling of mechanical micro- and nano-structures (TuA1e.7)

Masashi Kawasaki (Tohoku Univ., Sendai, Japan): ZnO ultraviolet light emitting diodes (FrA1c.3)

Frank Koppens (Kavli Inst., TU Delft, Netherlands): Coherent manipulation of single electron spins by electron spin resonance in coupled quantum dots (TuM1a.3)

Peter Kratzer (Fritz-Haber-Institut, MPG, Berlin, Germany): Transition-metal silicides as novel materials for magnet-semiconductor heterostructures (FrM1e.3)

Karl Leo (Univ. Dresden, Germany): Highly efficient organic semiconductor devices (FrM1d.5)

Daniel Loss (Univ. Basel, Switzerland): Spin qubits in quantum dots: Review and Outlook (WeA1c.5)

Izhar Neder (Weizmann Institute of Science, Rehovot, Israel): Controlled Dephasing and Phase Recovery via Cross-Correlation Measurements (ThM2b.1)

Vittorio Pellegrini (Scuola Normale Superiore, Pisa, Italy): Seeing emergent phases in quantum Hall double layers (ThM1d.1)

Henning Riechert (Infineon, Munich, Germany): Growth and material physics of InGaAsN for novel devices (FrM1b.3)

Massimo Rontani (CNR-INFM Univ. Modena, Italy): Imaging correlated wave functions of few-electron quantum dots: Theory and STS experiments (WeA1b.1)

Giacomo Scalari (Univ. Neuchatel, Switzerland): Multi-wavelength operation and vertical emission in THz quantum-cascade lasers (FrA1d.1)

Takeharu Sekiguchi (KEIO Univ., Yokohama, Japan): Self-assembly of periodic nano-dots of silicon and germanium on a vicinal silicon (111) surface (MoA1d.5)

Pascale Senellart (LPN Marcoussis, France): Strong Coupling Regime for a Single Quantum Dot in an Optical Microcavity (WeA1e.1)

Lu J. Sham (Univ. of California at San Diego, USA): Optically manipulating spins in quantum dots in semiconductors (ThM2c.3)

Andrew J. Shields (Toshiba Laboratory, Cambridge, UK): Single Photon Technology Based on Quantum Dots (TuA1a.1)

Vanessa Sih (Univ. of California at Santa Barbara, USA): Imaging the spin Hall effect and current-induced polarization in two-dimensional electron gases (TuM2b.3)

Carlo Sirtori (Univ. Paris 7, France): THz sideband generation (TuA1d.5)

Hadar Steinberg (Weizmann Institute, Rehovot, Israel): Unidirectional Injection and Relaxation of Ballistic electrons in Clean Quantum Wires (FrM1a.1)

Kyoichi Suzuki (NTT Basic Research Laboratories, Kanagawa, Japan): Observation of subband standing waves in super-lattices by low-temperature scanning tunneling spectroscopy (MoA2e.3)

Kazuya Takemoto (Fujitsu Laboratories. Ltd., Atsugi, Japan): A New Approach for Single-Photon Source using Quantum Dots at Telecommunication Wavelength (ThM2a.1)

Mike L.W. Thewalt (Simon Fraser Univ., Burnaby, British Columbia, Canada): Direct Observation of the Donor Nuclear Spin in a Near-Gap Bound Exciton Transition: 31P in Highly Enriched 28Si (FrM1c.1)

Vladislav B. Timofeev (ISSP, Russian Academy of Sciences, Chernogolovka,Moscow, Russia): Collective state in bose-gas of interacting interwell excitons (TuM1d.1)

Jose Maria Ulloa (COBRA - Eindhoven Univ. of Technology, Eindhoven, Netherlands): Capping of InAs quantum dots studied by cross-sectional scanning tunneling microscopy (TuM1c.1)

Chris Van de Walle (Univ. of California at Santa Barbara, USA): Electronic structure of nitride surfaces (MoA2d.1)

Luis Vi˜na (Univ. Autonoma Madrid, Spain): Photoluminescence dynamics in GaAs along an optically induced Mott transition (ThM1c.5)

David Williams (Hitachi Cambridge Laboratory, UK): Silicon charge qubit (FrA1b.6)

Ulrike Woggon (Univ. Dortmund, Germany): Single semiconductor nanocrystals: physics and applications (FrA1e.5)

Go Yusa (NTT Basic Research Laboratories, Atsugi, Japan): Nuclear spin control by a point contact (ThM1b.3)

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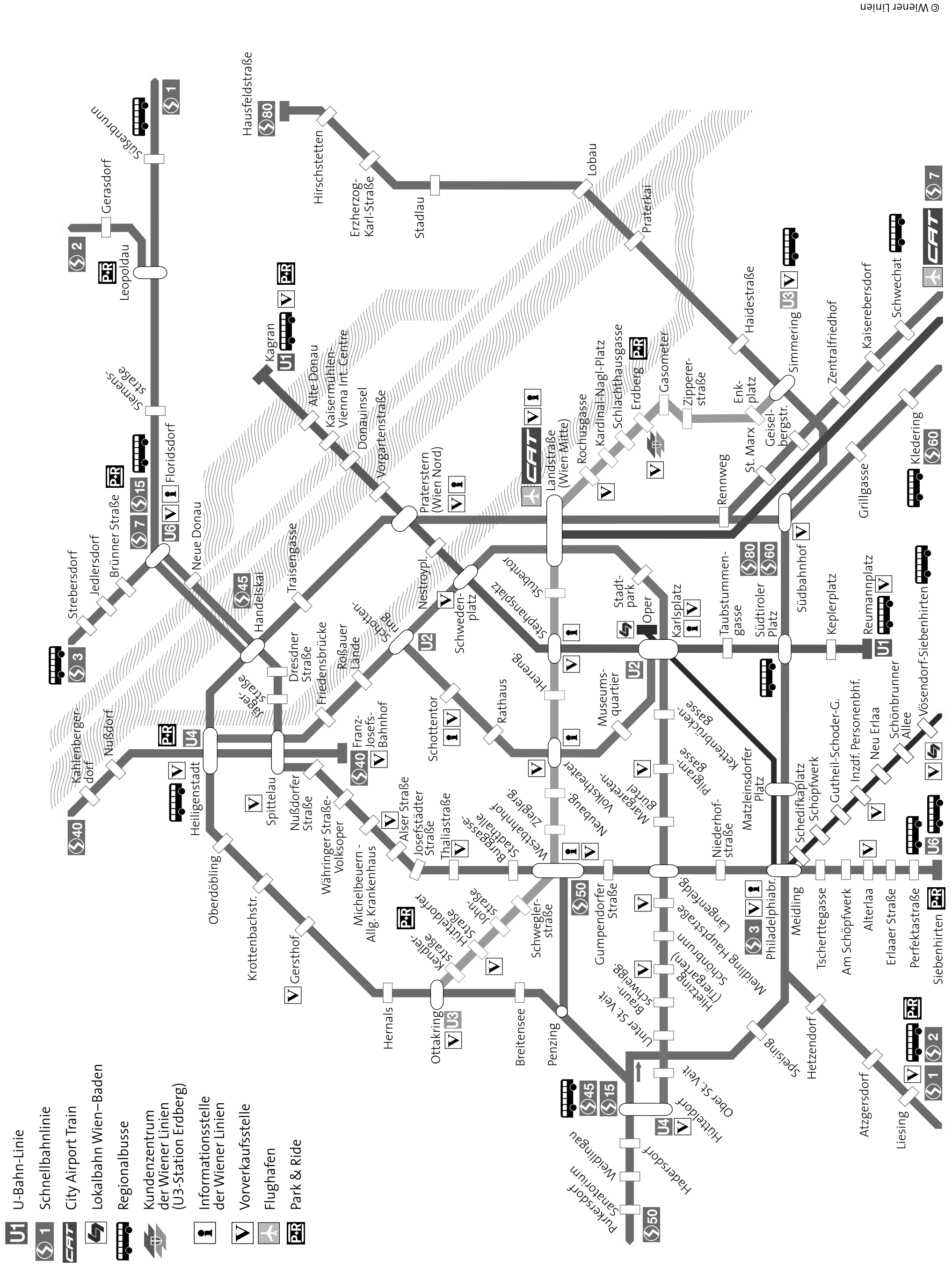
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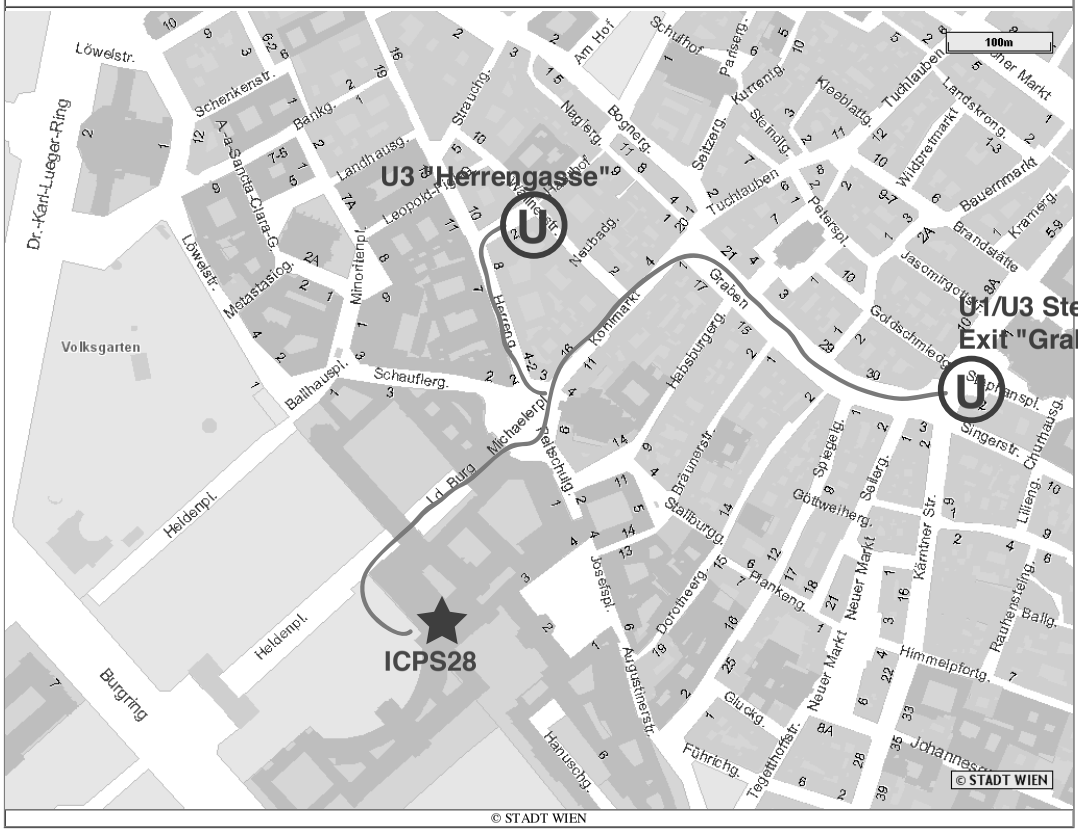

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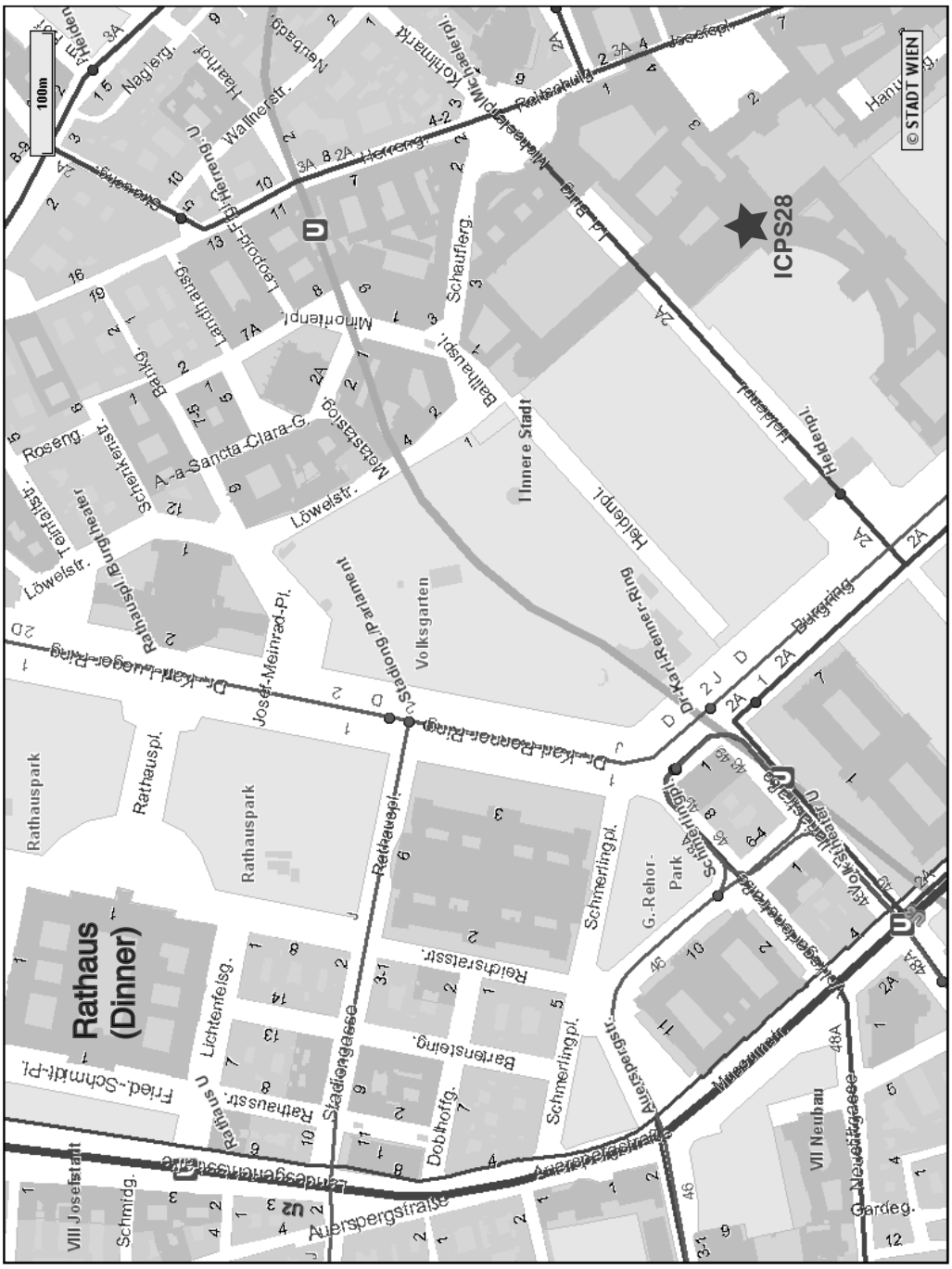
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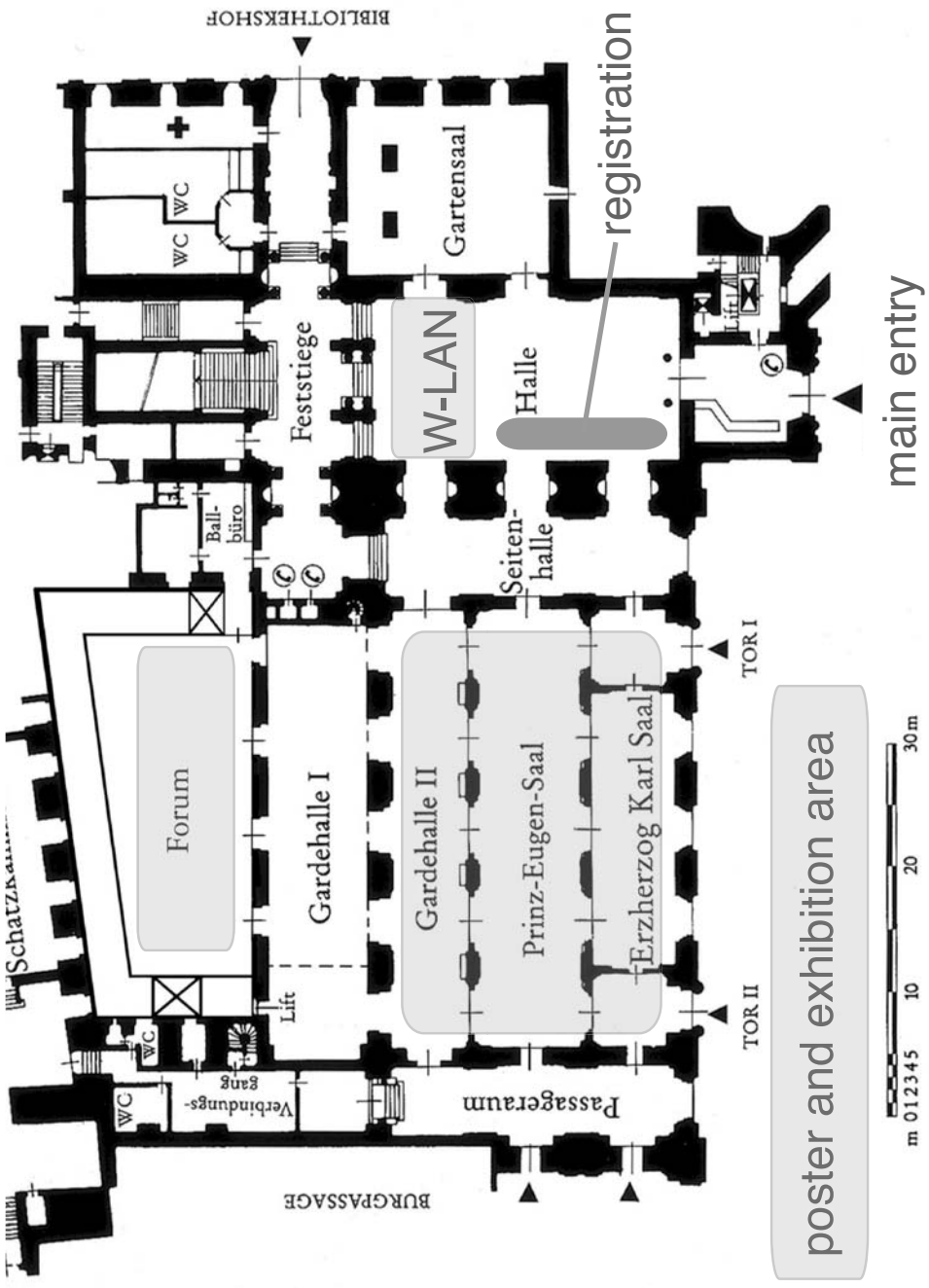
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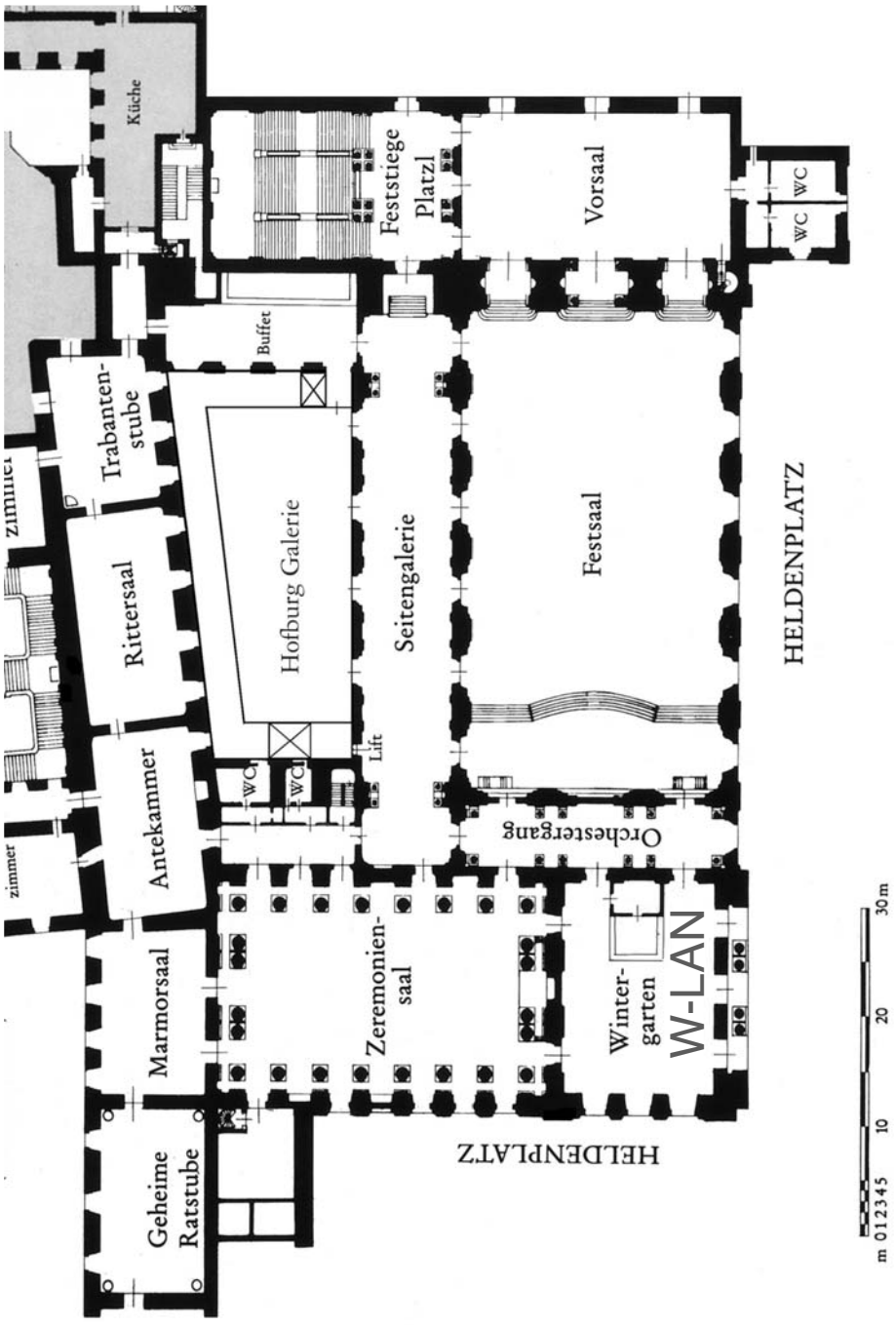
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CAT- Timetable

City Airport Train (CAT) Timetable

City Air Terminal > Vienna International Airport

05.38	06.08	06.38	07.08	07.38	08.08	08.38	09.08	09.38
10.08	10.38	11.08	11.38	12.08	12.38	13.08	13.38	14.08
14.38	15.08	15.38	16.08	16.38	17.08	17.38	18.08	18.38
19.08	19.38	20.08	20.38	21.08	21.38	22.08	22.38	23.08

Vienna International Airport > City Air Terminal

06.05	06.35	07.05	07.35	08.05	08.35	09.05	09.35	10.05
10.35	11.05	11.35	12.05	12.35	13.05	13.35	14.05	14.35
15.05	15.35	16.05	16.35	17.05	17.35	18.05	18.35	19.05
19.35	20.05	20.35	21.05	21.35	22.05	22.35	23.05	23.35

Social Program

Conference Dinner at the Vienna City Hall. The conference dinner will take place at the Vienna City Hall by invitation of the Mayor of Vienna. The City Hall is one of the most splendid amongst the numerous monumental buildings in Vienna. Enjoy a pleasant evening with dinner and musical entertainment. Tickets can be purchased online via the registration process. As the number of participants is limited, we recommend to register early.

Date
Thursday, July 27, 2006

Time
19:00 p.m.

Meeting Point
Wiener Rathaus (City Hall Vienna) Entrance: Lichtenfelsgasse 2 1010 Vienna
Rate per Person: € 70.-

Excursions

Sightseeing-tours in Vienna and it's surrounding will be organized on Thursday for the delegates of the IPCS28 conference. Every registered participant and accompanying person can register free of charge for ONE of the following tours on Thursday afternoon (Tour 1 – Tour 4).

TOUR 1a & b:
Grand City Tour with Palace Schönbrunn

TOUR 2:
Art Nouveau in Vienna

TOUR 3:
Vienna Woods & Mayerling

TOUR 4:
Prater – Klosterneuburg – Kahlenberg

Optional Tours

TOUR 5:

Castle Esterhazy and Lake Neusiedl (Tuesday, €95,-)

TOUR 6:

Abbey of Göttweig and Wine-City Krems (Wednesday, € 57,-)

TOUR 7:

Wachau Danube Valley and Abbey of Melk (Friday, € 61,-)

MoM0-MoM3: Opening Ceremony and Plenary Lectures

Monday 9:15–12:30; Festsaal; Chair: Y. Arakawa (MoM1), L. Eaves (MoM2, MoM3)

9:15	MoM0	**Opening Ceremony** — Erich Gornik (Conference Chair), Hiroyuki Sakaki (IUPAP C8 Commission Chair), Friedemar Kuchar (Conference Vice Chair)
9:45 *(Plenary talk)*	MoM1.1	**Semiconductor Nanowires: from self-assembly to quantum devices** — Lars Samuelson
10:30		**Break**
11:00 *(Plenary talk)*	MoM2.1	**Graphene and its electronic properties** — Andre Geim
11:45 *(Plenary talk)*	MoM3.1	**Spin-charge separation, tunneling, and spin transport in one-dimensional metals** — Bertrand I Halperin

MoA1a: Dots & Dot Molecules: Optical Studies I

Monday 14:00–16:00; Festsaal; Chair: M. Bayer

14:00 *(Invited talk)*	MoA1a.1	**Optically probing charge and spin couplings in electric field tunable quantum dot molecules** — Jonathan J Finley
14:30	MoA1a.2	**Optical Spectroscopy Of Charged Quantum Dot Molecules** — Michael Scheibner
14:45	MoA1a.3	**Theory of spin states of quantum dot molecules** — Ilya V Ponomarev
15:00	MoA1a.4	**Controlled Tunnel Coupling using a Lateral InGaAs/GaAs Quantum Dot Molecule** — Claus Hermannstädter
15:15	MoA1a.5	**Measurement and control of spin and charge interactions in an individual self-assembled InGaAs quantum dot molecule** — Emily C Clark
15:30	MoA1a.6	**Phonon-induced electron relaxation in correlated quantum dots** — Andrea Bertoni
15:45	MoA1a.7	**Optical properties of charged self-assembled quantum dots** — Marek J. Korkusinski

MoA1b: Electronic Transport: Dots, Point Contacts, Wires, & Rings

Monday 14:00–16:00; Zeremoniensaal; Chair: D. A. Ritchie

14:00	MoA1b.1	**Spontaneous spin polarization in quantum point contacts** — Leonid P. Rokhinson
14:15	MoA1b.2	**Real-space imaging of electron flow in Aharonov-Bohm rings** — Benoit Hackens
14:30 *(Invited talk)*	MoA1b.3	**Is inelastic tunneling phase coherent?** — Klaus Ensslin
15:00	MoA1b.4	**Rectified Coulomb drag induced by Wigner crystallization in quantum wires** — Michihisa Yamamoto
15:15	MoA1b.5	**Conductance quantization in Schottky-gated Si/SiGe quantum point contacts** — Andrea Notargiacomo
15:30	MoA1b.6	**Counting statistics of single electron transport in a quantum dot** — Renaud Leturcq
15:45	MoA1b.7	**Counting statistics of single electron transport through a double quantum dot** — Toshimasa Fujisawa

MoA1c: Carbon Nanotubes I

Monday 14:00–16:00; Gartensaal; Chair: T. Ando

14:00	MoA1c.1	**Li-inserted during the growth process of carbon nanotubes** — Vólia Lemos
14:15	MoA1c.2	**One-Dimensional Characteristics of Third-Order Nonlinear Optical Response in Single-Walled Carbon Nanotubes** — Arao Nakamura
14:30	MoA1c.3	**Self-assembled carbon nanotube phototransistors and memory devices** — Arianna Filoramo

14:45 MoA1c.4 **Orbital-selective transport in defective carbon nanotubes and its application to field emission devices** — Jisoon Ihm

15:00 MoA1c.5 **Temperature dependent Photoluminescence from carbon nanotubes** — Ian G Mortimer

15:15 MoA1c.6 **Observation of Exciton-Phonon Bound States in Carbon Nanotubes** — Flávio Plentz

15:30 MoA1c.7 *(Invited talk)* **Carbon Nanotube Electronics and Optoelectronics** — Phaedon Avouris

MoA1d: Growth and Structural Characterization of Nanostructures I

Monday 14:00–16:00; Rittersaal; Chair: D. Grützmacher

14:00 MoA1d.1 **Programming the shape of highly ordered Ge islands on Si: from dots to rods** — Oscar D. Dubon

14:15 MoA1d.2 **Ordering of strained Ge islands on prepatterned Si(001) substrates** — Gang Chen

14:30 MoA1d.3 **Self-ordering of Ge/Si(001) islands driven by silicon capping** — Giovanni Capellini

14:45 MoA1d.4 **In-situ X-ray investigation of the growth of Ge islands on nanostructured and nominal Si substrates** — Tobias U Schülli

15:00 MoA1d.5 *(Invited talk)* **Self-assembly of periodic nano-dots of silicon and germanium on a vicinal silicon (111) surface** — Takeharu Sekiguchi

15:30 MoA1d.6 **Intermixing on SiGe:Si(001) islands** — Marina Soares Leite

15:45 MoA1d.7 **Towards coupled and perfectly resonant quantum dot systems: New strategies** — Armando Rastelli

MoA1e: Defects & Impurities

Monday 14:00–16:00; Geheime Ratstube; Chair: B. Koiller

14:00 MoA1e.1 **Stoichiometry Driven Impurity Configurations in Compound Semiconductors** — Anant K Ramdas

14:15 MoA1e.2 **Two-electron Transitions for Excitons Bound at Shallow Neutral Donors in HVPE GaN** — Bo A Monemar

14:30 MoA1e.3 **Defect Doping of InN** — Rebecca E. Jones

14:45 MoA1e.4 **Stability of Defects in Semiconductor Quantum Dots** — Su-Huai Wei

15:00 MoA1e.5 **Self-diffusion of Si at low temperatures (T<855 °C) revealed by annealing and Raman spectroscopy of Si isotope superlattices** — Yasuo Shimizu

15:15 MoA1e.6 **Spontaneous terahertz electroluminescence under impact ionization of a shallow acceptor in Ge** — Alexander Vasilievich Andrianov

15:30 MoA1e.7 **Giant Fano Resonance of Infrared Photoconductivity in Ge:Te** — Hiroyasu Nakata

15:45 MoA1e.8 **Electronic and optical properties of amorphous silica by first-principles** — Layla Martin-Samos

MoA2a: Optical Studies: Dots II

Monday 16:30–18:00; Festsaal; Chair: G. Bastard

16:30 MoA2a.1 *(Invited talk)* **New Excitonic States Observed in Semiconductor Quantum Dots Using Polarization Resolved Optical Spectroscopy** — Karl Fredrik Karlsson

17:00 MoA2a.2 **Temperature dependent photocurrent spectroscopy of a single InGaAs/GaAs quantum dot** — Marc C. Hübner

17:15 MoA2a.3 **Polarization Conversion and Magneto-Optical Anisotropy of Self-assembled Quantum Dots** — Tobias Kiessling

17:30 MoA2a.4 **Optical near-field mapping of bright and dark quantum dot states** — Ulrich Hohenester

17:45 MoA2a.5 **Shell-Filling of Hole levels in InAs Quantum Dots** — Peter Christianen

MoA2b: Transport Studies: Dots I

Monday 16:30–18:00; Zeremoniensaal; Chair: W. Zawadzki

16:30 MoA2b.1 **Surface Acoustic Wave induced Transport in a Double Quantum Dot** — Wilfred G. van der Wiel

16:45 MoA2b.2 **Magnetotunneling through stacked InAs/InGaAs/InP self-assembled quantum dots.** — Andreza G. da Silva

17:00 MoA2b.3 **Imaging Few-Electron Quantum Dots in InAs/InP Nanowires: Imaging Experiments** — Ania C Bleszynski

17:15 MoA2b.4 **Bias-Controlled Selective Tunnelling Excitation of Electroluminescence from Individual Quantum Dots in a Large Ensemble** — Andreas Baumgartner

17:30 MoA2b.5 **Comparable homogenous and inhomogeneous quantum dot luminescence linewidths at room temperature** — M Benyoucef

17:45 MoA2b.6 **Optical resonant modes in SiOx/Si inverted rolled-up microtubes** — Rudeesun Songmuang

MoA2c: Nanotubes II

Monday 16:30–18:00; Gartensaal; Chair: R. Nicholas

16:30 MoA2c.1 **Time-resolved photoluminescence of single wall carbon nanotubes** — Christophe Voisin

16:45 MoA2c.2 **Single electron transport of carbon nanotube quantum dots under THz laser irradiation** — Tomoko Fuse

17:00 MoA2c.3 **Exciton luminescence of single-walled carbon nanotubes investigated by single nanotube spectroscopy** — Tadashi Inoue

17:15 MoA2c.4 **Excitons in Carbon Nanotubes** — Rodrigo B Capaz

17:30 MoA2c.5 *(Invited talk)* **Measurement of the Quantum Capacitance of Individual Carbon Nanotubes** — Shahal Ilani

MoA2d: Electronic Structure & Growth

Monday 16:30–18:00; Rittersaal; Chair: W. Walukiewicz

16:30 MoA2d.1 *(Invited talk)* **Electronic structure of nitride surfaces** — Chris G. Van de Walle

17:00 MoA2d.2 **Progress in MBE Growth and Properties of InN** — Gregor Koblmueller

17:15 MoA2d.3 **Transmission Electron Microscopy Study of InN Nanorods** — Zuzanna Liliental-Weber

17:30 MoA2d.4 **MnAs dots on GaN(000$\bar{1}$) surface - growth process and electronic structure** — Bogdan J. Kowalski

17:45 MoA2d.5 **Atomistic structure of ZnSe nanowires on ZnSe(001) grown catalytically at low temperatures** — Yutaka Ohno

MoA2e: Superlattices

Monday 16:30–18:00; Geheime Ratstube; Chair: P. Lustoza de Souza

16:30 MoA2e.1 **The coherent Fiske effect in semiconductor superlattices** — Hartmut G Roskos

16:45 MoA2e.2 **Relaxation dynamics of interminiband transitions and electron cooling in doped GaAs/AlGaAs superlattices** — Dominik Stehr

17:00 MoA2e.3 *(Invited talk)* **Observation of subband standing waves in superlattices by low-temperature scanning tunneling spectroscopy** — Kyoichi Suzuki

17:30 MoA2e.4 **Electronic conduction in low-dimensional semiconductor superlattices** — Daivid Fowler

17:45 MoA2e.5 **Electronic Properties of Carbon Nanoribbons and Peculiar Width Dependence** — Motohiko Ezawa

TuM1a: Spin Manipulation

Tuesday 9:00–10:30; Festsaal; Chair: Y. Hirayama

9:00 TuM1a.1 **Spin precession monitored by laser pulses** — Monique Combescot

9:15 TuM1a.2 **Electron spin dynamics during transport using moving quantum dots** — James A H Stotz

9:30 TuM1a.3 *(Invited talk)* **Coherent manipulation of single electron spins by electron spin resonance in coupled quantum dots** — Frank Koppens

10:00 TuM1a.4 **Electron spin manipulation, detection, and relaxation in a high mobility silicon quantum well** — Junya Matsunami

10:15 TuM1a.5 **Inversion asymmetry induced spin splitting in the magnetization of a two-dimensional electron system** — Marc A. Wilde

TuM1b: Photonic Devices

Tuesday 9:00–10:30; Zeremoniensaal; Chair: E. Kapon

9:00 TuM1b.1 **5μm Intersubband Raman Laser from GaInAs/InAlAs double Quantum Wells** — Maxi Scheinert

9:15 TuM1b.2 **Continuous wave operation of blue InGaN laser diodes made by plasma assisted MBE** — Czeslaw Skierbiszewski

9:30 TuM1b.3 **Towards a quantum dot based single photon emitter operating at room temperature** — Carsten Kruse

9:45 TuM1b.4 **Ultra High Speed Submonolayer Quantum Dot Vertical-Cavity Surface-Emitting Lasers** — Alex Mutig

10:00 TuM1b.5 *(Invited talk)* **Raman based Silicon photonics** — Bahram Jalali

TuM1c: Growth and Structural Characterization of Nanostructures II

Tuesday 9:00–10:30; Gartensaal; Chair: P. Calleja

9:00 TuM1c.1 *(Invited talk)* **Capping of InAs quantum dots studied by cross-sectional scanning tunneling microscopy** — Jose Maria Ulloa

9:30 TuM1c.2 **Sharp Interfacial Structure of InAs/InP Quantum Dots Grown by a Double-Cap Method: A Cross-Sectional Scanning Tunneling Microscopy Study** — A. Nakamura

9:45 TuM1c.3 **Growth, Atomic Structure, and Electronic Properties of GaSb/GaAs Nanostructures: Quantum Wells, Dots, and Rings** — Rainer Timm

10:00 TuM1c.4 **Shape Transition during Epitaxial Growth of InAs Quantum Dots on GaAs(001): Theory and Experiment** — Q. K.K. Liu

10:15 TuM1c.5 **Laterally aligned GaAs quantum dot molecules grown by droplet epitaxy** — Masakazu Yamagiwa

TuM1d: Excitons: Towards Bose-Einstein-Condensation I

Tuesday 9:00–10:30; Rittersaal; Chair: H. Mariette

9:00 TuM1d.1 *(Invited talk)* **Collective state in bose-gas of interacting interwell excitons** — Vladislav B Timofeev

9:30 TuM1d.2 **Artificial trapping of a stable high-density dipolar exciton fluid** — Gang Chen

9:45 TuM1d.3 **Trapping of 2D excitons and polaritons** — Zoltan Voros

10:00 TuM1d.4 **Drift mobility of long-living excitons in coupled GaAs quantum wells** — Alexander W. Holleitner

10:15 TuM1d.5 **Towards Bose-Einstein condensation of excitons in coupled quantum wells: Combined treatment of disorder and exciton-exciton interaction** — Roland Zimmermann

TuM1e: Microcavities I

Tuesday 9:00–10:30; Geheime Ratstube; Chair: A. Forchel

9:00 TuM1e.1 **Quantum confinement of microcavity polaritons** — Ounsi El Daïf

9:15 TuM1e.2 **Polariton quantum blockade in a photonic dot** — Arnaud Verger

9:30 TuM1e.3 **Optical Parametric Oscillation in a Vertical Triple Microcavity** — Jerome Tignon

9:45 TuM1e.4 **Coherent modulation of microcavity-polaritons by acoustic phonons** — Maurício M de Lima

10:00 TuM1e.5 **Polaritons composed of 2DEG Fermi-edge transitions in a GaAs/AlGaAs modulation doped quantum well embedded in a microcavity** — Alon Gabbay

10:15 TuM1e.6 **Microcavity polaritons: unified treatment of disorder on excitons and photons** — Vincenzo Savona

TuM2a: Quantum Electrodynamics and Quantum Information Processing I

Tuesday 11:00–12:30; Festsaal; Chair: T. Reinecke

11:00 TuM2a.1 **QND measurement of a single-spin in a dot-cavity system by optical means** — Filippo Troiani

11:15 TuM2a.2 **Charge fluctuation induced dephasing of exchange coupled spin qubits** — Xuedong Hu

11:30 TuM2a.3 **Coherent manipulations of an electric-field-tunable quantum dot** — Artur Zrenner

11:45 TuM2a.4 **Coherent dynamics of single quantum dot exciton qubit driven by detuned optical pulses with electrical readout** — Maurice S Skolnick

12:00 TuM2a.5 *(Invited talk)* **Cavity quantum electrodynamics of semiconductor intersubband transitions in the ultra-strong vacuum Rabi coupling regime** — Cristiano Ciuti

TuM2b: Spin Currents

Tuesday 11:00–12:30; Zeremoniensaal; Chair: T. Dietl

11:00 TuM2b.1 **Spin photocurrent and current-induced spin polarization in an InGaAs/InAlAs two-dimensional electron gas** — Weikun Ge

11:15 TuM2b.2 **g-factor tuning by an electric current in modulation-doped Si quantum wells** — Hans Malissa

11:30 TuM2b.3 *(Invited talk)* **Imaging the spin Hall effect and current-induced polarization in two-dimensional electron gases** — Vanessa Sih

12:00 TuM2b.4 **Scattering induced spin separation at zero bias** — Sergey A. Tarasenko

12:15 TuM2b.5 **Tunable spin-spin interaction in a quantum dot array using a solid state Stern-Gerlach setup** — Gonzalo Usaj

TuM2c: Nanotubes III

Tuesday 11:00–12:30; Gartensaal; Chair: J. Ihm

11:00 TuM2c.1 *(Invited talk)* **Quantum supercurrent transistors in carbon nanotubes** — Pablo Jarillo-Herrero

11:30 TuM2c.2 **High Field Magneto-Optical Study of the Aharonov-Bohm State in Single-Walled Carbon Nanotubes** — Hiroyuki Yokoi

11:45 TuM2c.3 **Aharonov-Bohm effects on optical phonons in carbon nanotubes** — Tsuneya Ando

12:00 TuM2c.4 **Photoluminescence blinking and spectral diffusion of an individual single-walled carbon nanotube** — Kazunari Matsuda

12:15 TuM2c.5 **Transition level dependence of Raman intensities in carbon nanotubes: Role of exciton decay** — Serguei V. Goupalov

TuM2d: Excitons: Towards Bose-Einstein-Condensation II

Tuesday 11:00–12:00; Rittersaal; Chair: J. Gaj

11:00 TuM2d.1 **Towards Bose-Einstein condensation of microcavity polaritons ?** — Le Si Dang *(Invited talk)*

11:30 TuM2d.2 **Long range order of a Bose-Einstein condensate in a semiconductor microcavity** — augustin baas

11:45 TuM2d.3 **Kinetics of quantum fluctuations in polariton Bose Einstein condensation** — Davide Sarchi

TuM2e: 2D Transport

Tuesday 11:00–12:30; Geheime Ratstube; Chair: D. Heitmann

11:00 TuM2e.1 **Imaging Magnetic Focusing in a Two-Dimensional Electron Gas** — Katherine E. Aidala

11:15 TuM2e.2 **Mechanically detected electron energy dissipation in two-dimensional electron systems** — Hiroshi Yamaguchi

11:30 TuM2e.3 **Measuring the energy distribution of partially relaxed non-equilibrium ballistic electrons in two dimensions** — Frank Hohls

11:45 TuM2e.4 **Non-insulating transport of GaAs two-dimensional holes in strong Coulomb interaction regime** — Jian Huang

12:00 TuM2e.5 **Possible ground state of a two-dimensional electron gas at low density** — Michel I Dyakonov

12:15 TuM2e.6 **Can Shot-Noise Measurements Distinguish Between Coherent and Sequential Tunneling?** — H. T Grahn

TuM3d: Semimagnetic Semiconductors I

Tuesday 12:00–12:30; Rittersaal; Chair: J. Gaj

12:00 TuM3d.1 **Ultrafast spin relaxation and dynamics of carriers in a diluted magnetic semiconductor quantum well** — Yasuo Oka

12:15 TuM3d.2 **Spin and orbital quantization of electronic states as origins of second harmonic generation in semiconductors** — Ingo Sänger

TuA1a: Single Photons and Photon Entanglement

Tuesday 14:00–16:00; Festsaal; Chair: P. Michler

14:00 TuA1a.1 **Single Photon Technology Based on Quantum Dots** — Andrew J Shields *(Invited talk)*

14:30 TuA1a.2 **Entangled Photon Pairs from Semiconductor Quantum Dots** — Nikolay Akopian *(Invited talk)*

15:00 TuA1a.3 **Polarization preservation between a photon pair from biexciton-exciton cascaded decay process in a single InAlAs quantum dot** — Hidekazu Kumano

15:15 TuA1a.4 **Polarization dependent correlations of single photons from CdTe/ZnTe quantum dots** — Jan Suffczyński

15:30 TuA1a.5 **Contrast in transmission spectroscopy of single quantum dots** — Brian D. Gerardot

15:45 TuA1a.6 **The radiative lifetime of charged excitons in a single self-assembled quantum dot** — Paul A Dalgarno

TuA1b: Magnetic & Semimagnetic Semiconductors II

Tuesday 14:00–16:00; Zeremoniensaal; Chair: H. Ohno

14:00 TuA1b.1 **Quantitative giant Zeeman effect in (Zn,Co)O and (Ga,Mn)N** — Wojciech Pacuski

14:15 TuA1b.2 **Magnetic Properties of GeMn: on the way to a group IV DMS** — Dominique Bougeard

14:30 TuA1b.3 **Intrinsic ferromagnetism in wurtzite (Ga,Mn)N semiconductor grown by plasma-assisted molecular-beam epitaxy** — Eirini Sarigiannidou

14:45 TuA1b.4 **Carrier Dynamics and Enhanced Ferromagnetism in Annealled GaMnAs** — Kenneth S Burch

15:00 TuA1b.5 **Ultrafast study of standing spin waves in ferromagnetic GaMnAs thin films: exchange and anisotropy effects** — Daimian Wang

15:15 TuA1b.6 **Mn $L_{3,2}$ X-ray Absorption and Magnetic Circular Dichroism in Ferromagnetic $Ga_{1-x}Mn_xP$** — Peter R Stone

15:30 TuA1b.7 *(Invited talk)* **Optical probing of the spin state of a single magnetic atom in a self-assembled quantum dot.** — L. Besombes

TuA1c: Physics in the QHE Regime I and Graphene

Tuesday 14:00–16:00; Gartensaal; Chair: H. Aoki

14:00 TuA1c.1 **Particle-hole symmetry in the quantum Hall transport** — Stefano Roddaro

14:15 TuA1c.2 **Berry phase 2π quasiparticles, Landau level degeneracy and quantum Hall effect in a bilayer of graphene** — Edward McCann

14:30 TuA1c.3 **Infrared magnetospectroscopy of two-dimensional electrons in graphene** — Marcin L Sadowski

14:45 TuA1c.4 **Edge States and the Quantized Hall Effect in Graphene** — Luis Brey

15:00 TuA1c.5 **Theory of transport in bilayer graphenes** — Mikito Koshino

15:15 TuA1c.6 **Raman spectroscopy on individual few-layer graphene islands** — Davy Graf

15:30 TuA1c.7 **Resistance Ridges Along Filling Factor $\nu = 4i$ in $SiO_2/Si/SiO_2$ Quantum Wells** — Kei Takashina

15:45 TuA1c.8 **Landau Level Crossing and Ring-like Structure in a Parabolic Well** — Guennadii M Gusev

TuA1d: THz & Quantum Cascade Structures

Tuesday 14:00–16:00; Rittersaal; Chair: C. Gmachl

14:00 TuA1d.1 **Terahertz quantum-cascade laser dynamics in time-domain** — Josef Kröll

14:15 TuA1d.2 **Time-Resolved Studies of Gain Dynamics in a Quantum Cascade Laser** — Hyunyong Choi

14:30 TuA1d.3 **Bloch gain and single-pulse THz-emission experiments** — Hartmut G Roskos

14:45 TuA1d.4 **Mapping charge carrier distributions with THz microscopy** — Federico Buersgens

15:00 TuA1d.5 *(Invited talk)* **THz sideband generation** — Carlo Sirtori

15:30 TuA1d.6 **Advanced device architectures for terahertz quantum cascade lasers** — Richard P Green

15:45 TuA1d.7 **Direct Measurement of Optical Phonon Limited Hole Intersubband Lifetimes in SiGe Quantum Cascade Structures** — Patrick Rauter

TuA1e: Applications & Devices

Tuesday 14:00–16:00; Geheime Ratstube; Chair: M. Helm

14:00 TuA1e.1 **Physical mechanism and ultimate improvement of Vfb shifts of SiN based SiON gate dielectrics** — Koichi Kato

14:15 TuA1e.2 **Electronic transport properties of strained Si thin films** — Jun Yamauchi

14:30 TuA1e.3 **Single Electron-based Flexible Multi-valued NAND Logic Gates** — Sang J Kim

14:45 TuA1e.4 **Novel nanoelectronic device applications based on the nonlinearity of three-terminal ballistic junctions** — Hongqi Xu

15:00 TuA1e.5 **Probing the strain distribution in III-V semiconductor micro-origami tubes by Raman spectroscopy** — A. Bernardi

15:15 TuA1e.6 **Efficient Laser Driving Scheme for Bi-Layer Nanoelectromechanical Systems** — Jörg P Kotthaus

15:30 TuA1e.7 **Optical cooling of mechanical micro- and nano-structures** — Khaled Karrai *(Invited talk)*

TuA2: Late News Plenary Session

Tuesday 16:30–17:30; Festsaal

16:30 TuA2.1 **Supercurrent reversal in quantum dots** — Jorden van Dam

16:40 TuA2.2 **Mode locking of electron spin coherences in singly charged InGaAs/GaAs quantum dots** — Dmitri R Yakovlev

16:50 TuA2.3 **Fine Structure In The Optical Spectra Of Quantum Dot Molecules** — Allan S. Bracker

17:00 TuA2.4 **Importance of Second-Order Piezoelectric Effects in Zinc-Blende Semiconductors** — Gabriel Bester

17:10 TuA2.5 **Realization of the ultimate limit of a light emitting diode** — Anatol Lochmann

17:20 TuA2.6 **What can we learn on the "universal" exchange-correlation functional of Density Functional Theory from the subband electronic structure of semiconductor quantum wells?** — César R. Proetto

TuA3f: Growth, surfaces, and interfaces: Atomic and electronic structure

Tuesday 17:30–19:30; Poster

17:30 TuA3f.1 **More Accurate Models of the Interfaces Oxide Charge from the Ultra-thin SOI Films** — Cristian R. Ravariu

17:30 TuA3f.2 **First Principles Study of Self-Assembled Monolayers on Metal Surfaces** — Yuji Suwa

17:30 TuA3f.3 **Dielectric discontinuity at a twin boundary in Si(111)** — Jun Nakamura

17:30 TuA3f.4 **Surface strain induced by reconstruction on GaAs(001) surfaces characterized by reflectance modulated spectroscopies** — Luis Felipe Lastras-Martinez

17:30 TuA3f.5 **Atomistic Model Structure of the Si(100)-SiO_2-HfO_2 Interface Generated by *Ab Initio* Molecular Dynamics** — Peter Broqvist

17:30 TuA3f.6 **New insight in the metal-semiconductor interface formation: generation and removal of donor-like surface states on Cs/p-GaAs(001)** — Vitaly L Alperovich

17:30 TuA3f.7 **Core-Level Photoelectron Spectroscopy Probing Local Strain at Silicon Surfaces and Interfaces** — Oleg V. Yazyev

17:30 TuA3f.8 **Atomic force microscope simulations on methyl-terminated Si(100)2x1 surfaces** — Akira Masago

17:30 TuA3f.9 **STS study of Fe monomers and multimers on InAs(110) surfaces** — Tomohiro Matsui

17:30 TuA3f.10 **Electronic structure of 6H-SiC$(11\bar{2}0)$ surfaces** — Marco Bertelli

17:30 TuA3f.11 **A unified model for α_2-β_2-(2×4) reconstructed semiconductor surfaces based on first principles calculations** — Frank Grosse

17:30 TuA3f.12 **Growth of InAs(001): Atomistic Simulations including Strain** — Hannes Guhl

17:30 TuA3f.13 **Atomic structure and electronic properties of self-assembled dysprosium-silicide nanowires on Si(001)** — Martina Wanke

TuA3g: Growth, surfaces, and interfaces: Bulk growth and structural characterization

Tuesday 17:30–19:30; Poster

17:30 TuA3g.1 **In-segregation measurements by RHEED during growth: comparison between vicinal and nominal substrates** — Sandro Martini

17:30 TuA3g.2 **Theoretical comparison of nitrogen-doping effects on silicon crystal growth with oxygen-doping effects** — Hiroyuki Kageshima

17:30 TuA3g.3 **The effect of Mn ions on the growth of cubic GaN** — Eunae Choi

17:30 TuA3g.4 **Monitoring quality of $Cd_{1-x}Zn_xTe$ bulk crystals by x-ray diffraction** — Zdeněk Matěj

17:30 TuA3g.5 **Annealing effect on the buffer layer of high-quality crystalline GaN** — Wei-Chou Hsu

17:30 TuA3g.6 **Surface-strain-induced hexagonal/cubic polymorphism in InGaN epitaxial growth** — Yuuki Takei

17:30 TuA3g.7 **Morphology and optical properties of porous GaAs layers** — Nicolas Dmitruk

17:30 TuA3g.8 **TEM and HRXRD analysis of LP MOVPE grown InGaP/GaAs epilayers** — Claudio Pelosi

17:30 TuA3g.9 **Enhancing the solubility of N in GaAs and InAs by surface kinetics** — Hazem Abu-Farsakh

TuA3h: Growth, surfaces, and interfaces: Interfaces

Tuesday 17:30–19:30; Poster

17:30 TuA3h.1 **Interface structure and shape of *rs*-PbTe quantum dots embedded in *zb*-CdTe: An ab initio study** — Roman Leitsmann

17:30 TuA3h.2 **Composition Profile of MOVPE Grown InP/InGaAs/InP Quantum Well Structures Studied by Cross-Sectional Scanning Tunneling Microscopy** — Ichirou Yamakawa

17:30 TuA3h.3 **Physical mechanisms responsible for the abruptness of the Si-SiO_2 interface** — Leonidas Tsetseris

17:30 TuA3h.4 **Behaviour of metal contacts on InN: aiming for a Schottky contact** — Victor T Rangel-Kuoppa

17:30 TuA3h.5 **Motive forces of atom intermixing at metal/semiconductor interfaces** — Takashi Nakayama

17:30 TuA3h.6 **New Analysis on the Interface Trap States at Schottky Contact** — Myungsim Jun

17:30 TuA3h.7 **Magnetic and electrical characterization of Fe/InAs(001) Interfaces** — R Peters

TuA3i: Heterostructures, quantum wells, superlattices: Electronic structure

Tuesday 17:30–19:30; Poster

17:30 TuA3i.1 **Role of nitrogen in photoluminescence up-conversion in GaInNP/GaAs heterostructures grown by molecular beam epitaxy** — Irina A Buyanova

17:30 TuA3i.2 **Optically detected cyclotron resonance studies of InGaNAs quantum well structures** — Daniel Dagnelund

17:30 TuA3i.3 **Complementary media of the graphitic lattice** — Katsuyoshi Kobayashi

17:30 TuA3i.4 **Miniband Effects in Short-period InGaAs/InP Superlattices** — Yury A Pusep

17:30 TuA3i.5 **Spin splitting in SiGe/Si heterostructures** — Mikhail O. Nestoklon

17:30 TuA3i.6 **Enhencement of electron effective mass and reduced mass in a dilute electron density regime** — Shintaro Nomura

17:30 TuA3i.7 **Band-edge alignment of SiGe heterostructures calculated with a 30 band k.p formalism** — Moustafa El Kurdi

17:30 TuA3i.8 **The Electronic Structures of In-Rich InGaN Quantum Well** — Pilkyung Moon

17:30 TuA3i.9 **Spurious solutions and boundary conditions in kp theory** — Benny Lassen

17:30 TuA3i.10 **Is there a metamagnetic transition in a 2d electron gas subject to an in-plane magnetic field?** — Keith A Benedict

17:30 TuA3i.11 **Magnetization of tunneling coupled double-layer electron systems and double-layer quantum dots** — Olaf Rösler

17:30 TuA3i.12 **Interface influence on carrier confinement and tunneling in nanometer-scale Si–SiO_2 superlattices** — Jan-Martin Wagner

17:30 TuA3i.13 **Hard X-ray Linear Dichroism: an element specific tool for electronic and structural characterization of semiconductors** — Fabrice Wilhelm

TuA3j: Heterostructures, quantum wells, superlattices: Interband transitions, excitons and exciton condensation

Tuesday 17:30–19:30; Poster

17:30 TuA3j.1 **Increasing of the longitudinal exciton magnetic momentum due its movement** — Vladimir Kochereshko

17:30 TuA3j.2 **Multielectron Processes in the Optics of Two-dimensional Excitons** — Vladimir Kochereshko

17:30 TuA3j.3 **Influence of Valance Band Offset on Carrier lifetime and Lasing Threshold in Compressive-strained InGaAs Quantum Well Lasers grown on GaAs** — Wataru Susaki

17:30 TuA3j.4 **Photoluminescence of $Mg_xZn_{1-x}O$/ZnO quantum wells grown by pulsed laser deposition** — Susanne Heitsch

17:30 TuA3j.5 **Spectroscopic characterization of 1.55 um GaInNAs(Sb) /GaNAs quantum-well structures grown by molecular-beam epitaxy** — Handong D Sun

17:30 TuA3j.6 **Quasi-1D type-II exciton in short period GaAs/AlAs (311)A corrugated superlattices: photoluminescence study** — Vladimir A Volodin

17:30 TuA3j.7 **Single particule excitations and interband recombination in very low density 2D electron gases** — Bernard Jusserand

17:30 TuA3j.8 **Can exciton BEC be observed via multi-level PL kinetics?** — Boris Laikhtman

17:30 TuA3j.9 **Interaction between free excitons and 2DEG in modulation doped GaAs/AlGaAs heterojunctions** — Yulia Preezant

17:30 TuA3j.10 **Control of spectral and polarization characteristics in semimagnetic asymmetric double quantum wells** — Sergey V. Zaitsev

17:30 TuA3j.11 **Dephasing of excitons in ZnSe quantum wells using ultra-short excitation pulses** — Hans-Peter Wagner

17:30 TuA3j.12 **Effect of an electric field on the photoluminescence kinetics of type II GaAs/AlAs superlattices** — Dmitry V. Gulyaev

17:30 TuA3j.13 **Observation of hot luminescence and slow intersubband relaxation in GaN/AlGaN multi-quantum-well structures** — Eva Monroy

17:30 TuA3j.14 **Photoluminescence and magneto-photoluminescence studies in GaInNAs/GaAs quantum wells** — Jaime Segura

17:30 TuA3j.15 **Delta-doped GaAs/AlAs multiple quantum wells: A study using optical and terahertz techniques** — Gintaras Valusis

17:30 TuA3j.16 **Polariton superfluids under magnetic field** — Yuri G. Rubo

17:30 TuA3j.17 **Transport in Electron-Hole Bilayers Fabricated Using Undoped GaAs-AlGaAs** — John A Seamons

17:30 TuA3j.18 **Observation of very efficient cold exciton emission due to the first excited subband state in GaAs/$Al_xGa_{1-x}As$ quantum wells** — Kenzo Fujiwara

17:30 TuA3j.19 **High Magnetic Field Study of Rare-earth Doped GaAs/AlAs Superlattices** — Tadashi Takamasu

17:30 TuA3j.20 **Shake-up replicas of excitons and trions in photoluminescence of two-dimensional holes in a high magnetic field** — Leszek Bryja

17:30 TuA3j.21 **Resonant photoluminescence spectroscopy of InGaN/GaN single quantum well structures** — Darren M Graham

17:30 TuA3j.22 **Propagation properties in high-density exciton polaritons** — Takeshi J Inagaki

17:30 TuA3j.23 **Influence of image charge effect on exciton fine structure in an organic-inorganic quantum well material** — Yuko Arai

17:30 TuA3j.24 **The so-called "trion line": A singular many body effect between one composite exciton and many electrons** — Monique Combescot

17:30 TuA3j.25 **High spin polarization of optically-oriented trions in p-doped GaAs-AlGaAs quantum wells** — Klaus Wagenhuber

17:30 TuA3j.26 **Magneto-absorption in quantum wells with in-plane electric fields** — Biswajit Karmakar

17:30 TuA3j.27 **Electron-Hole Liquid in Si/SiGe heterostructures** — Timur M. Burbaev

17:30 TuA3j.28 **Polarization Dependence of Absorption and Photocurrent in QDIPs** — Patrícia L. Souza

17:30 TuA3j.29 **Modification of InGaN Quantum Well Luminescence by Microstructured Buffer Layers** — Yargo C Bonetti

17:30 TuA3j.30 **Free versus Donor-bound Charged Excitons in Quantum Wells: Spectra of States and Optical Transitions in Magnetic Fields** — Alexander Dzyubenko

17:30 TuA3j.31 **Extraordinaire luminescence from an interlayer exciton complex in ZnSe/BeTe quantum structures** — Hirofumi Mino

TuA3k: Heterostructures, quantum wells, superlattices: Nonlinear optical studies

Tuesday 17:30–19:30; Poster

17:30 TuA3k.1 **Degenerate Four Wave Mixing Spectroscopy of InGaN/GaN Multiple Quantum Wells** — Dmytro O Kundys

17:30 TuA3k.2 **Enhancement of third-order nonlinear optical susceptibilities in single-walled carbon nanotubes** — Masao Ichida

17:30 TuA3k.3 **Carrier transport and recombination in resonantly excited InGaAs/GaAs MQWs** — Ramunas Aleksiejunas

17:30 TuA3k.4 **Coherent Control of Non-Markovian interaction of Exciton-Folded Acoustic Phonon in GaAs Multiple Quantum Wells** — yoshihiro ogawa

17:30 TuA3k.5 **Enhanced quantum confined Pockels effect in graded SiGe superlattices** — Bang-fen Zhu

17:30 TuA3k.6 **Selective generation of quantum beats of weakly confined excitons** — Osamu Kojima

17:30 TuA3k.7 **Dynamic Wannier-Stark ladder driven by a pulse train with periodic repetition: removal of interminiband interactions and optical gain** — Ken-ichi Hino

TuA3l: Heterostructures, quantum wells, superlattices: Carrier dynamics, relaxation

Tuesday 17:30–19:30; Poster

17:30 TuA3l.1 **Electron transport and optical properties of InGaAs/InP quantum well grown on patterned InP substrates** — Juliana B. Borges

17:30 TuA3l.2 **Transport anisotropy in high mobility $In_{0.75}Ga_{0.25}As$/ $In_{0.75}Al_{0.25}As$ 2DEGs** — Daniele Ercolani

17:30 TuA3l.3 **Non-perturbative theory of quantum lifetime in AlGaN/GaN two-dimensional electron gases** — Levon B Hovakimian

17:30 TuA3l.4 **Spin dynamics of type-II excitons in diluted magnetic double quantum wells** — Takeshi Koyama

17:30 TuA3l.5 **Optical phonon instability induced by high-speed electron transport** — Kochelap Vyacheslav A

17:30 TuA3l.6 **Lasing Dynamics and Excitonic Transition in CdSe Colloidal Quantum Dots** — Kwangseuk Kyhm

17:30 TuA3l.7 **Control of exciton dynamics in GaAs resonant tunneling diodes** — Francisco J Teran

17:30 TuA3l.8 **Bright photoemission from interacting excitons at the interface localized sites in CdS/ZnSe type-II quantum structures** — Kazuo Ono

TuA3m: Heterostructures, quantum wells, superlattices: Intersubband transitions

Tuesday 17:30–19:30; Poster

17:30 TuA3m.1 **Two-color phase control of electron populations, absorption and dispersion in an asymmetric semiconductor quantum well** — Emmanuel Paspalakis

17:30 TuA3m.2 **Magnetic field-induced selective reduction of energy relaxation paths in weakly coupled superlattices** — Gustavo S Vieira

17:30 TuA3m.3 **Quantum control of the dynamics of a semiconductor quantum well structure** — Emmanuel Paspalakis

17:30 TuA3m.4 **Van Hove singularities in intersubband transitions in multiquantum well photodetectors** — Judikaël Le Rouzo

17:30 TuA3m.5 **Two-electron intersubband absorption in quantum wells** — T. V. Shahbazyan

17:30 TuA3m.6 **Intersubband relaxation dynamics in narrow InGaAs/AlAsSb quantum well structures studied by femtosecond pump-probe spectroscopy** — Christiana Villas-Boas Tribuzy

17:30 TuA3m.7 **Single-particle nature of intersubband electronic Raman scattering and dynamical many-body effects in narrow GaAs quantum wells** — Takeya Unuma

17:30 TuA3m.8 **Ultrafast Intersubband Relaxation Dynamics and Coherent Nonlinearity in Bulk and Waveguide structures of GaN/AlN Multtiple Quantum Wells** — Keita Ikuno

17:30 TuA3m.9 **Intersubband emission and carrier dynamics in GaAs/AlGaAs tunnel-coupled quantum wells after ultrafast optical pumping** — Vadim Yu. Panevin

17:30 TuA3m.10 **Plasma-assisted MBE growth of nitride-based intersubband detectors** — Eva Monroy

17:30 TuA3m.11 **Far-infrared magneto-transmission studies of polarons and bipolarons in InAs/GaAs quantum dots** — Ben A Carpenter

17:30 TuA3m.12 **Resonant second-harmonic generation in GaN/AlN quantum wells at 1 μm wavelength.** — Laurent Nevou

17:30 TuA3m.13 **Quantum cascade electro-luminescent devices for intersubband polariton emission** — Luca Sapienza

TuA3n: Physics in the QHE regime

Tuesday 17:30–19:30; Poster

17:30 TuA3n.1 **Pseudopotentials, Correlations, and Hierarchy Schemes in Quantum Hall Systems** — John J. Quinn

17:30 TuA3n.2 **Evidence of a Macroscopic Electron Self-Ordering in an Asymmetric Quantum Hall System** — Sergey A. Emelyanov

17:30 TuA3n.3 **Interplay between the phonon and Coulomb-mediated drag in low-density bilayers** — Samvel Michael Badalyan

17:30 TuA3n.4 **Spin effects in the n-In$_x$Ga$_{1-x}$As/GaAs double quantum well magnetoresistance under tilted magnetic fields** — Michael V Yakunin

17:30 TuA3n.5 **Electrically detected magnetic resonance spectroscopy in a wide parabolic quantum well** — Clifford R Bowers

17:30 TuA3n.6 **Pairs and triplets of composite fermions in partially filled shells** — Arkadiusz Wójs

17:30 TuA3n.7 **Effect of microwave multi-photon absorption on the magnetoresistivity of 2D electron systems** — Jesus Inarrea

17:30 TuA3n.8 **Effects of In-plane Magnetic Fields on the Canted Antiferromagnetic Phase in the Bilayer $\nu = 2$ Quantum Hall State** — Akira Fukuda

17:30 TuA3n.9 **Anomalous Hall Resistance in Bilayer Electron Systems** — Zyun F. Ezawa

17:30 TuA3n.10 **Photon-counting microscopy of cyclotron emission in quantum Hall electron systems** — Kenji Ikushima

17:30 TuA3n.11 **Anisotropy of Current-pumped Nuclear Spin Polarization in the $\nu = 2/3$ Quantum Hall State** — Kazuki Iwata

17:30 TuA3n.12 **Two-subband quantum Hall effect in parabolic quantum wells** — Christoph Ellenberger

17:30 TuA3n.13 **Transport properties of 2D-electron gas in a n-InGaAs/GaAs DQW in a vicinity of low magnetic-field-induced Hall insulator–quantum Hall liquid transition** — Yurii G Arapov

17:30 TuA3n.14 **Calculations of the THz conductivity of Quantum Hall Systems** — Gabriel Vasile

17:30 TuA3n.15 **Quantum Hall ferromagnet at high filling factors: a magnetic-field-induced Stoner transition** — Benjamin A Piot

17:30 TuA3n.16 **Simultaneous imaging of Terahertz radiation and voltage in quantum Hall conductors** — Yukio Kawano

17:30 TuA3n.17 **Charged excitons in fractional quantum Hall regime.** — Marcin Byszewski

17:30 TuA3n.18 **Current filament model of the microwave induced zero-resistance state** — Josef Oswald

17:30 TuA3n.19 **Anomalous Aharonov-Bohm-type effects in square arrays of antidots** — Masanori Kato

17:30 TuA3n.20 **Hofstadter's butterfly energy diagram and the Hall conductance in Kagome lattice potential** — Hiroyuki Tamura

17:30 TuA3n.21 **dc voltage transformer based on the ν_T=1 state in bilayer electron systems** — Rodney D. Wiersma

17:30 TuA3n.22 **Imaging of Current Concentration in Sub-linear Width Dependent Quantum Hall Breakdown** — Kenichi Oto

17:30 TuA3n.23 **Tunneling and Coulomb Blockade in narrow hall bars of GaAs/AlGaAs heterostructure in the quantum hall regime** — Olivier Couturaud

17:30 TuA3n.24 **Spatial Variations of the Hall Potential and the Electron Temperature in Quantum Hall Systems with a Filling Factor Step** — Hiroshi Akera

17:30 TuA3n.25 **Thermohydrodynamic Instability in Narrow Quantum Hall Systems in the Breakdown Regime** — Hiroshi Akera

17:30 TuA3n.26 **Resistively-Detected NMR Studies of Quantum Hall Systems** — Katsuyoshi Kodera

17:30 TuA3n.27 **Resistively-Detected NMR Studies of Quantum Hall Systems** — Katsuyoshi Kodera

17:30 TuA3n.28 **Quantum Hall Skyrmions in a hole gas with large spin gap and strong disorder** — Leszek Bryja

17:30 TuA3n.29 **Cyclotron Resonance in 2D Electron Systems at Low Magnetic Field** — Andrey P. Chebotarev

17:30 TuA3n.30 **Reordering of the stripe and bubble phase in the presence of a DC current** — Gerardo Gamez

17:30 TuA3n.31 **Imaging Transport Resonances in the Quantum Hall Effect** — Gary A Steele

17:30 TuA3n.32 **Tunable Landau level spin-anticrossings in (110) GaAs two-dimensional hole systems** — Sebastian F Roth

17:30 TuA3n.33 **Composite Fermion Hierarchical States in Rotating Dipolar Fermi Gases** — Piotr Sitko

17:30 TuA3n.34 **Hall potential profiles and adiabatic transport** — Franck Dahlem

17:30 TuA3n.35 **Quantum Hall Effect in Bilayer System with Array of Antidots** — Guennadii M Gusev

TuA3o: Nanostructures: one- and zero-dimensional systems: Optical studies: wires

Tuesday 17:30–19:30; Poster

17:30 TuA3o.1 **Spatial localization of an optical near field dressed by coherent phonons** — Yuji Tanaka

17:30 TuA3o.2 **Current-injection lasing in T-shaped GaAs/AlGaAs quantum-wire lasers** — Shu-Man Liu

17:30 TuA3o.3 **Band-edge divergence and Fermi-edge singularity in an n-type doped T-shaped quantum wire** — Toshiyuki Ihara

17:30 TuA3o.4 **Raman Study of InAs/InP self-assembled quantum wires** — Todora I Angelova

17:30 TuA3o.5 **Temperature Dependence of Intersubband Absorption in Modulation-Doped V-Shaped Quantum Wires** — Jasna V. Crnjanski

17:30 TuA3o.6 **Optical properties of quantum dots in nanowires** — Umberto Perinetti

17:30 TuA3o.7 **Raman Scattering in GaN/AlN Multiple Quantum Disk Nanocolumns** — Tomoyuki Sekine

17:30 TuA3o.8 **Comparison of Charge Confinement in InAs/InP Quantum Wires and Wells** — Jochen Maes

TuA3p: Nanostructures: one- and zero-dimensional systems: Optical studies: dots and dot molecules

Tuesday 17:30–19:30; Poster

17:30 TuA3p.1 **Strain induced modifications of optoelectronic properties of PbSe nanostructures** — Mathias Simma

17:30 TuA3p.2 **Collective and Individual Emissions for InGaAs Quantum Dots in Photonic Crystal Nanocavity** — Wen-Yen Chen

17:30 TuA3p.3 **Optical properties of exciton charge states in InGaAs quantum dots grown by metalorganic chemical vapor deposition** — Hsiang-Szu Chang

17:30 TuA3p.4 **The influence of surface phonons to the polaron states in quantum dot.** — Alexander Yu. Maslov

17:30 TuA3p.5 **Order-N electronic structure calculation of n-type GaAs quantum dots** — Shintaro Nomura

17:30 TuA3p.6 **Foerster-Type Resonance Energy Transfer in Polymer-Stabilized Colloidal CdS Quantum Dots Coupled to Dye-Labeled Proteins** — Akira Sugimura

17:30 TuA3p.7 **Comparison of carrier lifetime and excited state for In(Ga)As quantum dots in the quaternary barriers on InP substrate** — Jaegyu Park

17:30 TuA3p.8 **A theoretical and experimental study of l>2microns photoluminescence of quantum dots on InP substrate** — jacky even

17:30 TuA3p.9 **Magnetic polaron formation in CdMnTe self assembled quantum dots** — Piotr Wojnar

17:30 TuA3p.10 **Ge(Si) self-assembled islands embedded in a tensile-strained Si layer: growth and photoluminescence** — Alexey V. Novikov

17:30 TuA3p.11 **Fine structure of electron-hole complexes in single semimagnetic quantum dots** — Alexander V Chernenko

17:30 TuA3p.12 **Near-field magneto-optics of quantum dots** — Anna Zora

17:30 TuA3p.13 **Raman scattering study of bio-conjugated core-shell CdSe/ZnS quantum dots** — T. V. Torchynska

17:30 TuA3p.14 **Microphotoluminescence study of single and multilayered structure with GaN/AlN quantum dots** — Konstantin S. Zhuravlev

17:30 TuA3p.15 **Effect of surface oxidation on optical absorption of silicon nanocrystallites** — Ikurou Umezu

17:30 TuA3p.16 **InN/GaN quantum dots: Electronic and optical properties** — Stefan Schulz

17:30 TuA3p.17 **Rough InAs/GaAs Quantum Dots** — Marilza G. Bezerra

17:30 TuA3p.18 **Long-wavelength emitters based on In(Ga)AsN/GaAsN quantum wells and quantum dots** — Faustino Martelli

17:30 TuA3p.19 **Optical detection of lateral potential modulation and electron accumulation in undoped GaAs quantum well with electric gates** — Masumi Yamaguchi

17:30 TuA3p.20 **Electron states and magnetophotoluminescence of elongated InAs/GaAs quantum dots** — Vlastimil Křápek

17:30 TuA3p.21 **Delocalized electron states in quantum dot molecules** — Twan van Lippen

17:30 TuA3p.22 **Excitonic Fock-Darwin spectrum of a single InAs/GaAs quantum dot** — Adam Babinski

17:30 TuA3p.23 **Magneto-photoluminescence of InSb/InAs quantum dots as a function of excitation power density** — Olga G. Lyublinskaya

17:30 TuA3p.24 **Low-density quantum dots embedded in photonic crystal nanocavities for single-photon generations** — Wen-Hao Chang

17:30 TuA3p.25 **Electro-optical states characterization of self-assembled InAs/GaAs Quantum Rings.** — Alfonso G Taboada

17:30 TuA3p.26 **Electronic Raman Scattering in InAs/AlAs Quantum Dot Structures** — Alexander G. Milekhin

17:30 TuA3p.27 **Resonant emission of single InAs/GaAs quantum dots in a waveguiding configuration** — Romain Melet

17:30 TuA3p.28 **Phonon-induced Excition Relaxation and prue Dephasing in Quantum Dots and Quantum Dot Molecules** — Egor A. Muljarov

17:30 TuA3p.29 **Superconducting Single Photon Detectors for Optical Measurements on Quantum Dots** — Elisabeth Reiger

17:30 TuA3p.30 **Magnetic and electric field-controlled coupling in quantum ring molecules** — Luis G. Dias da Silva

17:30 TuA3p.31 **Temperature dependence of the exciton homogeneous linewidth in CdTe and CdSe self-assembled quantum dots: limit of single photon source operation** — Kuntheak Kheng

17:30 TuA3p.32 **Ex-situ control of fine-structure splitting and excitonic binding energies in single InAs/GaAs quantum dots** — Robert Seguin

17:30 TuA3p.33 **Multi-Electronic Structures in GaAs Quantum Dots** — Fujio Minami

17:30 TuA3p.34 **Influence of carrier-carrier and carrier-phonon correlations on optical absorption and gain in quantum-dot systems** — Michael Lorke

17:30 TuA3p.35 **Disorder-induced energy shifts of magnetoexcitons in semiconductor heterostructures** — Matthias Erdmann

17:30 TuA3p.36 **Thermal and optical manipulation of hole occupancy in type-II self-assembled GaSb/GaAs quantum dots** — bhavtosh Bansal

17:30 TuA3p.37 **Resonant Raman scattering in CdSe self-assembled quantum dots** — J. S. Reparaz

17:30 TuA3p.38 **Polarization sensitive spectroscopy of the excitonic fine structure of negatively charged excitons in Single Quantum Dots** — Eilon Poem

17:30 TuA3p.39 **Electronic structure of the dilute nitrogen quantum dots** — Stanko S Tomic

17:30 TuA3p.40 **Single dot spectroscopy investigations of carrier transport and capture into InAs/GaAs quantum dots** — Mats Larsson

17:30 TuA3p.41 **Modified carriers transport and capture into InAs/GaAs quantum dots due to an applied magnetic field** — Mats Larsson

17:30 TuA3p.42 **Anti-Stokes photoluminescence and resonant Raman scattering from InSb quantum dots and nanowires** — Noboru Wada

17:30 TuA3p.43 **Control of the exciton recombination time of type-II quantum dots coupled to a type-I quantum well** — Marcio Peron Franco de Godoy

17:30 TuA3p.44 **Tuning the InAs/GaAs quantum dot charge state by pure optical means** — Mats Larsson

17:30 TuA3p.45 **Exciton Aharonov-Bohm Effect in Embedded Nanostructures** — Michal Grochol

17:30 TuA3p.46 **Temperature-dependent optical properties of CdSe/ZnSe quantum dots grown on GaAs and Si/Ge virtual substrates** — Evgeny E. Onishchenko

17:30 TuA3p.47 **Dependence of exciton energy on dot height in GaN/AlN quantum dots** — Eoin P O Reilly

17:30 TuA3p.48 **The Diffusion Driven Capture of Carriers in Quantum Dots Formed in type II GaAs/AlAs Quantum Well Structure** — Barbara Chwalisz-Pietka

17:30 TuA3p.49 **Carrier dynamics of electrons in n-type modulation-doped InAs/GaAs quantum dot structure studied using THz time-domain spectroscopy** — Seung Jae Oh

17:30 TuA3p.50 **In-plane absorption spectroscopy at room temperature of Stranski-Krastanov quantum dots emitting at 1.3 micron** — Giuseppe Visimberga

17:30 TuA3p.51 **Effect of carrier migration on the photoluminescence of CdTe/ZnTe quantum-dot superlattices** — Evgeny E. Onishchenko

17:30 TuA3p.52 **Resonant Raman scattering on optical phonons confined in spherical semiconductor nanocrystals: ODP interaction and polaron effects** — A. G. Rolo

17:30 TuA3p.53 **Micro-photoluminescence of isolated hexagonal GaN/AlN quantum dots : role of the electron-hole dipole** — Richard Bardoux

17:30 TuA3p.54 **Photoluminescent Properties of InAs Quantum Dots Grown by MOVPE on an $In_xAl_yGa_{1-x-y}As$ Layer and their Dependence on the Layer Stoichiometry** — Julio G. Mendoza-Alvarez

17:30 TuA3p.55 **Electron and Hole Confinement Localization in InP / GaAs type II Quantum Dots** — Paulo F Gomes

17:30 TuA3p.56 **Optical state engineering in charged quantum dot molecules** — Jose M Villas-Boas

17:30 TuA3p.57 **Electron-Hole Separation of Zero-Dimensional Excitons in A Single Self-Organized InAs Quantum Dot Studied Under Normal and In-Plane Electric Fields** — Masato Ohmori

17:30 TuA3p.58 **Observation of modulation of PL intensity in self assembled quantum rings under strong pulsed magnetic fields.** — Taboada G. Alfonso

TuA3q: Nanostructures: one- and zero-dimensional systems: Nanotubes

Tuesday 17:30–19:30; Poster

17:30 TuA3q.1 **Carbon nanotubes as terahertz emitters and detectors** — Oleg V Kibis

17:30 TuA3q.2 **Engineering of Carbon-Nanotube Band Structure through Bending** — Seungwon Lee

17:30 TuA3q.3 **Yield and quality optimisation for MWNTs prepared by catalytic CVD** — S. Santangelo

17:30 TuA3q.4 **Optical and structural properties of III-V rolled-up nano- and microtubes** — Hendrik Paetzelt

17:30 TuA3q.5 **Zitterbewegung of electrons and holes in carbon nanotubes** — Wlodek Zawadzki

17:30 TuA3q.6 **Encapsulation of metallocenes in single-wall carbon nanotubes: an ab initio study** — Solange Binotto Fagan

17:30 TuA3q.7 **Twisting the energy gap of a carbon Möbius nanostrip** — Ewerton W. S. Caetano

17:30 TuA3q.8 **Dynamical response of perfect conducting channel in carbon nanotubes** — Yoichi Asada

17:30 TuA3q.9 **Electronic states of single-walled carbon nanotubes with substitutional impurities.** — Koichi Inoue

17:30 TuA3q.10 **Prominent exciton absorption of perpendicularly polarized light in carbon nanotubes** — Seiji Uryu

17:30 TuA3q.11 **Strong inter-tube coupling induced by disorder in double-wall carbon nanotubes** — Seiji Uryu

17:30 TuA3q.12 **Magnetic field effecfts and geometrical aspects on double walled carbon nanotubes** — Andrea Latge

17:30 TuA3q.13 **Strain-induced localization in metallic carbon nanotubes** — Hidekatsu Suzuura

17:30 TuA3q.14 **Stimulated Raman scattering of single-wall carbon nanotubes** — B.P. Zhang

17:30 TuA3q.15 **Spin injection to single-walled carbon nanotubes through thin tunnel barriers** — Yasuhide Ohno

17:30 TuA3q.16 **Edge-Contact Carbon Nanotube Field-Effect Transistors with No Hysteresis Characteristics** — Kohei Nishiguchi

17:30 TuA3q.17 **Fabrication and transport property of artificial structure of CNTs using SPM nano-manipulation** — Yuichi Ochiai

17:30 TuA3q.18 **Defects and charge transport in carbon nanotubes** — Antônio J. R. da Silva

17:30 TuA3q.19 **Electron-phonon effects on the transport through a carbon nanotube with a side-coupled molecule** — Sergio Saul Makler

17:30 TuA3q.20 **Optical properties of carbon nanotubes: a first-principles study** — Deborah Prezzi

17:30 TuA3q.21 **Carbon Nanotube Based Transistors: A Computational Study** — Mahdi Pourfath

17:30 TuA3q.22 **Terahertz electrical and optical properties of doublewalled carbon nanotubes** — In Hee Maeng

17:30 TuA3q.23 **The role of topological defects on the electronic transport of carbon nanotube junctions under external fields** — Luis Rosales

17:30 TuA3q.24 **Phonon-drag thermopower of ballistic semiconducting single-wall carbon nanotubes** — Konstantinos Papagelis

17:30 TuA3q.25 **Band structure changes in carbon nanotubes caused by MnTe crystal encapsulation** — Lain-Jong Li

17:30 TuA3q.26 **Purification of Single-walled Carbon Nanotubes Probed by Raman Spectroscopy and High ResolutionTransmission Electronic Microscopy** — José M Rosolen

17:30 TuA3q.27 **Study of environmental effects on the optical properties of single-wall carbon nanotubes** — Adelina P Santos

17:30 TuA3q.28 **Band structure of carbon nanotubes probed by magnetic field** — Georgy Fedorov

TuA3r: Semiconductor Spintronics: Magnetic and semimagnetic semiconductors

Tuesday 17:30–19:30; Poster

17:30 TuA3r.1 **The magnetotransport properties of Co-doped ZnO films** — Qingyu Xu

17:30 TuA3r.2 **Anomalous Hall effect in a two-dimensional electron system: unified analysis of side-jump and skew scattering mechanisms** — S. Y. Liu

17:30 TuA3r.3 **Photoluminescence and tunneling of direct and indirect excitons of semimagnetic asymmetric double quantum wells CdSe/CdMgSe/CdMnSe** — Irina I. Reshina

17:30 TuA3r.4 **ZnO:Mn - DMS growth and characterization** — Ekaterina Chikoidze

17:30 TuA3r.5 **High-energy spectroscopic study of Mn-doped GaN prepared by thermal diffusion of Mn** — Jong-Il Hwang

17:30 TuA3r.6 **Structure investigation of ferromagnetic GaMnAs layers by x-ray standing wave methods** — Václav Holý

17:30 TuA3r.7 **Low temperature transport properties in ferromagnetic GaMnAs films** — Hongtao He

17:30 TuA3r.8 **Theoretical Study of Magnetic Properties of VN, CrN, MnN, FeN, and CoN under strain** — Luísa M.R. Scolfaro

17:30 TuA3r.9 **Local environment effects on exchange interactions and Curie temperatures in dilute magnetic semiconductors** — Kazunori Sato

17:30 TuA3r.10 **Effects of spinodal decomposition on ferromagnetism in dilute magnetic semiconductors** — Tetsuya Fukushima

17:30 TuA3r.11 **Size dependence of the Mn $3d^5$ luminescence decay in wire-like arrangements of (Zn,Mn)S nanoparticles** — Wolfram Heimbrodt

17:30 TuA3r.12 **Ab initio study of GaN/$Mn_xGa_{1-x}N$ digital heterostructure** — Marcelo Marques

17:30 TuA3r.13 **Above room temperature ferromagnetism in Mn-ion implanted $Si_{0.75}Ge_{0.25}$** — KieLeong Teo

17:30 TuA3r.14 **Ferromagnetic Ordering and Extraordinary Hall Effect in Epitaxial Cobalt-doped Germanium** — Viloane Ko

17:30 TuA3r.15 **Spin interaction in diluted magnetic semiconductor dots** — Kai Chang

17:30 TuA3r.16 **Origin of room-temperature ferromagnetism in Cr-As compound** — Jianhua Zhao

17:30 TuA3r.17 **Optical spectroscopy on metastable zincblende MnS/ZnSe heterostructures** — Limei Chen

17:30 TuA3r.18 **Kerr rotation and magnetic circular dichroism in ferromagnetic InMnSb and InMnAs** — Heinz Krenn

17:30 TuA3r.19 **Magnetic domain structure of GaMnAs films with perpendicular anisotropy** — Aristide Lemaitre

17:30 TuA3r.20 **Hot-electron photoluminescence of para- and ferromagnetic (Ga,Mn)As layers** — Victor F. Sapega

17:30 TuA3r.21 **Magnetic properties of $Ge_{1-x-y}Mn_xEu_yTe$ mixed crystals** — Witold Dobrowolski

17:30 TuA3r.22 **The effect of annealing on magnetic properties of $Ge_{1-x}Mn_xTe$ thin films grown by molecular-beam epitaxy** — KieLeong Teo

17:30 TuA3r.23 **First-Principles calculation under carrier doping treatment in $CuAlO_2$ based dilute magnetic semiconductor** — Hidetoshi Kizaki

17:30 TuA3r.24 **Correlation Between Electric Structure and Magnetism in Mn doped GaN films** — Saki Sonoda

17:30 TuA3r.25 **Magnetotranport and Antiferromagnetic Behavior in ErP Epitaxial Layers on GaInP(001)** — A. Nakamura

17:30 TuA3r.26 **Tuning the hole density of $Ga_{1-x}Mn_xAs$ by hydrogenation** — Aristide Lemaître

17:30 TuA3r.27 **Photoluminescence of "dark" excitons in CdMnTe quantum well embedded in a microcavity** — Adalberto Brunetti

17:30 TuA3r.28 **High resolution spin-flip Raman scatterings in CdZnTe/ CdZnMnTe quantum wells at ^{3}He Temperatures** — Kiyofumi Muro

17:30 TuA3r.29 **Remanence and Interdiffusion in Ultrathin Antiferromagnetic Semiconductor Epilayers** — Walter Soellinger

17:30 TuA3r.30 **Laser Control of Magnetization of bulk (Zn,Mn)Te** — Le Van Khoi

17:30 TuA3r.31 **Magnetoresistance effects in GaMnAs (001) and (311) layers** — Ursula Wurstbauer

17:30 TuA3r.32 **Optical emissions from III-V Diluted Magnetic Semiconductor Systems** — Guilherme M Sipahi

17:30 TuA3r.33 **Magnetic domain patterns in as-grown and annealed GaMnAs epilayers with perpendicular easy axis** — Catherine Gourdon

17:30 TuA3r.34 **Exchange interaction effects on the optical properties of $Eu_xPb_{1-x}Te$** — Andre B Henriques

17:30 TuA3r.35 **Ferromagnetic resonance study of ultra-thin GaMnAs films as a function of layer thickness** — Y. Y. Zhou

17:30 TuA3r.36 **Studies of intrinsic exchange interactions in Zn(Mn)O, Zn(Mn)S and Zn(Mn)Te at 4 kbar by inelastic neutron scattering.** — Zachary Wiren

17:30 TuA3r.37 **Formation and characterization of As^+-implanted p-type $(Zn_{1-x}Mn_x)O$ diluted magnetic semiconductor thin films** — Sejoon Lee

17:30 TuA3r.38 **Fabrication and characterization of n-type modulation-doped (Cd,Cr)Te quantum wells** — Fumiyoshi Takano

17:30 TuA3r.39 **Carrier Dynamics and Magnetization-induced Nonlinearity in Ferromagnetic GaMnAs** — Ji-Hee Kim

17:30 TuA3r.40 **Anisotropic Magnetic-Field Evolution of Valence-Band States in One-Dimensional Diluted Magnetic Semiconductors** — Yukihiro Harada

17:30 TuA3r.41 **Single Particle Parameters of a Spin Polarized Electron Gas in CdMnTe Quantum Wells: Comparison between Raman Scattering and Photoluminescence** — Cynthia Aku-Leh

17:30 TuA3r.42 **Co-Doped TiO_2 Rutile Films on Al_2O_3 (0001)** — William R Branford

17:30 TuA3r.43 **Inter-wire antiferromagnetic exchange interaction in Ni/Si-ferromagnetic/semiconductor nanocomposites** — Klemens Rumpf

17:30 TuA3r.44 **Energy Transport Between Hole Gas and Crystal Lattice in Diluted Magnetic Semiconductor** — Jani M Kivioja

17:30 TuA3r.45 **Room temperature magneto-optics of ferromagnetic ZnO doped with transition metals and aluminium** — A Mark Fox

17:30 TuA3r.46 **Diluted Magnetic III-V Semiconductors with Mn for Possible Spintronic Applications** — Maria Kamińska

17:30 TuA3r.47 **Evidence for substitutional Mn in MBE-grown GaMnN: 1.42 eV PL and TEM studies.** — Jan Zenneck

17:30 TuA3r.48 **STM-study of the atomic structure of the (110) surface of Mn-doped cubic GaN** — Jens K. Garleff

17:30 TuA3r.49 **Optical properties of (Mn,Ga)As and (Be,Ga)As** — C. S. Lee

17:30 TuA3r.50 **Influence of intermetallic precipitates on the magnetic properties of GeMn** — Stefan Ahlers

17:30 TuA3r.51 **Magnetophotoluminescence and ultrafast spectroscopy on GaAs quantum wells close to a GaMnAs layer** — Robert Schulz

17:30 TuA3r.52 **Formation of epitaxial MnSb and MnBi layers on GaMnAs** — Janusz Kanski

17:30 TuA3r.53 **Infrared Magneto-Optical Studies in $Ga_{1-x}Mn_xAs$ Films** — John Cerne

17:30 TuA3r.54 **GaN:Fe and (Ga,Fe)N:Mg: growth, characterization and magnetic properties** — Alberta Bonanni

17:30 TuA3r.55 **GaMnAs annealing under various conditions: air vs. As cap** — Kamil Olejník

17:30 TuA3r.56 **Optical Studies of Transition Metal Doped GaN Thin Films grown by Metalorganic Chemical Vapor Deposition** — Matthew H Kane

17:30 TuA3r.57 **Anisotropic Magnetoresistance: from tunnel junctions to Coulomb Blockade** — J. Fernandez-Rossier

17:30 TuA3r.58 **Magnetic cluster phases of Mn-interstitial-free (Ga,Mn)As** — Y. J. Cho

17:30 TuA3r.59 **Magnetotunnelling spectroscopy of Mn interstitial donors in GaMnAs/GaAs devices** — Oleg Makarovsky

17:30 TuA3r.60 **Photon induced exchange interactions in semiconductor microcavities with finite quality factors** — Enrique V. Anda

17:30 TuA3r.61 **Theoretical Model of Magnetoexcitons in $Zn_{1-x}Co_xO$** — Witold Bardyszewski

17:30 TuA3r.62 **A new superparamagnetic phase in strained and unstrainend heteroepitaxial EuSe above the critical temperature** — Rainer T. Lechner

17:30 TuA3r.63 **Magnetic resonance as a tool to investigate the composition, shape, and orientation of precipitates in "ferromagnetic" semiconductors** — H. Przybylinska

TuA3s: Semiconductor Spintronics: Spin injection and spin transport

Tuesday 17:30–19:30; Poster

17:30 TuA3s.1 **Effects of spin-dependent tunneling in III-V semiconductor heterostructures** — Irina N. Yassievich

17:30 TuA3s.2 **The conductance of the quantum wire touching the gated Aharonov-Bohm ring** — Ivan A Shelykh

17:30 TuA3s.3 **Annealing-induced structural transition from $Ga_{1-x}Mn_xAs$ alloys to GaAs:Mn/MnAs hybrids probed by magneto-transport and ferromagnetic resonance** — Christoph Michel

17:30 TuA3s.4 **Spin-Hall effect in semiconductor heterostructures with weak cubic Rashba spin-orbit interaction** — Olaf Bleibaum

17:30 TuA3s.5 **Thermoballistic Description of Spin-Polarized Electron Transport in Diluted-Magnetic-Semiconductor Heterostructures** — U. Wille

17:30 TuA3s.6 **Theory of spin transport across domain-walls in (Ga,Mn)As** — Rafal Oszwaldowski

17:30 TuA3s.7 **Spin detection of ballistic electrons injected from scanning-tunneling-microscope** — Makoto Sakurai

17:30 TuA3s.8 **Prospects for using Andreev Spectroscopy to detect Spin Accumulation in Semiconductors** — Fridrik Magnus

17:30 TuA3s.9 **Electrical spin injection in light emitting Schottky diodes based on InGaAs /GaAs QW heterostructures** — Nikolay V Baidus

17:30 TuA3s.10 **Spin-filter capabilities of an indirect double-barrier structure** — Titus Sandu

17:30 TuA3s.11 **Drastic Magnetoresistance Enhancement on Spin-Dependent-Transport and Appearance of Spin-Glass-like Behavior for Magnetite Nanoparticle Sinter calcined at Low Temperature** — Hiromi Kobori

17:30 TuA3s.12 **Mesoscopic Hall effect driven by chiral spin order** — Jun-ichiro Ohe

17:30 TuA3s.13 **Spin Hall current induced by acceleration of electrons** — Masayuki Yamamoto

17:30 TuA3s.14 **Current-Induced Spin Polarization in Semimagnetic Semiconductor Structures** — Andriy I Savchuk

17:30 TuA3s.15 **Spin transport in ferromagnet/semiconductor nanostructures on a cleaved InAs/InGaAs heterostructure** — Andreas Wittmann

17:30 TuA3s.16 **Optical Spin Current Injection and Manipulation in Semiconductors: Infrared Absorption and Raman Scattering Processes** — John E. Sipe

17:30 TuA3s.17 **Spin and Charge Transport Properties in Quasi-One Dimensional Anomalous Hall System** — Katsunori Wakabayashi

17:30 TuA3s.18 **Spin-splitting characterization of an InGaSb 2DEG by using magnetoresistance measurements with tilted magnetic fields** — Masashi Akabori

17:30 TuA3s.19 **Long-range spin transport in (110) GaAs Quantum Wells** — Odilon D. D. Couto

17:30 TuA3s.20 **Spin Injection in InAsSb quantum well LEDs with ferromagnetic metal injectors** — Ben N Murdin

17:30 TuA3s.21 **Spin resolved quantum transport along [110] III-V hetestructures** — Erasmo A de Andrada e Silva

17:30 TuA3s.22 **Hole Spin Polarization in symmetric and asymmetric p-type GaAs/AlAs Resonant Tunneling Diodes** — Hugo Bonette de Carvalho

17:30 TuA3s.23 **Evidence of Hole Spin-polarized Current through a non-magnetic Resonant Tunneling Diode** — Hugo Bonette de Carvalho

17:30 TuA3s.24 **Cyclotron (or InterLandau-level) resonances in the circular polarization of light emitted from Fe/InAs Quantum-dot-based spin LEDs** — Mesut Yasar

17:30 TuA3s.25 **Spin precession and alternating spin polarization in spin-3/2 hole systems** — Dimitrie Culcer

WeM1-WeM4: Plenary Lectures

Wednesday 9:00–12:30; Festsaal; Chair: G. Abstreiter (WeM1, WeM2), K. von Klitzing (WeM3, WeM4)

9:00 WeM1.1 *(Plenary talk)* **Photonic Crystals for Manipulation of Photons** — Susumu Noda

9:45 WeM2.1 *(Plenary talk)* **Frontiers in Nanotechnology and Devices** — George Bourianoff

10:30 **Break**

11:00 WeM3.1 *(Plenary talk)* **Probing and manipulating spin effects in vertical quantum dots** — Seigo Tarucha

11:45 WeM4.1 *(Plenary talk)* **Progress in Spin-based Quantum Bits** — Charles M Marcus

WeA1a: Quantum Dots: Optical Studies, Carrier Dynamics and Decoherence

Wednesday 14:00–16:00; Festsaal; Chair: A. Zrenner

14:00 WeA1a.1 **Mid-infrared polaron laser with InAs/GaAs self-assembled quantum dots** — Sébastien Sauvage

14:15 WeA1a.2 **Intersublevel dephasing of polarons in n-type InAs quantum dots** — Evgeny A Zibik

14:30 WeA1a.3 **Magneto-optical interband transitions in semiconductor quantum dots : evidence for excitonic polarons** — Vanessa M Preisler

14:45 WeA1a.4 **Bipolar charging in quantum dot arrays** — Artem V Savelyev

15:00 WeA1a.5 **Combined influence of Coulomb, exchange and phonon couplings on the lineshape of quantum dot spectra** — Annette Krügel

15:15 WeA1a.6 **Control of Acoustic-phonon-induced Electron Relaxation in Quantum Dots: The Role of the Piezoelectric Field** — Juan Ignacio Climente

15:30 WeA1a.7 *(Invited talk)* **Motional narrowing in a semiconductor quantum dot** — Guillaume Cassabois

WeA1b: Electronic Structure of Dots & Transport II

Wednesday 14:00–16:00; Zeremoniensaal; Chair: P. Hawrylak

14:00 WeA1b.1 *(Invited talk)* **Imaging correlated wave functions of few-electron quantum dots: Theory and STS experiments** — Massimo Rontani

14:30 WeA1b.2 **Theory of Self-Assembled InGaAs/GaAs Quantum-Dots: Excitons, Multi-Excitons, Charged Excitons, and Entangled Excitons in self-assembled Quantum Dot-Molecules** — Alex Zunger

14:45 WeA1b.3 **Tunnelling Transient Spectroscopy on self-assembled InAs Quantum Dots** — Andreas Schramm

15:00 WeA1b.4 **Non-local spin control in a double quantum dot-quantum wire coupled system** — Satoshi Sasaki

15:15 WeA1b.5 **Orbital and Spin Effects in Single- and Double-Quantum Dots Defined in InAs/InP Nanowire Heterostructures** — Andreas Fuhrer

15:30 WeA1b.6 **Pseudo-spin Kondo effect in Aharonov-Bohm interferometer containing laterally coupled double quantum dots** — Toshihiro Kubo

15:45 WeA1b.7 **Resonant scattering between self-assembled InAs quantum dots and a two-dimensional electron gas** — Cedrik Meier

WeA1c: Quantum Information Processing II

Wednesday 14:00–16:00; Gartensaal; Chair: C. Tejedor

14:00 WeA1c.1 **Quantum control of donor-bound electrons at the Si-SiO_2 interface** — Belita Koiller

14:15 WeA1c.2 **Stark Tuning of Donor Electron Spins in Silicon** — Forrest R Bradbury

14:30 WeA1c.3 **Applications of Single Photons from a Single Quantum Dot in Quantum Information** — Matthias Scholz

14:45 WeA1c.4 **A quantum device interfacing photons and spins for quantum repeaters** — Hideo Kosaka

15:00 WeA1c.5 *(Invited talk)* **Spin qubits in quantum dots: Review and Outlook** — Daniel Loss

15:30 WeA1c.6 **Si-based two-electron Coulomb blockade devices for spin qubit gates** — Jung B Choi

15:45 WeA1c.7 **Relaxation of Donor Nuclear Spins in Silicon** — Stephen A. Lyon

WeA1d: Magnetic Nanostructures and Spin Injection

Wednesday 14:00–16:00; Rittersaal; Chair: J. Kossut

14:00 WeA1d.1 **Fe adatoms along Bi nanolines on H/Si(001): Patterning atomic magnetic chains** — Walter Orellana

14:15 WeA1d.2 **Detection of Magnetic Domain Wall in a Permalloy Wire using a Semiconductor and Ferromagnetic Hybrid Structure** — Yoshiaki Sekine

14:30 WeA1d.3 *(Invited talk)* **Imaging electrical spin injection and accumulation in lateral ferromagnet/semiconductor devices** — Scott A. Crooker

15:00 WeA1d.4 **Oblique Hanle measurements of InAs/GaAs quantum dot spin-LEDs** — Grigorios Itskos

15:15 WeA1d.5 **Electrical spin injection from ZnMnSe into InGaAs/GaAs quantum structures** — Michael Hetterich

15:30 WeA1d.6 **Intrinsic current bi-stability in a Datta-Das spin transistor** — Kanji Yoh

15:45 WeA1d.7 **Spin-dependent transverse magnetic focusing in InSb- and InAs-based heterostructures** — Jean J Heremans

WeA1e: Microcavities II and Photonic Crystal Structures

Wednesday 14:00–16:00; Geheime Ratstube; Chair: E. Cohen

14:00 WeA1e.1 *(Invited talk)* **Strong Coupling Regime for a Single Quantum Dot in an Optical Microcavity** — Pascale Senellart

14:30 WeA1e.2 **Control of single quantum dot and collective spontaneous emission in 2D photonic crystal nanostructures** — Michael Kaniber

14:45 WeA1e.3 **Control of polarized single quantum dot emission in high-quality-factor elliptical microcavity pillars** — Paulo Sergio S. Guimarães

15:00 WeA1e.4 **Photon Statistics of Semiconductor Microcavity Lasers** — Jan Wiersig

15:15 WeA1e.5 **Optical Microtube Ring Resonators** — Tobias Kipp

15:30 WeA1e.6 **Selective excitation of a single quantum dot in a photonic crystal nanocavity by using cavity resonance** — Masahiro Nomura

15:45 WeA1e.7 **Terahertz phonon dynamics in acoustic nanocavities** — Bernard Jusserand

WeA2f: Growth, surfaces, and interfaces: Growth and structural characterization of nanostructures, wires, and dots

Wednesday 16:30–19:00; Poster

16:30 WeA2f.1 **Structural characterization of CdTe quantum dots grown on Si(111)** — Sukarno O Ferreira

16:30 WeA2f.2 **Synthesis and Properties of ZnSe Precursor and ZnSe Nanoribbon Arrays on Zn Substrates** — Lijuan Zhao

16:30 WeA2f.3 **Fractal growth of silicon nanocrystallites during pulsed laser ablation in background gas** — Ikurou Umezu

16:30 WeA2f.4 **Preparation and Properties of Some PVC Nanocomposites** — Onsy I.H. Dimitry

16:30 WeA2f.5 **Morphology of Si Nanowire Grown via Solid-Liquid-Solid Mechanism** — Eun-Kyung Lee

16:30 WeA2f.6 **Surface concentration mapping of InAs/GaAs quantum dots** — Giorgio Biasiol

16:30 WeA2f.7 **Growth of High Purity Polyaniline Nano and Micro Fibers Using the Electrospinning Technique** — Jairo R Cárdenas

16:30 WeA2f.8 **Optical properties of GaSe nano particles fabricated by laser ablation** — S Onari

16:30 WeA2f.9 **Optimization of MBE Growth Parameters for GaAs-based THz Quantum Cascade Lasers** — Aaron Maxwell Andrews

16:30 WeA2f.10 **Kinetic Lattice Monte Carlo Simulations of Germanium Island and Wire Growth on Prepatterned Silicon (100) Substrates** — Richard Akis

16:30 WeA2f.11 **Single-wall carbon nanotubes obtained with metallic catalysts** — Paulo de Tarso Cavalcante Freire

16:30 WeA2f.12 **InN nanorods growth: influence of temperature, catalyst, and gas flow rate** — Aleksandra B Djurisic

16:30 WeA2f.13 **Quantum dots microstructure by XAFS spectroscopy: GaN/AlN system depending on preparation conditions** — Simon Erenburg

16:30 WeA2f.14 **Effects of Anisotopic Arrangement and Strain Modification in Laterally Self-aligned InGaAs/GaAs Quantum-dot Heterostructures** — Sang J. Lee

16:30 WeA2f.15 **Growth and Luminescence of N doped TiO_2 Nanowires** — Ana Cremades

16:30 WeA2f.16 **Structures and energetics of ZnO, ZnS, and ZnSe nanowires: an empirical interatomic potential approach** — Toru Akiyama

16:30 WeA2f.17 **MBE growth and characterization of MnP and Ge nanowhiskers** — Alexei D. Bouravleuv

16:30 WeA2f.18 **Fabrication and characterization of Mn-catalyzed GaAs nanowires** — Faustino Martelli

16:30 WeA2f.19 **AlGaAs/GaAs nano-hetero-epitaxy on a patterned GaAs substrate by MBE** — Tatsuya Nishiwaki

16:30 WeA2f.20 **Electron Paramagnetic Resonance Characterization of Mn- and Co-doped ZnO Nanowires** — Amélia O. Ankiewicz

16:30 WeA2f.21 **Structure analysis of the Ga nanoclusters on Si(111)-(7x7)** — Akihiro Ohtake

16:30 WeA2f.22 **Capping layer effect on the optical and structural characteristics for high density $In_xGa_{1-x}As$ quantum dots ($x = 0.5 \sim 0.75$)** — Tsong-Sheng Lay

16:30 WeA2f.23 **ZnSe/CdSe supperlattice nonowires by catalyst-assisted molecular beam** — Grzegorz Karczewski

16:30 WeA2f.24 **Surfactant-Mediated Epitaxy of Germanium on Structured Silicon Substrates: Towards Embedded Germanium** — Tobias F. Wietler

16:30 WeA2f.25 **Nano-positioning of Sb-based semiconductor quantum structures for novel-communication devices** — Naokatsu Yamamoto

16:30 WeA2f.26 **Thermodynamic analysis of the shape, anisotropy and formation process of InAs/InP(001) quantum dots and quantum sticks grown by Metalorganic Vapor Phase Epitaxy** — Guillaume Saint-Girons

16:30 WeA2f.27 **Strain field calculations of quantum dots — a comparison study of two methods** — R. Kunert

16:30 WeA2f.28 **In-situ X-ray diffraction study on structural evolution of InAs islands on GaAs(001) during annealing** — Masamitu Takahasi

16:30 WeA2f.29 **Analysis on growth of poly-Si domain measured by Imaging Ellipsometry** — Yong Woo Jung

16:30 WeA2f.30 **Time Delayed Feedback Control of Growth Processes** — Michael Block

16:30 WeA2f.31 **InGaN selfassembled quantum dots investigated by synchrotron-radiation techniques** — Edyta Piskorska

16:30 WeA2f.32 **Evolution of the lateral composition modulation in InAs/AlAs short-period superlattices** — Ondřej Caha

16:30 WeA2f.33 **Ultrasound-stimulated a self-organization of point defects in silicon and silica during ion implantation** — Jaroslav M. Olikh

16:30 WeA2f.34 **Arrays of Metal Nanodots designed by Electron Induced Deposition** — Heinz D Wanzenboeck

16:30 WeA2f.35 **InAs self-assembled quantum dot superlattice structure fabricated by strain compensation technique** — Ryuji Oshima

16:30 WeA2f.36 **Hybrid InAsSb/CdSeTe heterostructures lattice-matched to GaSb** — Irina V. Sedova

16:30 WeA2f.37 **Growth and Characterization of InSb:N Quantum Dots** — Fariba Hatami

16:30 WeA2f.38 **Surface stability and atomic-step-edge kinetics on a cleaved-edge-overgrown (110) GaAs surface** — Masahiro Yoshita

16:30 WeA2f.39 **Correlation of interfaces morphologies and optical properties of GaAs/AlGaAs quantum wells grown by MOVPE on vicinal substrates** — Nicolas Moret

16:30 WeA2f.40 **Two-step process for epitaxial growth of thin and atomically flat Fe-films on GaAs(110)** — Lars Winking

16:30 WeA2f.41 **Stranski-Krastanov growth of tensely strained Si on Ge (001) substrates** — Dietmar Pachinger

16:30 WeA2f.42 **Analysis of strain-decay in InAs/GaAs(001) multilayer quantum dot growth** — Stanko Tomic

16:30 WeA2f.43 **Controlling the Mn concentration in CdTe QDs** — Laurent Maingault

16:30 WeA2f.44 **A new metallic nanowire growth technique utilizing focused ion beams** — Christoph Schoendorfer

16:30 WeA2f.45 **Metalorganic chemical vapor deposition of iron nanocrystals and films on (0001)GaN** — Andrea Navarro-Quezada

16:30 WeA2f.46 **Structural and optical properties of Ge nanocrystals grown by RF-sputtering technique** — P. Caldelas

16:30 WeA2f.47 **Atomic structure of capped InAs(N)/GaAs(N) quantum dots** — H. Eisele

16:30 WeA2f.48 **InAs quantum dots, $In_xGa_{1-x}As$ epilayers and quantum wells on porous GaAs** — Yury Nikolaevich Buzynin

16:30 WeA2f.49 **Structure of In(Ga)As quantum dots for devices** — Andrea Lenz

16:30 WeA2f.50 **InAs/GaAs quantum dots grown with Sb impurities** — Andrea Lenz

16:30 WeA2f.51 **Growth and Excitonic Emission of CdSe Ultra-Thin Quantum Wells without Thickness Fluctuations** — Isaac Hernández-Calderón

16:30 WeA2f.52 **X-ray diffraction from single semiconductor nanostructures** — Julian Stangl

16:30 WeA2f.53 **Au-free epitaxial growth of InAs nanowires** — Bernhard Mandl

16:30 WeA2f.54 **Local atomic structure of CdSe ultra-thin quantum wells examined by X-ray absorption fine structure experiments.** — Isaac Hernández-Calderón

16:30 WeA2f.55 **InAs wetting layer and quantum dots on GaAs(001) surface studied by in situ STM placed inside MBE growth chamber and kMC simulations based on first-principles calculations** — Shiro Tsukamoto

WeA2g: Heterostructures, quantum wells, superlattices: Terahertz and quantum cascade structures

Wednesday 16:30–19:00; Poster

16:30 WeA2g.1 **Magnetic field induced rearrangement of the electric field domains in weakly coupled superlattices** — Weber H. M. Feu

16:30 WeA2g.2 **Alloy scattering in Quantum Cascade Lasers in a magnetic field : a numerical study** — Nicolas Regnault

16:30 WeA2g.3 **Fast and tunable photodetectors for Terahertz radiation based on the Landau quantization at HgTe/HgCdTe heterojunctions** — R. Bonk

16:30 WeA2g.4 **Terahertz Photovoltaic Effect in Bilayer Two-Dimensional Systems** — Yuri Vasilyev

16:30 WeA2g.5 **THz Bloch oscillator with suppressed electric instability** — Timo T Hyart

16:30 WeA2g.6 **Spin-orbit effects on quantum cascade transitions** — Vadym Apalkov

16:30 WeA2g.7 **Dephasing of Bloch oscillations due to interface roughness scattering in GaAs/AlAs superlattices** — Takeya Unuma

16:30 WeA2g.8 **THz generation in semiconductor superlattice devices in conditions of suppressed electric domains: Progress in theory.** — Kirill N. Alekseev

16:30 WeA2g.9 **Electron Scattering Spectroscopy by High Magnetic Field in Mid-Infrared Quantum Cascade Lasers** — Angela Vasanelli

16:30 WeA2g.10 **Terahertz detection schemes based on sequential multi-photon absorption** — Fabrizio Castellano

16:30 WeA2g.11 **Plasmon resonances in the terahertz photoresponse of homogeneous 2D electron system with grating gate** — Gregory Aizin

16:30 WeA2g.12 **Broadband Quantum Cascade Lasers and Superluminescent Diodes Emitting in 6 μm $< \lambda <$ 8μm Spectral Range** — Evgeny A Zibik

16:30 WeA2g.13 **THz generation by optical rectification and competition with other nonlinear processes** — Jerome Tignon

16:30 WeA2g.14 **New probe of electronic and optical processes in quantum cascade lasers under operating conditions** — Dmitry G Revin

16:30 WeA2g.15 **Non-equilibrium quantum transport theory for quantum cascade lasers** — Tillmann Kubis

16:30 WeA2g.16 **Vertical second-harmonic emission from quantum cascade lasers** — Maximilian Austerer

16:30 WeA2g.17 **Optical mode control in surface-plasmon quantum cascade lasers** — Virginie Moreau

16:30 WeA2g.18 **Stressed GaAsN/GaAs heterostructures as a base of THz radiation sources** — Dmitry Firsov

16:30 WeA2g.19 **Dual-Mode Microdisk Terahertz Quantum-Cascade Lasers** — Gernot Fasching

16:30 WeA2g.20 **Excitation wavelength dependence of terahertz emission from Indium Nitride thin films** — Grace D Chern

16:30 WeA2g.21 **Theoretical aspects of time-domain spectroscopy applied to semiconductor terahertz gain medium** — Juraj Darmo

16:30 WeA2g.22 **Photoabsorption of quantum dots in a superlattice in presence of a strong electric field** — Volkmar Putz

16:30 WeA2g.23 **High Performance Quantum Cascade Lasers Grown by MOCVD without Lateral Regrowth** — Claire F Gmachl

WeA2h: Heterostructures, quantum wells, superlattices: Transport, tunneling, high-frequency transport

Wednesday 16:30–19:00; Poster

16:30 WeA2h.1 **Radiation-induced magnetoresistance oscillations in two-dimensional electron systems** — Xiaolin Lei

16:30 WeA2h.2 **Electrons reflection under tunnelling into two-dimensional electron system near LO-phonon emission threshold.** — Sergey E Dizhur

16:30 WeA2h.3 **New type of magnetoresistance oscillations in antidot lattices in Si/SiGe heterostructures** — Eugene B Olshanetsky

16:30 WeA2h.4 **Tunnel density of states at Fermi level in two-dimensional electron system.** — Igor N Kotelnikov

16:30 WeA2h.5 **Step-like Curren-Voltage characteristics and period-adding bifurcations in an external ac-driven GaAs/AlAs superlattice** — Hongtao He

16:30 WeA2h.6 **Spin g-factor and cyclotron mass of electrons in GaAs/$Ga_{1-x}Al_xAs$ quantum wells** — Pawel Pfeffer

16:30 WeA2h.7 **Noise-induced current oscillations in superlattices: from stationary to moving domains** — Eckehard Schöll

16:30 WeA2h.8 **Quasiclassical magnetotransport of two-dimensional electrons** — Ze Don Kvon

16:30 WeA2h.9 **Directed ratchet transport in two-dimensional electron system with asymmetrical scatterers** — Yuryi Krupko

16:30 WeA2h.10 **Metal-Insulator Transition in GaAs/AlGaAs Heterostructures: Acoustic Study** — Irina L. Drichko

16:30 WeA2h.11 **Interface roughness scattering in type II broken-gap GaInAsSb/InAs single heterostructures** — Maya P Mikhailova

16:30 WeA2h.12 **Interaction Corrections to the Longitudinal Conductivity and Hall Resistivity in High Mobility 2D Systems with Intermediate Density** — Guennadii M Gusev

16:30 WeA2h.13 **Weak antilocalization in a GaAs quantum well in the presence of a strong in-plane magnetic field** — Wilfried Desrat

16:30 WeA2h.14 **Interactions: Consequences for the two-dimensional Metal-Insulator Transition** — Theodore G Castner

16:30 WeA2h.15 **Role of fluctuations in quantum transport in 2D systems** — Igor V. Rozhansky

16:30 WeA2h.16 **The carrier density dependence of hole mobility in strained Ge channel modulation-doped structures** — Kentarou Sawano

16:30 WeA2h.17 **Carbon doped high mobility hole gases** — Christian Gerl

16:30 WeA2h.18 **AC conductance in p-type Si/SiGe heterostructures in the ultra-quantum limit** — Irina L. Drichko

16:30 WeA2h.19 **Microwave-induced collective responce in the SiGe Hall bars** — Sami Sassine

16:30 WeA2h.20 **Control of the Inherent Magnetoresistance in thin InSb epilayers on GaAs (001) by Interfacial Engineering** — William R Branford

16:30 WeA2h.21 **Surface Fermi energy pinning in high mobility InGaAs/InAlAs modulation doped field effect transistors.** — Eleftherios Skuras

16:30 WeA2h.22 **Classical magnetoresistance of a two-dimensional electron gas constrained to non-planar topographies in antidot lattice under tilted magnetic field** — Nilo M. Sotomayor

16:30 WeA2h.23 **Influence of L subband states on optical and electric properties in GaAs/AlAs type-I superlattices** — Naoki Ohtani

16:30 WeA2h.24 **Negative Persistent Photoconductivity Effect on Weak Anti-Localization in Hetero-Interface and InSb Thin Film Layer of InSb/GaAs(100)** — Akira Fujimoto

16:30 WeA2h.25 **Magneto-transport studies in mesoscopic InAs 2DEG devices** — Ernesto E Marinero

16:30 WeA2h.26 **Study of Spin-Orbit Interaction in $Al_xGa_{1-x}As_ySb_{1-y}$/InAs Quantum Wells by Means of Persistent Photoconductivity Effect on Weak Localization** — Shuichi Ishida

16:30 WeA2h.27 **Teraheltz irradiation effect on magneto-resistance in a two-dimensional electron system in a GaAs/AlGaAs heterostructure** — Ayako Sugahara

16:30 WeA2h.28 **Magneto-oscillation due to Gantmakher effect in microwave transimission of 2-dimensional electron gas** — Ken-ichi Fujii

16:30 WeA2h.29 **Shallow HEMTs for lateral magnetic superlattices** — Ralf Dinter

16:30 WeA2h.30 **Diffraction from quasiperiodic unidirectional lateral superlattice observed in the geometric resonance of magnetoresistance** — Akira Endo

16:30 WeA2h.31 **Ballistic rectification effects in InAs/AlGaSb nano-structures** — Masatoshi Koyama

16:30 WeA2h.32 **Low Temperature Conductivity of Field Induced Bilayer in SiO_2-Si-SiO_2 Quantum Well** — Mika Prunnila

16:30 WeA2h.33 **Microwave induced interaction between the conducting and localized electrons in a quantum ring** — Ken-ichi Fujii

16:30 WeA2h.34 **Quantum Dynamical Study of Electron Transport in 2D Nanostructures under External Field** — Shoichi Sakamoto

16:30 WeA2h.35 **Absorption of a two-dimensional electron gas** — Oleh M. Fedorych

16:30 WeA2h.36 **Quantum well acousto-electronic gate based on a standing wave piezoelectric potential** — Oleg A Korotchenkov

16:30 WeA2h.37 **Ballistic behavior of electrons in semiconductor multi-terminal junctions at room temperature** — Daniel Wallin

16:30 WeA2h.38 **Absorption at harmonics of cyclotron frequency caused by spin-orbit interaction** — Michel I Dyakonov

16:30 WeA2h.39 **Lateral Transport in Asymmetric Quantum Wells under Strong Excitation** — Jalles F. R. da Cunha

16:30 WeA2h.40 **Stark Magnetophonon Resonance observation in InAs/GaSb superlattices** — Russell S Deacon

16:30 WeA2h.41 **Superlattice Magnetophonon resonance in Strongly Coupled InAs/GaSb superlattices** — Russell S Deacon

16:30 WeA2h.42 **Phonon-assisted resonant tunnelling through single X-minimum related donors in submicrometer mesa structures** — Marta Gryglas

16:30 WeA2h.43 **Time dependent model of resonant tunneling in multiple-wide-quantum-well structures with homogeneous and nonhomogeneous interfaces** — Vladimir N. Murzin

16:30 WeA2h.44 **Thermodynamic and transport properties of two-dimensional GaAs systems near the apparent Metal-Insulator Transition** — Evgeniy A Galaktionov

16:30 WeA2h.45 **Corrections to the Drude conductivity and Hall resistivity caused by electron interaction and 'memory' effects in the presence of mixed disorder** — Evgeniy A Galaktionov

16:30 WeA2h.46 **Resistance fluctuations near the "metal-to-insulator" transition** — Andrey V Kretinin

16:30 WeA2h.47 **Switching from classical to ballistic transport in a 100-nm gamma-gate AlGaAs/InGaAs pHEMT under lowered temperatures** — Nambin Kim

16:30 WeA2h.48 **Formation of quantum dots in the contact regions in the metal-insulator transition regime in high-mobility Si inversion layers** — Georg Pillwein

16:30 WeA2h.49 **The observation of magnetic phonon modes in modulation-doped dilute $Cd_{1-x}Mn_xTe/Cd_{1-y}MgyTe$ quantum well structure** — Yong-Jie Wang

16:30 WeA2h.50 **Low-temperature mobilities and energy loss rates of two-dimensional electrons in Si inversion layers** — KyungHwa Park

WeA2i: Heterostructures, quantum wells, superlattices: Phonons, plasmons

Wednesday 16:30–19:00; Poster

16:30 WeA2i.1 **Piezoelectric acoustic heterostructures: Raman scattering and femtosecond pump&probe results** — María F. Pascual Winter

16:30 WeA2i.2 **Resonance piezoelectric electron-phonon interaction in multiple-quantum well structures** — Boris A Glavin

16:30 WeA2i.3 **Gain of intersubband Raman lasing in modulation-doped GaAs/AlGaAs coupled double quantum wells tuned by an external bias** — Shin-ichi Katayama

16:30 WeA2i.4 **Phonon engineering with THz acoustic nanocavities** — Alejandro Fainstein

WeA2j: Heterostructures, quantum wells, superlattices: Hybrid structures

Wednesday 16:30–19:00; Poster

16:30 WeA2j.1 **Hysteretic Operation of Integrated Nanomagnetoelectronic Devices** — Jong-Uk Bae

16:30 WeA2j.2 **Polarization switching effects in ferromagnetic/ferroelectric hybrid double quantum wells** — Nammee Kim

16:30 WeA2j.3 **Light emission from polymer-semiconductor nanocrystals (PFO-CdSe/ZnS) structures.** — Krzysztof Nauka

16:30 WeA2j.4 **Specific adhesion of peptides on semiconductor surfaces in experiment and simulation** — Karsten Goede

WeA2k: Nanostructures: one- and zero-dimensional systems: Electronic properties, transport: dots and coupled dots

Wednesday 16:30–19:00; Poster

16:30 WeA2k.1 **Quantum-current transport through an array of coupled quantum-dots accounting for k.p electronic bandstructures** — Morten Willatzen

16:30 WeA2k.2 **Ferromagnetic Lead Effects on Inelastic Cotunneling Current and Shot Noise of an Interacting Quantum Dot** — Norman J.M. Horing

16:30 WeA2k.3 **Geometical and Impurities Effects on the Energy Spectrum in Quantum Rings** — Jose A. K. Freire

16:30 WeA2k.4 **Tunneling through nanosystems: Combining broadening with many-particle states** — Jonas N. Pedersen

16:30 WeA2k.5 **Removing spin blockade in a double quantum dot: role of spontaneous emission of pnonons** — Jesus Inarrea

16:30 WeA2k.6 **Charge correlation and spin coupling in double quantum dots** — Jun Nakamura

16:30 WeA2k.7 **Hole transport in p-type GaAs quantum dots** — Boris Grbić

16:30 WeA2k.8 **Theory and experiment of InAs/InP quantum dots: from calculations to laser emission** — Charles Cornet

16:30 WeA2k.9 **Observation of quantum effects in the electron transport characteristics of a nanocrystalline silicon point contact transistor** — Mohammed A. H. Khalafalla

16:30 WeA2k.10 **Andreev tunneling through an interacting quantum dot:Numerical renormalization group approach** — Yoichi Tanaka

16:30 WeA2k.11 **Spin polarization in open quantum dots and two dimensional electron gas** — Martin Evaldsson

16:30 WeA2k.12 **Excitation spectra of two correlated electrons in a quantum dot** — Thomas Ihn

16:30 WeA2k.13 **Dependence of charge trapped on nanocrystals and electron transport on excess Si in silicon-rich SiO_2** — Irina V Antonova

16:30 WeA2k.14 **Coupling of quantum states in InAs/GaAs quantum dot molecule** — Mikhail M Sobolev

16:30 WeA2k.15 **Spin-resolved edge state structure around an antidot** — Igor V Zozoulenko

16:30 WeA2k.16 **High bias non-linear magneto-transport through two weakly coupled vertical quantum dots: The quasi-2D regime to the strong 0D-limit crossover by gate tuning** — David G Austing

16:30 WeA2k.17 **Thermopower due to Kondo Effect in Quantum Dot Systems with Orbitals** — Rui Sakano

16:30 WeA2k.18 **Meta-stable excited states of a closed quantum dot probed by Aluminum single electron transistor** — Jeng-Chung Chen

16:30 WeA2k.19 **Dynamical Tunneling in Open Quantum Dot Arrays** — Roland Brunner

16:30 WeA2k.20 **The carrier "antibinding" in narrow quantum dots: a decrease inconfinement efficiency** — Marc-Andre Dupertuis

16:30 WeA2k.21 **Noninvasive detection of charge rearrangement in a quantum dot** — Christian Fricke

16:30 WeA2k.22 **Voltage-tunable ferromagnetism in semimagnetic quantum dot systems with few particles: Magnetic polarons and electrical capacitance** — Alexander O Govorov

16:30 WeA2k.23 **Tunable quantum dots and charge sensing in carbon nanotubes** — Georg Goetz

16:30 WeA2k.24 **Probing of overlapping Fano resonances by a multi-terminal interferometer** — Arkady M Satanin

16:30 WeA2k.25 **Optical transitions and the nature of Stokes shift in spherical CdS quantum dots** — Denis O Demchenko

16:30 WeA2k.26 **Electron confinement in nanocrystals embedded in random media: Anderson localization effects** — Mikhail I Vasilevskiy

16:30 WeA2k.27 **Quantum dots with internal substructure** — Davy Graf

16:30 WeA2k.28 **The role of the leads on imaging process of scar wave functions in quantum dots.** — Peter A. Schulz

16:30 WeA2k.29 **Electron transport through triple-quantum-dot systems** — Lev Mourokh

16:30 WeA2k.30 **Thermal conductance of a weakly coupled quantum dot** — Margarita Tsaousidou

16:30 WeA2k.31 **Memory window improvement effect in boron doped Si nanocrystal memory** — Keein Bang

16:30 WeA2k.32 **Kondo effect in quantum dots coupled to ferromagnetic leads: effect of non-collinear magetization** — Daisuke Matsubayashi

16:30 WeA2k.33 **Electrical characterisation of ordered Si:P dopant arrays** — Wilson Pok

16:30 WeA2k.34 **Resonant Tunneling through Quantum States of Enhancement Mode In-Plane-Gate Quantum Dot Transistors** — Seunghun Son

16:30 WeA2k.35 **Kondo and Dicke effect in quantum-dots side coupled to a quantum wire** — Pedro A Orellana

16:30 WeA2k.36 **Probing spin configurations in quantum dots** — Maximilian C. Rogge

16:30 WeA2k.37 **Effect of light illumination on the conductivity of tunnel-coupled Ge/Si quantum dots** — Natalia P Stepina

16:30 WeA2k.38 **Investigation of the quantum confinement effects in CdTe dots by electrical measurements** — Ewa Płaczek-Popko

16:30 WeA2k.39 **Super-Poissonian Shot Noise in Tunneling through Coupled Self-Assembled InAs Quantum Dots** — Patrick Barthold

16:30 WeA2k.40 **Non-Orthogonal Theory for Computation of Quantum Dot Polarons** — Marc-André Dupertuis

16:30 WeA2k.41 **Quantum dot array energy spectrum tuning with laser pulse action** — Anatoly V. Dvurechenskii

16:30 WeA2k.42 **Delocalization in two dimensional systems with correlated disorder** — Rodrigo A Caetano

16:30 WeA2k.43 **Scanning Gate Measurements on a Coupled Quantum Dot-QPC System** — Arnd E Gildemeister

16:30 WeA2k.44 **Zero g-factor in quantum dots** — Weidong Sheng

16:30 WeA2k.45 **Observation of the Stark Effect in a Single Acceptor in Si** — Laurie E Calvet

16:30 WeA2k.46 **Quantum information processing using designed defects in 2D anti-dot lattices** — Christian Flindt

16:30 WeA2k.47 **Topological Hund's rules in a triple quantum dot molecule** — Pawel Hawrylak

16:30 WeA2k.48 **Path Detection in QDs: From Coherent Resonant Tunnelling to Sequential Tunnelling** — Daniel Rohrlich

16:30 WeA2k.49 **The Influence of thin GaAs layer deposition on InAs/ (InGaAs)/InP Quantum Dot** — Pilkyung Moon

16:30 WeA2k.50 **Coulomb Blockade Imaging of Few-Electron Quantum Dots in a Magnetic Field** — Parisa Fallahi

16:30 WeA2k.51 **Linear and Nonlinear Transport in Single Magnetic-Ion-Doped Quantum Dots** — Fanyao Qu

16:30 WeA2k.52 **Breakdown of the Onsager-Casimir relations in electron billiards** — Heiner Linke

16:30 WeA2k.53 **Energy Level Engineering of Coupled InAs Quantum Dot Structures** — Jin Soak Kim

16:30 WeA2k.54 **Stability of spin phases in few-electron coupled quantum dots under magnetic fields** — Guido Goldoni

16:30 WeA2k.55 **Fano effect in a ring-dot system with tunable coupling.** — Andreas Fuhrer

16:30 WeA2k.56 **A high-performance configuration-interaction study of Wigner crystallization in quantum dots** — Massimo Rontani

16:30 WeA2k.57 **Effects of Electron-Phonon Interaction on Quantum Transport Through the Single Molecule Transistor** — Bang-fen Zhu

16:30 WeA2k.58 **Constant Capacitance-DLTS on InAs-Quantum Dots embedded in Schottky diodes** — Jan Schaefer

16:30 WeA2k.59 **Current instabilities in resonant tunneling quantum dot structures** — Kathy Lüdge

16:30 WeA2k.60 **Recombination, transport and loss mechanisms in p-doped InAs/GaAs quantum dots** — Igor P Marko

16:30 WeA2k.61 **Influence of Electron-Phonon Interaction on Fano Resonance in Aharonov-Bhom Interferometer** — Akiko Ueda

16:30 WeA2k.62 **Thermoelectric power in coherent transport as a tool for transmission-phase measurement** — Takeshi Nakanishi

16:30 WeA2k.63 **Quantum dots defined in InAs quantum wires by local gate electrodes** — Carina Fasth

16:30 WeA2k.64 **Landé g-tensor in semiconductor nanostructures** — Thiago P Mayer Alegre

16:30 WeA2k.65 **Influences of vibrations to Fano resonances in a C_{60}** — Shigeo Fujimoto

16:30 WeA2k.66 **Excitons in type II self-assembled quantum dots.** — Justino R Madureira

16:30 WeA2k.67 **Exciton states and magnetooptical transitions in stacks of InGaAs/GaAs self-assembled quantum rings** — Milan Tadic

16:30 WeA2k.68 **Towards the realization of a charge detector for nanowire quantum dots** — Daniel Wallin

16:30 WeA2k.69 **Ground state transition energies of electron and hole in cubic GaN/AlN quantum dots** — Yosr Turki-Benali

16:30 WeA2k.70 **Bunching of Electrons in Transport through Quantum Dots** — Oren Zarchin

16:30 WeA2k.71 **Strain and electronic structure interactions in realistically scaled quantum dot stacks** — Clemens Heitzinger

16:30 WeA2k.72 **Symmetry breaking and fine structure splitting in self-assembled zincblende quantum dots: atomistic simulations of long-range strain and piezoelectric field** — Muhammad Usman

16:30 WeA2k.73 **Anomalous Kondo Spin Splitting in Quantum Dots** — Jose Marcelo J. M. Aguiar Hualde

16:30 WeA2k.74 **Side-Connected Dots in the Kondo Regime: Effect of the Dot-Dot Interaction on Transport** — Maria A. Davidovich

16:30 WeA2k.75 **Effects of thermal treatment on the intrinsic and deep level states in self-assembled InAs quantum dot structures** — Shiwei Lin

WeA2l: Nanostructures: one- and zero-dimensional systems: Ultrafast, coherent and non-linear optical studies

Wednesday 16:30–19:00; Poster

16:30 WeA2l.1 **Pump-probe spectroscopy of CuCl exciton-biexciton system in a slab: Aspect of EIT interpretation** — Kikuo Cho

16:30 WeA2l.2 **All-optical quantum coherent control of electron spin in semiconductor quantum dots** — Gabriela M Slavcheva

16:30 WeA2l.3 **Theory of transient four-wave mixing in coupled quantum dot systems** — Gaetano Parascandolo

16:30 WeA2l.4 **Femtosecond polarization relaxation in CdSe nanocrystals** — Andreas Tortschanoff

16:30 WeA2l.5 **Exciton radiative recombination rate in ZnO quantum dots** — Xinhai Zhang

16:30 WeA2l.6 **Anomalous time evolution of exciton coherence in highly-stacked InAs quantum dots** — Junko Ishi-Hayase

16:30 WeA2l.7 **Polarization-dependent four-wave mixing measurements in highly-stacked InAs quantum dots** — Mamiko Kujiraoka

16:30 WeA2l.8 **Phonon-Induced Exciton Dephasing in CdTe Self-Organized Quantum Dots** — Tadashi Kishimoto

16:30 WeA2l.9 **Relaxation of electron-hole pairs by coherent emission of LO-phonons in a quantum kinetic regime** — Pierre Gilliot

16:30 WeA2l.10 **Energy dependence of the linear and dynamical photo-induced dichroism of InAs/GaAs self-assembled quantum dots** — Emilie Aubry

16:30 WeA2l.11 **Two-Photon Excitation of Coupled Asymmetric GaN/AlGaN Quantum Discs** — Kwan H Lee

WeA2m: Nanostructures: one- and zero-dimensional systems: Carrier dynamics, relaxation

Wednesday 16:30–19:00; Poster

16:30 WeA2m.1 **Carrier dynamics under an AC electric field for nanowire superlattices** — Lok C Lew Yan Voon

16:30 WeA2m.2 **Carrier relaxation dynamics 1.55 micron InAs/InP quantum dots under high resonant excitation** — Labbé Christophe

16:30 WeA2m.3 **Coupling, Relaxation and Coherent Emission in Semiconductor Double Quantum Dots** — Lok C Lew Yan Voon

16:30 WeA2m.4 **Disorder and Interference Processes in Low-dimensional Transport and Kinetics** — Vladimir Mitin

16:30 WeA2m.5 **Direct observation of electronic couplings between 1.5 um emitting InGaAs/InGaAsP quantum dots on InP** — Yudong Jang

16:30 WeA2m.6 **Resonant amplification and relaxation process of transient current in nanocontact systems** — Hiroyuki Ishii

16:30 WeA2m.7 **Theory of Teraherz-Radiation Activated Ground-State Luminescence in Quantum Dots** — Fredrik Boxberg

16:30 WeA2m.8 **Factors influencing temperature dependence of the photo- and electroluminescence from self-assembled InAs/GaAs quantum dots** — Nikolay V Baidus

16:30 WeA2m.9 **Influence of the electronic energy level spacing on the carrier dynamics of single InP quantum dots** — Matthias Reischle

16:30 WeA2m.10 **Characterization of tunneling and free-carrier screening in coupled asymmetric GaN/AlGaN quantum discs** — Kwan H Lee

16:30 WeA2m.11 **Spatio-temporal dynamics of charge carriers in quantum dot-wire systems** — Doris Reiter

16:30 WeA2m.12 **The origin of the broad distribution of exciton lifetimes in InGaN quantum dots** — Matthias Dworzak

16:30 WeA2m.13 **Electron-Acoustic Phonon Interaction in Nanostructures** — Frank Grosse

WeA2n: Semiconductor Spintronics: Optical studies and spin dynamics

Wednesday 16:30–19:00; Poster

16:30 WeA2n.1 **Picosecond decrease of magnetization induced by photocarriers in diluted magnetic semiconductor quantum wells** — Alexey V Scherbakov

16:30 WeA2n.2 **Spin orientation and spin currents induced by linearly polarized light** — Sergey A. Tarasenko

16:30 WeA2n.3 **Picosecond spin relaxation of acceptor-bound exciton in Wurtzite GaN** — Atsushi Tackeuchi

16:30 WeA2n.4 **Recombination and spin dynamics of excitons in III-V/II-VI:Mn heterovalent double quantum wells** — Toropov A. A.

16:30 WeA2n.5 **Long-lived spin coherence of diluted two-dimensional electron gas in CdTe/CdMgTe quantum wells** — Dmitri R Yakovlev

16:30 WeA2n.6 **Optical orientation of electron spins by in-plane excitation of GaAs quantum wells** — Stefan Pfalz

16:30 WeA2n.7 **Coupling of a Single Nitrogen-Vacancy Center to Nitrogen Spins in Diamond** — Felix M Mendoza

16:30 WeA2n.8 **Spin dynamics of electrons, holes, and magnetic ions in III-V quantum wells** — Roberto C Myers

16:30 WeA2n.9 **Spin dynamics controlled by spin-dependent recombination in GaAsN alloys at room temperature** — Vladimir K. Kalevich

16:30 WeA2n.10 **Spin relaxation in quantum wire with spin-orbit interaction** — Tomoaki Kaneko

16:30 WeA2n.11 **Rashba spin splitting and circular photogalvanic effect in GaN-based heterostructures** — Leonid E Golub

16:30 WeA2n.12 **Temperature dependence of exciton spin relaxation rates in semiconductor quantum dots** — Alexander N. Reznitsky

16:30 WeA2n.13 **Spin Relaxation Anisotropy in Quantum Well Structures** — Leonid E. Golub

16:30 WeA2n.14 **Electron spin resonance investigations of the two-dimensional electron gas confined in GaN/AlGaN interface** — Agnieszka Wołoś

16:30 WeA2n.15 **Spin Coherence of Electrons in n-doped CdTe/(Cd, Mg)Te Quantum Wells** — Rudolf Bratschitsch

16:30 WeA2n.16 **Nuclear spin effects in negatively charged InP quantum dots** — Sergey Yu. Verbin

16:30 WeA2n.17 **Study of spin dynamics in quantum Hall regime by time resolved Kerr rotation spectroscopy** — Daisuke Fukuoka

16:30 WeA2n.18 **Role of Interfaces on the Rashba Effect in Heterostructures** — Saadi Lamari

16:30 WeA2n.19 **Ultrafast Carriers Dynamics in GaSb/Mn Random Alloys** — Andrea G Markelz

16:30 WeA2n.20 **Coherent Oscillatory Spin-Dynamics in High-Mobility 2D Electron Gases.** — Richard Harley

16:30 WeA2n.21 **Spin relaxation in SiGe islands** — H. Malissa

16:30 WeA2n.22 **Exciton-polariton spin coherence measured by four-wave mixing experiments in the $\chi^{(3)}$ regime** — Pierre Gilliot

16:30 WeA2n.23 **k-dependence of the electron spin-flip time in GaAs** — A. Amo

16:30 WeA2n.24 **Current-Induced Spin Polarization in (113) Two-Dimensional Hole Gas** — Pavel A Blajnov

16:30 WeA2n.25 **Quenching of the electronic spin relaxation by localization on donors** — Maria Chamarro

16:30 WeA2n.26 **Spin Relaxation in 2D Electron Gases in Strong Scattering Regime.** — Richard Harley

16:30 WeA2n.27 **Spin coherence of holes in GaAs/AlGaAs quantum wells.** — Marcin Syperek

16:30 WeA2n.28 **Electron spin quantum beats in positively charged InAs quantum dots** — Bernhard Urbaszek

16:30 WeA2n.29 **Spin lifetime in chemically synthesised PbSe quantum dots** — Konstantin L Litvinenko

16:30 WeA2n.30 **Polarised electroluminescence from GaMnAs/GaAs p-i-n quantum well diodes** — Oleg Makarovsky

16:30 WeA2n.31 **Spin Susceptibility Enhancement of a Spin Polarized Two Dimensional Electron Gas determined by Raman Spectroscopy** — Florent Perez

WeA2o: Semiconductor Spintronics: Nuclear spin interactions

Wednesday 16:30–19:00; Poster

16:30 WeA2o.1 **Indirect Exchange Coupling and Nuclear Spin Diffusion in Low Dimensional Semiconductors: an NMR Study** — Alexander M. Panich

16:30 WeA2o.2 **Nuclear Hyperpolarization and Polarization Transfer in InP** — Atsushi Goto

16:30 WeA2o.3 **^{71}Ga nuclear magnetic relaxation measurements in zinc-blende GaN** — Robin N Morris

16:30 WeA2o.4 **Optical pumping of ^{15}N nuclear spin polarization in zinc-blende GaN for magnetic resonance signal enhancement** — Robin N Morris

16:30 WeA2o.5 **Coherent control of electron spin decoherence by nuclear spins in a quantum dot** — Ren-Bao Liu

16:30 WeA2o.6 **Dynamical nuclear spin polarization in gated double quantum dots** — Guy Ramon

16:30 WeA2o.7 **Impact of electron life-time on nuclear spin in InGaAs quantum dots** — Alexander I. Tartakovskii

16:30 WeA2o.8 **Self-quenching of hyperfine-induced electron spin relaxation in InAs/GaAs quantum dots due to dynamic nuclear polarization** — Benoît Eble

WeA2p: Applications and Devices: Electronic devices

Wednesday 16:30–19:00; Poster

16:30 WeA2p.1 **Theory of nanogated field-effect transistors** — Zinovi S Gribnikov

16:30 WeA2p.2 **Strong free exciton emission in an AlGaAs/GaAs HEMT structure** — Kazunori Aoki

16:30 WeA2p.3 **Electron mobility and concentration on submicrometer scale – investigation of Si and GaN field effect transistors by AC magnetoresistance method** — Maciej Sakowicz

16:30 WeA2p.4 **Atomistic pseudopotential simulation of nanometer sized CMOS devices** — Lin-Wang Wang

16:30 WeA2p.5 **DRAM storage time of milliseconds demonstrated in self-organized quantum dots** — Martin Geller

16:30 WeA2p.6 **Geometric enhancement of the transport properties of InSb films on GaAs (001)** — William R Branford

16:30 WeA2p.7 **Characteristics of nano floating gate memory with Au nano-particles and SiON dielectrics** — Min Seung Lee

16:30 WeA2p.8 **Thermoelectric properties of and device physics based on InSb and InN semiconductors** — Jun Yamazaki

16:30 WeA2p.9 **Parameter Modelling for High Order Transport Models** — Martin Wagner

16:30 WeA2p.10 **Low-Field Mobility in Strained Si Surface Layers and Ultra-Thin Body SOI on different Substrate Orientations** — Enzo Ungersboeck

16:30 WeA2p.11 **Field characteristics of electron mobility and velocity in InAs/AlGaSb HFETs with high-k gate insulators** — Toshihiko Maemoto

16:30 WeA2p.12 **Accurate Extraction of Conduction Parameter in MOSFETs on Si(110) surface** — Philippe Gaubert

16:30 WeA2p.13 **Self-consistent Wigner Monte Carlo simulations of current in nanodevices: role of tunneling and scattering** — Viktor Sverdlov

16:30 WeA2p.14 **One-dimensional sub-threshold channels in nanoscale triple-gate silicon transistors** — Gabri P Lansbergen

16:30 WeA2p.15 **Modelling Random Resistive Memory Devices** — María J. Sánchez

16:30 WeA2p.16 **Modeling of Electron Transport in GaN-based Materials and Devices** — Stanislav Vitanov

16:30 WeA2p.17 **Quantum Non-Locality in Systems with Open Boundaries: Limitations of the Wigner function formalism** — David Taj

WeA2q: Applications and Devices: Photonic devices

Wednesday 16:30–19:00; Poster

16:30 WeA2q.1 **Resonator fabrication for switchable two-color MIR detectors based on p-type SiGe quantum cascade injectors** — Martyna Grydlik

16:30 WeA2q.2 **Competition of different recombination channels in metamorphic 1.5 μm range quantum dot lasers on GaAs substrate** — Leonid Ya. Karachinsky

16:30 WeA2q.3 **Near-Field Optical Microscopy of AlGaInP Laser Diode Emissions and Comparison with Far-Field Observation - Possible Non-Radiating Modes -** — Akihiro Tomioka

16:30 WeA2q.4 **Comparison of Near-Field Emission Profiles and Emission Spectra of AlGaInP Laser Diode with Far-Field TE- and TM-mode Counterparts** — Akihiro Tomioka

16:30 WeA2q.5 **The two-dimensional bigradient effect and its application for GHz–THz sensing** — Gintaras Valusis

16:30 WeA2q.6 **Si:Er-based Light Emitting Diodes with Extended Space Charge Region** — Viacheslav B Shmagin

16:30 WeA2q.7 **High Efficient Schottky ZnO Photodiode UV Detector** — Ping Yu

16:30 WeA2q.8 **Fabrication of silicon vertical taper structures for fiber to chip coupler by KOH anisotropic etching** — Roman Holly

16:30 WeA2q.9 **Optical properties of IR quantum dot detectors with miniband tunnel extraction** — F. F. Schrey

16:30 WeA2q.10 **Electro-optic memory effect at 1.54 μm Si:Er light-emitting diodes** — W. Jantsch

16:30 WeA2q.11 **Mid-infrared excitation of plasmonic resonances in highly anisotropic layered semiconductor structures** — Deborah L Sivco

16:30 WeA2q.12 **Red, green and 1.54 μm emissions from an Er-doped n-ZnO/p-Si light emitting diode** — Susumu Harako

16:30 WeA2q.13 **Avalanche Photodiode Structure for Photon Counting on SiGe Epitaxial Layer** — Josef Blazej

16:30 WeA2q.14 **Band alignment and carrier recombination in GaAsSb/GaAs quantum wells** — Konstanze Hild

16:30 WeA2q.15 **Waveguiding Si/SiGe:Er/Si Structures – An Approach for Laser Realization** — Margarita Stepikhova

16:30 WeA2q.16 **Mechanism of Electron-Hole Pair Generation and Light Emission for Electro-Luminescence Devices with Silicon Nano-Crystals Prepared by Laser Ablation Method** — Akira Sugimura

16:30 WeA2q.17 **Advancements of LED packaging for white light sources** — Franz P Wenzl

16:30 WeA2q.18 **On the Origin of Photoconductivity in Lateral Quantum Dots-in-a-Well Infrared Photodetectors** — Linda Höglund

WeA2r: Applications and Devices: Terahertz and cascade lasers

Wednesday 16:30–19:00; Poster

16:30 WeA2r.1 **Carrier Injection as a Cause of THz Lasing Excitation in SiGe/Si QW Structures.** — Miron S Kagan

16:30 WeA2r.2 **Bipolar THz laser: the way out of fundamental gain limitations.** — Leonid D Shvartsman

16:30 WeA2r.3 **Silicon Stokes terahertz laser** — Sergey G Pavlov

16:30 WeA2r.4 **Quantum-cascade lasers operating at low electric field strengths** — Lutz Schrottke

16:30 WeA2r.5 **Room temperature terahertz emission from nanometer field effect transistors** — Michel Dyakonov

16:30 WeA2r.6 **Electron-photon coupling in opto-electronic quantum devices: from electroluminescence to lasing** — Rita C. Iotti

16:30 WeA2r.7 **Thermal modelling of Antimonide-based quantum cascade lasers** — Craig A Evans

16:30 WeA2r.8 **Room temperature operation of $\lambda = 7.5$ μm surface-plasmon quantum cascade lasers** — Michael Bahriz

16:30 WeA2r.9 **Optimization of InP-based waveguides for high-performance mid-infrared quantum cascade lasers** — Oana Malis

WeA2s: Applications and Devices: Novel device concepts

Wednesday 16:30–19:00; Poster

16:30 WeA2s.1 **Continuous focal-plane array for detection of Terahertz radiation** — Dmitry Khokhlov

16:30 WeA2s.2 **Phase coherent photorefractive effect in ZnSe quantum wells using ultrashort pulses** — Hans-Peter Wagner

16:30 WeA2s.3 **Sensitive detection of mid-infrared light** — Zhenghua An

16:30 WeA2s.4 **Optical ionization of amino acids using amino-acid/semiconductor junctions** — Oda Masato

16:30 WeA2s.5 **Power-optimized single-mode slot waveguides** — Paul Müllner

16:30 WeA2s.6 **Extraordinary Optoconductance in In-GaAs and In-InSb metal-semiconductor hybrid structures** — Kristopher A. Wieland

16:30 WeA2s.7 **Extraordinary Electroconductance in In-GaAs metal-semiconductor hybrid structures** — Yun Wang

16:30 WeA2s.8 **Generation of micro-plasma in porous silicon** — Hoi Lam Tam

16:30 WeA2s.9 **Design strategies in InAs/InGaAs quantum dots-in-a-well infrared photodetectors** — Pantelis Aivaliotis

16:30 WeA2s.10 **Ultimate Control of the Thermal Shift of a Tilted Cavity Laser Wavelength** — Maria B Lifshits

ThM1a: Transport in Wires

Thursday 9:00–10:30; Festsaal; Chair: M. Heiblum

9:00 ThM1a.1 **The Coulomb blockade regime in disordered AlAs cleaved-edge overgrown quantum wires** — Joel Moser

9:15 ThM1a.2 **Conductance quantisation in an induced hole quantum wire** — Oleh Klochan

9:30 ThM1a.3 **Oscillatory persistent currents in nano-volcanoes** — Niek Kleemans

9:45 ThM1a.4 **Partial passivation effects in hydrogen-terminated Si, Ge, and Si/Ge nanowires** — Helio Chacham

10:00 ThM1a.5 **High-performance thermoelectrics based on heterostructure nanowires** — Heiner Linke

10:15 ThM1a.6 **Electrical properties of atomically controlled Si:P devices created by scanning probe microscopy** — Frank J Ruess

ThM1b: Nuclear Spin Interactions

Thursday 9:00–10:30; Zeremoniensaal; Chair: L.Kouwenhoven

9:00 ThM1b.1 **Optical pump-probe detection of coherent nuclear spin dynamics in n-GaAs quantum wells** — Shunichiro Matsuzaka

9:15 ThM1b.2 **Nuclear spin switch in InGaAs quantum dots** — Alexander I Tartakovskii

9:30 ThM1b.3 *(Invited talk)* **Nuclear spin control by a point contact** — Go Yusa

10:00 ThM1b.4 **Dynamic nuclear polarization of a single InAs/GaAs quantum dot: positive versus negative trions** — Benoît Eble

10:15 ThM1b.5 **Electron and Nuclear Spin Dynamics in a Single Quantum Dot: Low Field Limit** — Ilya Akimov

ThM1c: Structural, Electronic and Optical Properties of Bulk Materials

Thursday 9:00–10:30; Gartensaal; Chair: E. Haller

9:00 ThM1c.1 **In-plane band gap engineering by hydrogenation of dilute nitride semiconductors** — M. Felici

9:15 ThM1c.2 **Frequency– and temperature–dependent conductivity at the metal–insulator transition in phosphorus doped silicon studied by far–infrared ellipsometry** — Josef Humlicek

9:30 ThM1c.3 **Photoluminescence dynamics in highly excited InGaN ternary alloys** — Daisuke Hirano

9:45 ThM1c.4 **Sensitive Ultrafast THz Mobility Measurement** — James N Heyman

10:00 ThM1c.5 *(Invited talk)* **Photoluminescence dynamics in GaAs along an optically induced Mott transition** — L. Viña

ThM1d: Physics in the QHE Regime II

Thursday 9:00–10:30; Rittersaal; Chair: G. Landwehr

9:00 ThM1d.1 *(Invited talk)* **Seeing emergent phases in quantum Hall double layers** — Vittorio Pellegrini

9:30 ThM1d.2 **Skyrmions in fractional quantum Hall regime: theory and experiment** — Karel Vyborny

9:45 ThM1d.3 **Missing conductivity peak in SAW measurement at $\nu = 2/3$** — Dimitri Dini

10:00 ThM1d.4 **Terahertz Radiation-induced Resistance Oscillations And Zero-resistance States In High Mobility GaAs/AlGaAs Devices** — R G Mani

10:15 ThM1d.5 **Characterization and modelling of one-dimensional states in a bent quantum Hall system** — Lucia Steinke

ThM1e: Group IV: Surfaces and Bulk

Thursday 9:00–10:30; Geheime Ratstube; Chair: H. Kamimura

9:00 ThM1e.1 **Increasing Mobilities in some Semiconductors** — Marvin L. Cohen

9:15 ThM1e.2 **Melting Kinetics of Confined Systems at the Nanoscale: Superheating and Supercooling** — I. D. Sharp

9:30 ThM1e.3 **Strain dependence of stabilities of Si-related defects in Si-oxide** — Hiroyuki Kageshima

9:45 ThM1e.4 **Proton Diffusion in Amorphous SiO_2 and Hafnium Silicate by *Ab Initio* Molecular Dynamics** — Julien Godet

10:00 ThM1e.5 *(Invited talk)* **Trimming and taming silicon surfaces: a first-principles study** — Marilia J Caldas

ThM2a: Optical Studies: Dots III

Thursday 11:00–12:30; Festsaal; Chair: A. Zunger

11:00 ThM2a.1 *(Invited talk)* **A New Approach for Single-Photon Source using Quantum Dots at Telecommunication Wavelength** — Kazuya Takemoto

11:30 ThM2a.2 **Observation of a long-range electromagnetic interaction between semiconductor quantum dots** — Erik W. Bogaart

11:45 ThM2a.3 **Electronic structure of long wavelength ($>1.3\mu$m) GaAsSb-capped InAs quantum dots** — David J Mowbray

12:00 ThM2a.4 **Spectroscopy of single non-polar GaN/AlN quantum dots as a function of temperature and electrical bias** — Fabian Rol

12:15 ThM2a.5 **Optical studies of nonlinear absorption in single InGaN/GaN quantum dots** — Robert A Taylor

ThM2b: Transport in Low Dimensional Systems

Thursday 11:00–12:30; Zeremoniensaal; Chair: J. Kotthaus

11:00 ThM2b.1 *(Invited talk)* **Controlled Dephasing and Phase Recovery via Cross-Correlation Measurements** — Izhar Neder

11:30 ThM2b.2 **Strong effect of resonant impurities on Landau level quantisation** — Giles Allison

11:45 ThM2b.3 **Magneto-resistance studies on evenly curved Hall bars in InGaAs/GaAs-microtubes** — Olrik Schumacher

12:00 ThM2b.4 **Acoustic charge transport in a n-i-n three terminal device** — Giorgio De Simoni

12:15 ThM2b.5 **Spin interference in silicon one-dimensional rings** — Nikolay T Bagraev

ThM2c: Semiconductor Spintronics and Spin Relaxation

Thursday 11:00–12:30; Gartensaal; Chair: M. Dyakonov

11:00 ThM2c.1 **Optical detection of spin injection in InAs based Spin-LEDs** — Bruce D McCombe

11:15 ThM2c.2 **Non-Markoffian Theory of Electron Spin Decoherence in a Single Quantum Dot** — Toshihide Takagahara

11:30 ThM2c.3 *(Invited talk)* **Optically manipulating spins in quantum dots in semiconductors** — Lu J Sham

12:00 ThM2c.4 **Spin relaxation and dephasing in high mobility wide band gap GaN/AlGaN 2DEGs** — Stefan Schmult

12:15 ThM2c.5 **Nanosecond excitonic spin relaxation in cubic GaN** — Atsushi Tackeuchi

ThM2d: Electronic Transport in 1D Systems

Thursday 11:00–12:30; Rittersaal; Chair: F. Beltram

11:00 ThM2d.1 **Strongly confined tunnel-coupled one-dimensional electron systems** — Saskia F. Fischer

11:15 ThM2d.2 **Single-electron backscattering resonances in a small quantum ring interferometer caused by Friedel oscillations** — Ze D Kvon

11:30 ThM2d.3 **Anisotropic Zeeman spin-splitting in one-dimensional ballistic hole system** — Romain Danneau

11:45 ThM2d.4 **Superconducting Proximity Effect in Ge/Si Core/Shell Nanowires** — Andy Vidan

12:00 ThM2d.5 *(Invited talk)* **Ballistic transport in hybrid nanostructures of paraelectric PbTe** — Grzegorz Grabecki

ThM2e: Growth and Structural Studies of Nanosystems

Thursday 11:00–12:30; Geheime Ratstube; Chair: O.G. Schmidt

11:00 ThM2e.1 **Alloy Ordering in Core-Shell Nanowires** — Niklas Sköld

11:15 ThM2e.2 **ZnTe nanowires grown catalytically on GaAs (001) substrates by molecular beam epitaxy** — Tomasz Wojtowicz

11:30 ThM2e.3 *(Invited talk)* **Quantum dots with coherent interfaces between *rocksalt*-PbTe and *zincblende*-CdTe** — Wolfgang Heiss

12:00 ThM2e.4 **AFM Quantitative Morphological Analysis of the Step Bunching Instability Formed on GaAs(110) During H-assisted MBE** — Miguel Luis Crespillo

12:15 ThM2e.5 **New approach to grow very thin, high Ge content and relaxed SiGe epilayers on SOI(001) substrate** — Maksym Myronov

FrM1a: 1D Transport and Optics

Friday 9:00–10:30; Festsaal; Chair: A. Sachrajda

9:00 FrM1a.1 *(Invited talk)* **Unidirectional Injection and Relaxation of Ballistic electrons in Clean Quantum Wires** — Hadar Steinberg

9:30 FrM1a.2 **Electron transport through isolated dopants in gated silicon nanowires.** — Hermann Sellier

9:45 FrM1a.3 **Spatially-Resolved Electronic and Vibronic Structure of CdS and GaAs/AlGaAs Nanowires** — L M Smith

10:00 FrM1a.4 **Semiconductor Quantum Wires with Controlled Length and Confinement Potential** — Qing Zhu

10:15 FrM1a.5 **Optical Properties and Electronic States in Strained InP/InAs/InP Core-multishell Heterostructure Nanowires** — Junichi Motohisa

FrM1b: Nitrides: Electronic Properties and Optical Studies

Friday 9:00–10:30; Zeremoniensaal; Chair: P. Koenraad

9:00 FrM1b.1 **Evidence for p-type InN** — W. Walukiewicz

9:15 FrM1b.2 **Effects of nonlinear elasticity in nitride semiconductors and their nanostructures** — Slawomir P. Lepkowski

9:30 FrM1b.3 *(Invited talk)* **Growth and material physics of InGaAsN for novel devices** — Henning Riechert

10:00 FrM1b.4 **High photoluminescence efficiency III-nitride based quantum well structures emitting at 380 nm** — Darren M Graham

10:15 FrM1b.5 **Luminescence efficiency and gain mechanisms in field-free InGaN/GaN heterostructures grown on sapphire or bulk GaN substrate** — A. Hoffmann

FrM1c: Bulk: Excitons, Lattice and Carrier Dynamics

Friday 9:00–10:30; Gartensaal; Chair: P.O. Holtz

9:00 FrM1c.1 *(Invited talk)* **Direct Observation of the Donor Nuclear Spin in a Near-Gap Bound Exciton Transition: ^{31}P in Highly Enriched ^{28}Si** — M. L. W. Thewalt

9:30 FrM1c.2 **Long wave phonons in random (Ga,In)P and spontaneoulsy ordered $GaInP_2$: the percolation approach** — Allal Chafi

9:45 FrM1c.3 **Lattice Dynamics of Hexagonal-BN by Inelastic X-ray Scattering** — Jorge Serrano

10:00 FrM1c.4 **Coherence of Elementary Excitations in Disordered Electron Systems** — Yuri A Pusep

10:15 FrM1c.5 **Transient response of photoexcited electrons: absolute negative conductivity and Hall oscillations** — Oleg E Raichev

FrM1d: Organic Semiconductors

Friday 9:00–10:30; Rittersaal; Chair: E. Molinari

9:00 FrM1d.1 **Coherent exciton state in an organic quantum wire** — François Dubin

9:15 FrM1d.2 **Sub-micron organic Thin-Film-Transistors manufactured by Nano-Imprint-Lithography** — Günther Leising

9:30 FrM1d.3 **Perovskite organic semiconductor: a way to hybrid microcavities** — Jean-Sébastien Lauret

9:45 FrM1d.4 **Non-radiative energy transfer from an inorganic quantum well to a polymer overlayer** — Grigorios Itskos

10:00 FrM1d.5 *(Invited talk)* **Highly efficient organic semiconductor devices** — Karl Leo

FrM1e: New Materials, Concepts and Techniques

Friday 9:00–10:30; Geheime Ratstube; Chair: D.K. Ferry

9:00 FrM1e.1 **Nanomagnet arrays fabricated on self-organized semiconductor templates** — Christian Teichert

9:15 FrM1e.2 **Magnetotransport of two-dimensional electrons at *in situ* cleaved InAs surfaces** — Toshimitsu Mochizuki

9:30 FrM1e.3 *(Invited talk)* **Transition-metal silicides as novel materials for magnet-semiconductor heterostructures** — Peter Kratzer

10:00 FrM1e.4 **Synthesis and Optical Properties of Multiband III-V Semiconductor Alloys** — Kin Man Yu

10:15 FrM1e.5 **Dilute Ga(AsN) alloys: a new negative differential velocity concept** — Giles Allison

FrM2f: Bulk

Friday 11:00–12:30; Poster

11:00 FrM2f.1 **Pressure induced destruction of the Mott-Hubbard insulating state in manganese monochalcogenides with NaCl structure** — Yoshimi Mita

11:00 FrM2f.2 **Anomalous PL brightening inside a current density filament in n-GaAs under a pulsed electric field** — Kazunori Aoki

11:00 FrM2f.3 **Difference in nature of photoinduced defects and structural instability between surroundings of Si-H and Si-H2 bonds in amorphous silicon** — Hidetoshi Oheda

11:00 FrM2f.4 **Link between lifetime and scattering rates for elementary and composite excitons** — Monique Combescot

11:00 FrM2f.5 **The ki3 cancellation problem solved by novel tools** — Monique Combescot

11:00 FrM2f.6 **Do strong excitonic effects violate the critical-point analysis of optical spectra? // New insight from parameter-free calculations** — Friedhelm Bechstedt

11:00 FrM2f.7 **Ab initio calculations of zero-field spin splitting in zinc-blende semiconductors** — Jacek A Majewski

11:00 FrM2f.8 **Transient Megagauss Fields on Indiumantimonide and Mercurycadmiumtelluride** — Stefan Hansel

11:00 FrM2f.9 **Resolved Fine Structure of the Boron Bound Exciton in Highly Enriched ^{28}Si Using Single Frequency Laser Spectroscopy** — A. Yang

11:00 FrM2f.10 **Optical Properties of a CuAu Phase of $AgGaSe_2$ Grown on [100] GaAs substrate** — Peter Yu

11:00 FrM2f.11 **Electroreflectance and photoluminescence study of InN and InGaN** — Hyeonsik Cheong

11:00 FrM2f.12 **Effect of local nanoscale ferromagnetic ordering on thermoelectric and magnetotransport properties of amorphous $(Gd,Y)_x$ Si_{1-x} alloys.** — Nikolai K. Chumakov

11:00 FrM2f.13 **Trembling motion (Zitterbewegung) of electrons in semiconductors** — Tomasz M Rusin

11:00 FrM2f.14 **Superconductivity of InN as an intrinsic property** — Takashi Inushima

11:00 FrM2f.15 **The optical properties of $GaSe$ single crystals thermally annealed in C_{60} vapors** — Elmira Cuculescu

11:00 FrM2f.16 **Hall effect and conductivity in the superconducting-insulator transition region in $Pb_zSn_{1-z}Te$:In.** — Maxim S Kononchuk

11:00 FrM2f.17 **Interband breakdown in a Kane semiconductor with a degenerate hole distribution** — Alexey Artamkin

11:00 FrM2f.18 **Failure of the two-level repulsion-model in describing the conduction band edge of GaN_xP_{1-x}.** — Martin Güngerich

11:00 FrM2f.19 **Recombination kinetics of the dielectric metastable EH-liquid and photoluminescence spectra of Ge:Sb samples** — Yurii A Mityagin

11:00 FrM2f.20 **Polarized photoluminescence of ordered GaInP2 layers: temperature and polarization angular dependencies** — Tatiana Prutskij

11:00 FrM2f.21 **Atom relaxation of H in silicon** — Koun Shirai

11:00 FrM2f.22 **High-order THz-sideband generation in semiconductors** — Ren-Bao Liu

11:00 FrM2f.23 **Influence of holes on optically enhanced nuclear spin polarization in semiconductors** — Denis Scalbert

11:00 FrM2f.24 **Positive magnetoresistance behaviour in the variable range hopping in insulating n-type InP** — Abdelhamid El kaaouachi

11:00 FrM2f.25 **Lifetime of yellow 1S-paraexcitons in Cu_2O: A high resolution spectroscopy study** — Jan Brandt

11:00 FrM2f.26 **Femtosecond-scale build-up of inverted phonon distribution in GaN** — Romuald Brazis

11:00 FrM2f.27 *Ab initio* **Calculations of the Vibrational Modes of MnAs and $Ga_{1-x}Mn_xAs$** — Horacio W. L. Alves

11:00 FrM2f.28 **A solution in 3 dimensions for current in a semiconductor under high level injection from a point contact** — Mike W Denhoff

11:00 FrM2f.29 **Evidence for novel hydrogen-nitrogen complexes in dilute nitrides** — G. Bisognin

11:00 FrM2f.30 **Determination of Ge concentration profile in graded SiGe layers using diffuse x-ray scattering** — Stanislav Daniš

11:00 FrM2f.31 **Spin-dependent phenomena in new nanoobject - 2d layer on the internal interface Te-SiO_2** — Nikita S Averkiev

11:00 FrM2f.32 **Photoluminescence under magnetic field and hydrostatic pressure in Ga(AsN) for probing the compositional dependence of carrier effective mass and gyromagnetic ratio** — F. Masia

11:00 FrM2f.33 **Universal Nonequilibrium Conductance Peak in Ferroelectrics and Quantum-Paraelectrics** — Yukio Watanabe

11:00 FrM2f.34 **Sensitization effect of Yb doping on Er-related 1.54μm emissions in nanocrystalline Si thin films** — Xinwei Zhao

11:00 FrM2f.35 **Influence of oxygen vacancies on time-resolved photo-luminescence in photo-catalytic anatase TiO_2 film** — Masako Goto

11:00 FrM2f.36 **Processes of Stimulated Emission in ZnO** — Claus Klingshirn

11:00 FrM2f.37 **Coherent phonon oscillations in zinc blende and wurtzite wide-gap semiconductors** — Hideyuki Kunugita

11:00 FrM2f.38 **Decoherence suppression of excitons in semiconductor using sequential femtosecond pulses** — Tadashi Kishimoto

11:00 FrM2f.39 **Investigation of compositional disorder in GaAsN:H** — A. Polimeni

11:00 FrM2f.40 **Simulations of Deformation and Fracture Mechanisms in Amorphous and Nanostructured Carbon** — Pantelis C Kelires

11:00 FrM2f.41 **First-principles study on dielectric properties of semiconductor nano-scale films** — Masato Ishikawa

11:00 FrM2f.42 **Semiempirical tight binding modeling of electronic band structure of III-V nitride Heterostructures** — Hikmet H. Gürel

11:00 FrM2f.43 **Ab-initio calculations of bulk lead chalcogenides and their heterostructures** — Kerstin Hummer

11:00 FrM2f.44 **Piezoresistance Effect of n-type Silicon; Temperature and Concentration Dependencies, Stress Dependent Effective Masses** — Yozo Kanda

11:00 FrM2f.45 **Anisotropy of Semiconductor Gap States Probed by Resonant Tunneling** — Sebastian Loth

11:00 FrM2f.46 **Electrical percolation effects in amorphous $Ge_2Sb_2Te_5$ thin films during the crystallization phase transformation** — Dae-Hwang Kim

11:00 FrM2f.47 **Exciton-polariton effects in high purity ZnTe** — Evgeny E. Onishchenko

11:00 FrM2f.48 **InGaAsSb p-n Heterojunctions Studied by Photoluminescence and Photoacoustic Spectroscopies for Photovoltaic Applications** — Ma. Lucero Gomez-Herrera

11:00 FrM2f.49 **Impurity band of dilute-nitride InGaAs** — Horia-Eugen Porteanu

11:00 FrM2f.50 **Phonons and phonon-mixing in ZnSe isotopic crystals, pressure-cycled domains, and nanorods** — Bernard A Weinstein

11:00 FrM2f.51 **Photoexcitation Spectroscopy of Cyclotron Resonance in Dilute-Nitrogen Alloys** — Horia-Eugen Porteanu

11:00 FrM2f.52 **Dielectric function and critical-point parameters of biaxially stressed Si:C alloys on Si (001)** — Stefan Zollner

11:00 FrM2f.53 **A Raman study of order-disorder phenomena in compounds $Zn_{1-x}Mn_xGa_2Se_4$** — Pablo Alonso-Gutiérrez

11:00 FrM2f.54 **Two-dimensional metal-insulator transition in gated silicon inversion layers according to the Dipole trap model** — Gerhard Brunthaler

11:00 FrM2f.55 **Anisotropy of the Γ-point electron effective mass in hexagonal InN** — T. Hofmann

FrM2g: Defects and Impurities

Friday 11:00–12:30; Poster

11:00 FrM2g.1 **Influence of residual point defects on the stability of electrical junctions** — Mao-Nan Chang

11:00 FrM2g.2 **Identification of point defects in Ga(Al)NAs alloys** — Weimin M Chen

11:00 FrM2g.3 **Spin structure of A(+) centers in GaAs/AlGaAs QW-s.** — Yuri L. Ivanov

11:00 FrM2g.4 **Gettering Mechanism of 3d Transition Metals studied by First principles Calculation** — Kazuhito Matsukawa

11:00 FrM2g.5 **Low frequency dielectric anomaly in $Pb_{0.75}Sn_{0.25}Te$(In).** — Ludmila I. Ryabova

11:00 FrM2g.6 **V, Cr, Mn and Co impurities in semimagnetic semiconductors, based on ZnSe, ZnS, and ZnO: X-ray, optical, and magnetic research** — Thorsten Schmitt

11:00 FrM2g.7 **ODMR of impurity centers embedded in silicon microcavities** — Tatiana N Shelykh

11:00 FrM2g.8 **Shallow Impurity Absorption Spectroscopy in Isotopically Enriched Silicon** — M. Steger

11:00	FrM2g.9	**Electrical isolation of low dimensional structures in GaAs by light ion irradiation** — Henri Boudinov
11:00	FrM2g.10	**Transport properties of PbTe(Mn) and PbTe(Mn, V).** — Alexey I. Artamkin
11:00	FrM2g.11	**Very Large-Scale First-principles Simulation on Earth Simulator** — Takenori Yamamoto
11:00	FrM2g.12	**Phonon induced resonances in impurity photocurrent spectra of bulk semiconductors and quantum wells doped by shallow donors** — Vladimir Ya Aleshkin
11:00	FrM2g.13	**Electron trap energy levels in indium doped $Cd_{0.85}Mn_{0.15}Te$** — Ewa Placzek-Popko
11:00	FrM2g.14	**Structure and vibrational properties of Mn-H complexes in $Mn_xGa_{1-x}As$ dilute magnetic semiconductors.** — Aldo Amore Bonapasta
11:00	FrM2g.15	**Stabilizing effects of n-type doping on Fe and Mn acceptors in III-V compounds.** — Aldo Amore Bonapasta
11:00	FrM2g.16	**Relationship between the structure and the doping mechanisms in polycrystalline CdTe:Cl** — Vincent Consonni
11:00	FrM2g.17	***Ab initio* studies of magnetism induced by vacancies in graphene** — Marcos Veríssimo-Alves
11:00	FrM2g.18	**Optical Signatures of Magnesium Related Acceptors in GaN** — Bo A Monemar
11:00	FrM2g.19	**Room temperature electroluminescence in the mid-infrared (2 to 3 microns) from bulk chromium-doped ZnSe** — Julien Jaeck
11:00	FrM2g.20	**Symmetry of native defects in non-cubic semiconductors** — Susanne Siebentritt
11:00	FrM2g.21	**Anomalies and New Phenomena in the Terahertz Spectra of Shallow Centres in Silicon and Germanium** — Rodney E Vickers
11:00	FrM2g.22	**Confined Electronic Structures of Nitrogen Isoelectronic Centers in GaAs Grown by Atomically Controlled Doping Technique** — Takashi Kita
11:00	FrM2g.23	**Microscopic Mechanism of Phosphorus Diffusion in Silicon** — Hiroyuki Nakayama
11:00	FrM2g.24	**Electirc structure of shallow muonium in titanium dioxide** — Koichiro Shimomura
11:00	FrM2g.25	**Phonon-assisted electron transitions from valence band to ground state of acceptors in Si via even- and odd-parity excited states** — Boris A Andreev
11:00	FrM2g.26	**Potential fluctuations in 2D MBE CdTe/CdMgTe quantum well - experimental proof of the nature of fluctuations** — Krzysztof Karpierz
11:00	FrM2g.27	**Electrical activation of Fe impurities introduced in III-V semiconductors by high temperature ion implantation.** — Tiziana Cesca
11:00	FrM2g.28	**THz silicon laser based on arsenic donor transitions** — Valery N Shastin
11:00	FrM2g.29	**Hydrogen clusters in dilute nitride alloys** — Aldo Amore Bonapasta
11:00	FrM2g.30	**First-principles study of stair-rod dislocations in Si and GaAs stacking-fault tetrahedron defects** — Ryo Kobayashi
11:00	FrM2g.31	**Theoretical Model of Shallow Acceptor States in SiGe Grown on Si** — Shun-Tung Yen
11:00	FrM2g.32	**Mn in GaAs and Ge Nanowires** — Adalberto Fazzio
11:00	FrM2g.33	**Direct observation of picosecond-scale energy-transfer processes in Er,O-codoped GaAs by pump-probe reflection technique** — Yasufumi Fujiwara
11:00	FrM2g.34	**Process of diffusion of interstitial oxygen atoms and interstitial hydrogen molecules in silicon and germanium crystals: quantumchemical simulation** — Vasilii Gusakov
11:00	FrM2g.35	**Theory of impurity states in coupled quantum wells and superlattices and their infrared absorption spectra** — Dominik Stehr
11:00	FrM2g.36	**High-Pressure Luminescence Studies of Intrashell Transitions of Cr^{2+} Ions in ZnSe:Cr Crystals** — Sergiy Trushkin
11:00	FrM2g.37	**Deep level emission and electrical activity of chlorine in epitaxial ZnSe thin films** — Miguel García-Rocha
11:00	FrM2g.38	**Quantification of AlGaN-related deep levels in AlGaN/GaN heterostructures using deep level optical spectroscopy** — Andrew Armstrong

FrM2h: Wide Gap Semiconductors

Friday 11:00–12:30; Poster

11:00	FrM2h.1	**Theoretical support for the smaller band gap bowing in wurtzite InGaN alloys** — Lara K. Teles
11:00	FrM2h.2	**Thermal boundary resistance between GaN layer and different substrates determined by transient electrical and optical interferometry methods.** — Dionyz Pogany
11:00	FrM2h.3	**Influence of surface trapping on determination of electron saturation velocity in AlGaN/GaN heterostructure.** — Jan Kuzmik
11:00	FrM2h.4	**Optical Properties and Effective Carrier Masses of Rutile SnO_2 as Obtained from Full Relativistic *Ab Initio* Calculations** — Antonio T Lino
11:00	FrM2h.5	**Optoelectronic Applications of ZnO/ZnMgO Quantum Well Lasers in the Blue and the UV Spectral Regions** — Seoung-Hwan Park
11:00	FrM2h.6	**Effect of H and Si impurities on device performance based on HfO_2 gate oxide** — Joongoo Kang
11:00	FrM2h.7	**Biexciton emission and lasing of superfine ZnO particle in a cavity** — Yoshiyuki Harada
11:00	FrM2h.8	**Energy transfer processes between extended band states and Te-related localized states in metastable $ZnS_{1-x}Te_x$** — Peter J. Klar
11:00	FrM2h.9	**Physical reason for the energy gap dispersion of $Ga_xAl_{1-x}N$** — Luiz G Ferreira
11:00	FrM2h.10	**In-enriched nanostructures within inhomogeneous InGaN and InN** — Shubina T. V.
11:00	FrM2h.11	**Temperature-dependent band-gap and excitonic properties of ZnO** — Rüdiger Schmidt-Grund
11:00	FrM2h.12	**Screening Influence on the Binding Energies of Excitons in Quantum Wells under Pressure** — Shiliang Ban
11:00	FrM2h.13	**Influence of Plasmon Scattering on Low Field Electron Mobility in Wurtzite and Zincblend GaN** — Hadi Arabshahi
11:00	FrM2h.14	**Defect emission in ZnO nanorods fabricated by hydrothermal method** — Aleksandra B Djurisic
11:00	FrM2h.15	**Influence of the wire diameter on the optical properties of individual ZnO nanowires** — L. Wischmeier
11:00	FrM2h.16	**Photoluminescence study of nitrogen-related states in ZnSe** — Vadim P. Sirkeli
11:00	FrM2h.17	**Acceptor level due to carbon in a (1-101)AlGaN** — Nobuhiko Sawaki
11:00	FrM2h.18	**Heterojunctions based on Silicon Carbide** — Alexander A. Lebedev
11:00	FrM2h.19	**Angular dependent magneto-photoluminescence spectra of ZnO single crystal thin film** — Lu Ding
11:00	FrM2h.20	**Coupled longitudinal optical phonon-plasmon modes in InN nanocolumns** — Snezana Lazic
11:00	FrM2h.21	**Polarization dependent spectroscopic study of InN** — Jayeeta Bhattacharyya
11:00	FrM2h.22	**Optical characterisation of low-temperature grown ZnO nanorods.** — Chegnui Bekeny
11:00	FrM2h.23	**Persistent photo-conductivities from extended defects in GaN films with high resistivities** — Xinhua Li
11:00	FrM2h.24	**Comparative study on the impact of TiN, and Mo metal gates on MOCVD-grown HfO_2 and ZrO_2 high-k dielectrics for CMOS technology** — Stephan Abermann
11:00	FrM2h.25	**Population dynamics of biexcitons and single excitons in AlGaN ternary alloys** — Yoichi Yamada
11:00	FrM2h.26	**Dislocation-density dependent carrier lifetimes and stimulated recombination thresholds in GaN** — Kestutis Jarašiunas
11:00	FrM2h.27	**Polarization- and time- resolved photoluminescence studies of free excitons in a 1-mm-thick HVPE GaN film** — Toropov A. A.
11:00	FrM2h.28	**Control of electronic properties of high-k gate oxides with doping from first-principles calculation** — Tatsuo Schimizu
11:00	FrM2h.29	**Evaluation of concentration of deep levels from photoelectric measurements in wide gap high-resistivity semiconductors** — Jan Franc

11:00 FrM2h.30 **Measurement of deep intrinsic defects in thin ZnO films via mid-infrared photocurrent spectroscopy** — Heiko Frenzel

11:00 FrM2h.31 **Tunneling in dislocation-free GaN/AlGaN double-barrier diodes grown on bulk GaN** — Sebastian Golka

11:00 FrM2h.32 **Radiative recombination and nanosecond exciton lifetime in GaN freestanding film via two-photon excitation** — Yongchun Zhong

11:00 FrM2h.33 **The band bending effects on optical spectra of thin epilayers and nano-size samples of n-InN** — Albert A Klochikhin

11:00 FrM2h.34 **Atomistic model of the 4H(1000)SiC-SiO_2 interface: structural and electronic properties** — Fabien Devynck

11:00 FrM2h.35 **A comparative study of recombination, gain, and lasing mechanisms in differently strained GaN-based heterostructures with In-rich nanoclusters** — Bernd Schineller

11:00 FrM2h.36 **Electronic structure and vertical transport in single-barrier AlN/GaN heterostructures** — Sylvain Leconte

11:00 FrM2h.37 **Frequency Dependence of the Dielectric Constants and of the Reflectivity for HfO_2 and ZrO_2 from First-Principles Calculations** — Horacio W. L. Alves

11:00 FrM2h.38 **High quality AlGaN/AlGaN distributed Bragg reflectors and microcavities** — Oleg Mitrofanov

11:00 FrM2h.39 **Effect of Ga adlayer on strain and nucleation rates during GaN quantum dot growth on AlN** — Gregor Koblmueller

11:00 FrM2h.40 **Temperature-dependent radiative lifetimes of excitons in non-polar GaN/AlGaN quantum wells** — Sergey Rudin

11:00 FrM2h.41 **Hall Effect and Luminescence Measurements on Si-implanted $Al_xGa_{1-x}N$** — Mee-Yi Ryu

11:00 FrM2h.42 **Oblique-incidence infrared reflection and Raman scattering in thin ZnO films deposited on sapphire by gas-source MBE** — Noritaka Kuroda

11:00 FrM2h.43 **Polarization-induced high-quality two-dimensional electrons in ZnO/ZnMgO heterostructures** — Shigehiko Sasa

11:00 FrM2h.44 **Theoretical Study of the Nitrogen Adsorption on Si and GaAs (100) Surfaces** — Horacio W. L. Alves

11:00 FrM2h.45 **Thermoelectric and electrical properties of GaN and InN single crystals** — Takayuki Matsumoto

11:00 FrM2h.46 **Recursive Insulator-Metal Transition and Conductance Oscillation in Ferroelectric Films** — Yukio Yukio Watanabe

11:00 FrM2h.47 **Calculated optical properties of wurtzite GaN and ZnO** — Daniel Fritsch

11:00 FrM2h.48 **Influence of the host lattice on the O-H interaction in II-VI semiconductors** — M. Felici

11:00 FrM2h.49 **Symmetry of the conduction band minima in AlP** — Mykhaylo P. Semtsiv

11:00 FrM2h.50 **Kinetics of relaxation and recombination of free and bound excitons in ZnO: inter-valence band scattering and carrier capture by impurities** — Frank Bertram

11:00 FrM2h.51 **Charge transport and filament formation in ZnS:Mn thin film structures** — Karsten Meyer

11:00 FrM2h.52 **Exciton Spin Dynamics in ZnO** — Thierry Amand

11:00 FrM2h.53 **Optical Characterization of GaS Thin Films, Components of GaS/CdTe Heterojunctions** — George G Rusu

11:00 FrM2h.54 **Temperature dependence of carrier dynamics in AlGaN alloys with enhanced light emission through nanoscale compositional inhomogeneities** — Gregory A. Garrett

11:00 FrM2h.55 **Determination of internal electric field in ZnO/(Zn,Mg)O quantum wells from time resolved photoluminescence experiments.** — Thierry Guillet

11:00 FrM2h.56 **Dynamic and energy transfer processes of excitonic states in ZnO** — Markus R. Wagner

11:00 FrM2h.57 **GaN and GaN_xAs_{1-x} epilayers on Si and GaAs substrates with porous and two-layer buffer** — Yury Nikolaevich Buzynin

11:00 FrM2h.58 **Electro-modulated absorption in GaN/AlN superlattices** — Daniel - Hofstetter

11:00 FrM2h.59 **Towards efficient p-type doping of ZnO with group-V atoms: N versus As and Sb** — Eliana Kaminska

FrM2i: Molecular systems and organic semiconductors

Friday 11:00–12:30; Poster

11:00	FrM2i.1	**Absorption of Frenkel Excitons in PTCDA thin films, in PTCDA/Alq3 multilayers and in co-deposited films** — Hans-Peter Wagner
11:00	FrM2i.2	**Fabrication and Electrical Characterization of Lambda DNA Field Effect Transistors** — Jong-Seung Hwang
11:00	FrM2i.3	**Highly ordered thin crystal films: charge transport, optical film properties and applications** — Alexander E. Kozhanov
11:00	FrM2i.4	**Theoretical study of carrier-vibration coupling effect on carrier transport process in organic devices** — Kunihiro Mitsutake
11:00	FrM2i.5	**Nonlinear spin injection into a DNA chain** — Xue Feng Wang
11:00	FrM2i.6	**Novel gold nanoparticles/conjugated molecules network structures fabricated by self-assembling process** — Tetsuo Akasaka
11:00	FrM2i.7	**Surface nanopatterning through styrene adsorption on Si(100)** — Arrigo Calzolari
11:00	FrM2i.8	**Reduced sheet resistance in pentacene field-effect transistors using thiol-modified electrodes** — D. V. Pham
11:00	FrM2i.9	**Novel FET structures based on bundled and single C_{60} nanowhiskers** — Yuichi Ochiai
11:00	FrM2i.10	**Holographic nano-patterning based on photo-cross-linkable light emitting polyacetylenes** — Kam Sing Wong
11:00	FrM2i.11	**Third harmonic generation measurements on organic semiconductor films** — Emmanuelle Deleporte
11:00	FrM2i.12	**Transfer-printing-induced improvement of pentacene thin films on plastic substrates** — Yue Shao
11:00	FrM2i.13	**Atomistic picture of electromigration process and its application to high-yield fabrication of nanogap electrodes** — Akinori Umeno
11:00	FrM2i.14	**On the D.C. Conduction Mechanism in N-(p-Nitrobenzoyl) Asparagic Acid Derivatives Thin Films** — Gheorghe I Rusu
11:00	FrM2i.15	**Transport properties through single molecules on the semiconducting electrodes — ab initio calculation study –** — Kenji Hirose
11:00	FrM2i.16	**Adsorption and conductance of BDT on the Au(111) surface** — Renato B. Pontes
11:00	FrM2i.17	**How to tailor excitonic effects in organic semiconductors?** — Claudia Ambrosch-Draxl
11:00	FrM2i.18	**Spatially resolved optical properties of organic semiconducting thin films** — Paul Lacharmoise
11:00	FrM2i.19	**Para-sexiphenyl thin films grown on dielectric substrates** — Yue Hou
11:00	FrM2i.20	**Controlling molecular orientation of sexiphenyl thin films** — Gregor Hlawacek
11:00	FrM2i.21	**Ab initio electronic and transport properties of a hybrid Si/organic/Si interface** — Benedetta Bonferroni
11:00	FrM2i.22	**Theoretical study of the organic semiconductor polyaniline** — Liliana Y. A. Dávila
11:00	FrM2i.23	**New energy modulated heterostructures for charge transfer and confinement based on conjugated polymers** — Francisco E. G. Guimarães
11:00	FrM2i.24	**On the Electronic Transport in Poly(azomethine sulfone) films** — Gheorghe I. Rusu

FrM2j: Nanostructures: one- and zero-dimensional systems: Electronic properties, transport: Wires

Friday 11:00–12:30; Poster

11:00	FrM2j.1	**Anomalous field-effect characteristics in double-wall carbon nanotubes due to proximity effect** — Xiang Rong Wang
11:00	FrM2j.2	**Helical nanostructures and Aharonov-Bohm quantum rings in a transverse electric field** — Mikhail E Portnoi

11:00	FrM2j.3	**The metallic-like temperature dependence of the conductivity in 2D** — Grigory M Minkov
11:00	FrM2j.4	**Magneto-Magnon Resonances in Diluted Magnetic Semiconductors Quantum Wires** — Eduardo S Souto
11:00	FrM2j.5	**Spin polarization and structure of edge channels in quantum wires** — Igor V Zozoulenko
11:00	FrM2j.6	**Anomalous Impedance in High Frequency Measurements of Quantum Point Contacts** — Jonathan P Bird
11:00	FrM2j.7	**Pseudo-intersubband transitions in lateral superlattices with fluctuating period** — Hiroshi Tsukahara
11:00	FrM2j.8	**Magnetic field symmetry and phase rigidity of the nonlinear conductance in a ring** — Renaud Leturcq
11:00	FrM2j.9	**A Study of alloyed nanowires from two perspectives: approximate dispersion diagrams and transmission coefficients** — Gerhard Klimeck
11:00	FrM2j.10	**Novel Interaction Phenomena in Non-Equilibrium Transport in One-Dimensional Quantum Wires** — Takahiro Morimoto
11:00	FrM2j.11	**Scanning Gate Imaging of Transport within InGaAs QPC** — Nobuyuki Aoki
11:00	FrM2j.12	**Electrical properties of three-terminal InAs nanowire junctions** — Hongqi Xu
11:00	FrM2j.13	**Ballistic rectification in four-terminal fork-shaped Si/SiGe junctions** — Egmont Fritz
11:00	FrM2j.14	**Enhanced rectification efficiency in cascaded ballistic GaAs/AlGaAs rectifiers** — Ulrich Wieser
11:00	FrM2j.15	**Graphene-based quantum wires** — João M Pereira
11:00	FrM2j.16	**Spin and momentum effects on focusing in one-dimensional systems** — Kavitha Kishen
11:00	FrM2j.17	**Inelastic transport in low dimensional systems: An application to DNA chains and molecular wires** — Rafael R Rey-Gonzàlez
11:00	FrM2j.18	**Hopping conduction in chain-like Silicon nanowires** — Mitsuru Inada
11:00	FrM2j.19	**Gauge invariant envelope function theory and prediction of g-factors in nanowires** — Richard Morschl
11:00	FrM2j.20	**Transport pectroscopy of in-plan dual electron waveguides** — Jean-Laurent Deborde
11:00	FrM2j.21	**First-principles theory of inelastic transport and local heating in atomic gold wires** — Thomas Frederiksen
11:00	FrM2j.22	**Spin qubits in Si nanowires** — Floris A Zwanenburg
11:00	FrM2j.23	**Quantised Conductance in InSb/InAlSb quantum wells using surface metal split-gates.** — James M S Orr
11:00	FrM2j.24	**Low-frequency Noise Properties of GaN Nanowires** — L. C. Li
11:00	FrM2j.25	**Quantized conductance without the reservoir picture** — bart soree
11:00	FrM2j.26	**Quantum dots in InAs nanowires defined by local gates** — Marc Scheffler
11:00	FrM2j.27	**Conductance of Disordered Wires with Symplectic Symmetry: Random Matrix Approach and Numerical Simulation** — Hiroshi Sakai
11:00	FrM2j.28	**Si and SiGe Nanowires** — Antonio J. R. da Silva
11:00	FrM2j.29	**Anomalous 0.7 Electrical Conductance Quantization in Nano-scale Constriction; Revisited** — Yunchul Chung
11:00	FrM2j.30	**Comparison of device performance and scaling properties of cylindrical-nanowire (CNW) and carbon-nanotube (CNT) transistors** — Elena Gnani
11:00	FrM2j.31	**Properties of the silicon nanowhiskers grown by molecular-beam epitaxy** — Olga V Naumova
11:00	FrM2j.32	**High fidelity single-shot read-out of charges and spins in a few-electron quantum dot** — Ivo T. Vink
11:00	FrM2j.33	**Electric-field induced exciton breakdown in radial polarized nanorings** — Zdenka Barticevic
11:00	FrM2j.34	**Conductance fluctuations in a quantum wire with a non-uniform scattering potential** — David W Horsell

11:00 FrM2j.35 **Surface Passivated InAs/InP core/shell Nanowires** — Juriaan van Tilburg

11:00 FrM2j.36 **Resistance switching induced by an electric field in ZnO:Li,Fe nanowires** — Gennady N Panin

FrM2k: Nanostructures: one- and zero-dimensional systems: Nanocrystals

Friday 11:00–12:30; Poster

11:00 FrM2k.1 **Nanocrystals as Precursors for Flexible Functional Films through Nanocrystal Plasma Polymerization** — Ludovico Cademartiri

11:00 FrM2k.2 **Role of a Single Dopant in Binary and Ternary Nanocrystals** — Rameshwar N Bhargava

11:00 FrM2k.3 **Physical Properties of Quantum-Confined Europium Sulfide Nanocrystals** — Marcela L Redígolo

11:00 FrM2k.4 **Optical imaging with a single CdSe nanocrystal** — Serge Huant

11:00 FrM2k.5 **Stepwise Assembly of Eu_2O_3 Nanocrystals and Nanoneedles** — Sameer V Mahajan

11:00 FrM2k.6 **The whispering gallery effect in zinc oxide micro- and nanoresonators** — Thomas Nobis

11:00 FrM2k.7 **Hybrid excitons in semiconductor-meal nanoparticle assemblies** — Alexander Govorov

11:00 FrM2k.8 **Ballistic effect and optical properties of Si nanocrystallite structures** — Tatiana V. Torchynska

11:00 FrM2k.9 **Ge quantum dots in GeO2: synthesis, properties, applications** — Gorokhov B Eugeni

11:00 FrM2k.10 **Synthesis of Si nanocrystals in silicon oxynitride matrix by PECVD and their optical and structural properties** — Rong-Jun Zhang

11:00 FrM2k.11 **Effect of external electric field on photoluminescence of silicon nanocrystals** — Konstantin S Zuravlev

11:00 FrM2k.12 **Optical excitation and energy transfer of Eu^{3+}-doped CdS nanocrystals in reverse micelles** — Kiyoto Matsuishi

11:00 FrM2k.13 **Interface Structure, Distortions, and Electronic Properties of Silicon Nanocrystals in Amorphous Silica** — Pantelis C Kelires

11:00 FrM2k.14 **Excitonic features in CdTe spherical, rod- and tetrapod- shaped nanocrystals: the role of the Stark-effect** — Davide Tarì

11:00 FrM2k.15 **Electric field dependent photoluminescence studies of photorefractive polymer/semiconductor nanoparticle composites** — Darren M Graham

11:00 FrM2k.16 **Size Dependence of Phonon Scattering in CdSe/CdS/ZnS Nanocrystals** — Thomas J Liptay

11:00 FrM2k.17 **Light Emission from HgTe Nanocrystals embedded in Silicon Waveguides** — Ventsislav Lavchiev

FrM2l: Semiconductor quantum electrodynamics, strong coupling

Friday 11:00–12:30; Poster

11:00 FrM2l.1 **From photon absorption to Rabi oscillations for excitons and atoms** — Francois Dubin

11:00 FrM2l.2 **Quantum Measurement of Solid-State Qubit and Mesoscopic Transport from the Perspective of Quantum Open Systems** — Xin-Qi Li

11:00 FrM2l.3 **Transmission Characteristics of Coupled-Electron-Waveguide Qubit Structures** — Arunkumar Ramamoorthy

11:00 FrM2l.4 **Theoretical investigation of quantum-tomography measurements on entangled photon pairs emitted by quantum-dot cascade decay** — Filippo Troiani

11:00 FrM2l.5 **Cavity quantum electrodynamics for two quantum dots** — Elena del Valle

11:00 FrM2l.6 **Optimized Coherent Control in Semiconductor Nano-Structures: Direct and Indirect Approaches** — Markus Wenin

11:00 FrM2l.7 **A non-Markovian optical signature for detecting entanglement in coupled excitonic qubits** — Ferney Javier Rodriguez

11:00 FrM2l.8 **Linewidth and quantum features of the signal emission of a microcavity in the optical parametric oscillation regime** — Fabrice P Laussy

11:00 FrM2l.9 **Spin mixing of two electrons in a quantum dot** — Thomas L Reinecke

FrM2m: Quantum information and processing

Friday 11:00–12:30; Poster

11:00 FrM2m.1 **A Radio Frequency Quantum Point Contact Charge Read-Out** — Thomas Mueller

11:00 FrM2m.2 **Spin Rotations and Non-Abelian Phases in Quantum Wire Networks** — Aron W Cummings

11:00 FrM2m.3 **Cluster states in charge qubits based on coupled quantum dots** — Tetsufumi Tanamoto

11:00 FrM2m.4 **Charge Detection in a Closed-Loop Aharonov-Bohm Interferometer** — Gyong Luck Khym

11:00 FrM2m.5 **Effect of the electron-hole exchange interaction on the photon-spin quantum state transfer** — Yoshiaki Rikitake

11:00 FrM2m.6 **Spin qubit and its decoherence in quantum dot in a diluted magnetic semiconductor medium** — Witold Jacak

11:00 FrM2m.7 **Spin Dynamics of Electron-Nuclei Coupled System in a Double Quantum Dot** — Özgür Çakir

11:00 FrM2m.8 **Acoustic charge transport in lateral n-i-p InSb/$In_{1-x}Al_xSb$ quantum well diodes** — Stuart J Smith

11:00 FrM2m.9 **State Tomography of Layered Qubits via Spin Blockade Measurements on the Edge Qubit in a Spin Field-Effect Transistor Structure Embedded with Quantum Dots** — Kazuya Yuasa

FrM2n: Microcavities and photonic crystal structures

Friday 11:00–12:30; Poster

11:00 FrM2n.1 **Cylindric resonators with coaxial Bragg-Reflectors** — Rüdiger Schmidt-Grund

11:00 FrM2n.2 **Is the definition of left-handed materials ($\epsilon < 0, \mu < 0$) valid ?** — Kikuo Cho

11:00 FrM2n.3 **Strong optical confinements inside the wavelength-size metal mirror microcavities - New concept for small light emitters using InAsSb QDs microcavities -** — Akio Ueta

11:00 FrM2n.4 **Deep hole InP photonic crystals infiltrated with solid polymers and liquid crystals** — Carl-Fredrik Carlström

11:00 FrM2n.5 **Quantum beats in exciton-polariton system in semiconductor microcavity in magnetic field** — Vladimir D Kulakovskii

11:00 FrM2n.6 **Multiple polariton scattering and collective threshold phenomena in a semiconductor microcavity** — Sergey S. Gavrilov

11:00 FrM2n.7 **Spin dependent strong- to weak-coupling transition in semiconductor microcavities** — D. Ballarini

11:00 FrM2n.8 **Resonant Raman scattering of cavity confined acoustic phonons in an optical microcavity** — Norberto Daniel Lanzillotti-Kimura

11:00 FrM2n.9 **Using phonons to populate the bottom of the polariton dispersion relation** — M. D. Martin

11:00 FrM2n.10 **Single and coupled photonic cavities - AlAs/GaAs DBR pillars and GaAs pyramids** — Michael Hetterich

11:00 FrM2n.11 **Design of an injection-friendly transverse-magnetic gap for photonic-crystal QC lasers** — Michael Bahriz

11:00 FrM2n.12 **Positional Disorder in the Regime of Negative Refraction in Photonic Crystals** — Ronald Meisels

11:00 FrM2n.13 **Emission properties of 6.7 micron vertical-emitting microcavity lasers operating in continuous-wave mode** — Thomas Schwarzl

11:00 FrM2n.14 **Light transmission in photonic crystal mediated by surface plasmon** — Hoi Lam Tam

11:00 FrM2n.15 **Parametric Polariton Scattering in Single Micropillar Microcavities** — Daniele Bajoni

11:00 FrM2n.16 **Dominant Effect of Polariton-Polariton Interactions on the Coherence of the Microcavity Optical Parametric Oscillator** — Dmitriy N Krizhanovskii

11:00 FrM2n.17 **Polariton relaxation dynamics in semiconductor microcavities: Non-Markov effects** — Ferney Javier Rodriguez

11:00 FrM2n.18 **Spatial Distributions and Polarisation Properties of the Polaritonic Condensate in Semiconductor Microcavities** — Dmitriy N Krizhanovskii

11:00 FrM2n.19 **Enhanced Spontaneous Emission of CdSe/ZnSe Quantum Dots in Monolithic II-VI Pillar Microcavities** — Henning Lohmeyer

11:00 FrM2n.20 **Vortices in the Microcavity Optical Parametric Oscillator** — David M Whittaker

11:00 FrM2n.21 **Negative Refraction in Aperiodic Photonic Crystals** — Javad Zarbakhsh

11:00 FrM2n.22 **Direct observation of stacking faults in colloidal photonic crystals** — Evangellos W Vekris

11:00 FrM2n.23 **2D photonic components in 3D inverted opals on Si** — Gudrun Kocher

11:00 FrM2n.24 **Quantum dots in a tube as light emitters, waveguides and ring resonators** — Stefan Mendach

11:00 FrM2n.25 **A New Criterion for Focussing in Photonic Crystals** — Friedemar Kuchar

11:00 FrM2n.26 **Stability of the photonic band gap in the presence of disorder** — Richard A Abram

FrM2o: Semiconductor Spintronics: Spin manipulation and detection

Friday 11:00–12:30; Poster

11:00 FrM2o.1 **Spin coherence of two-dimensional electron gas achieved via resonant excitation of trions and excitons** — Evgenii A Zhukov

11:00 FrM2o.2 **Probing the Microscopic Structure of the Localized State in Quantum Point Contacts** — Youngsoo Yoon

11:00 FrM2o.3 **Spin-dependent transmission through a mesoscopic ring: determination of the spin-orbit interaction strengths from the final spin orientation and spin flips** — Panagiotis Vasilopoulos

11:00 FrM2o.4 **Zeeman splitting of zero-dimensional heavy-hole states in a strongly strained Ge quantum well** — Oleksiy B. Agafonov

11:00 FrM2o.5 **Spin orientation by electric current in 2D and 3D semiconductors** — Leonid E. Golub

11:00 FrM2o.6 **Theory on measuring electron spin decoherence time by nonlinear optical spectroscopy of single quantum dots** — Ren-Bao Liu

11:00 FrM2o.7 **InAs diode heterostructure as an effective electron spin aligner** — Yakov V Terentyev

11:00 FrM2o.8 **Optical manipulation of exciton spin in a single self-assembled quantum dot** — Hirotaka Sasakura

11:00 FrM2o.9 **Analysis of Spin Interference Effect in Square Loop Arrays Including both Rashba and Dresselhaus Terms using InGaAs Quantum Wells** — Takaaki Koga

11:00 FrM2o.10 **Novel mechanism for order-of-magnitude enhancement of Rashba effect in wide modulation-doped quantum wells** — Dejan M Gvozdic

11:00 FrM2o.11 **Stray-field-induced modification of coherent spin dynamics** — Gian Salis

11:00 FrM2o.12 **Optical spin pumping of low-dense electron gas in CdTe-based quantum wells** — G. V. Astakhov

11:00 FrM2o.13 **Local imprinting of carrier spin states in a semiconductor via magnetic fringe fields** — Simon Halm

11:00 FrM2o.14 **Toward high frequency spin-manipulation via electric-dipole-induced spin resonance in InAs quantum wells** — Bruce D. McCombe

FrM2p: Semiconductor Spintronics: Devices

Friday 11:00–12:30; Poster

11:00 FrM2p.1 **Spin-orbit interactions in high In-content InGaAs / InAlAs inverted heterojunctions for Rashba spintronics devices** — Hyonkwan Choi

11:00 FrM2p.2 **Magnetic and transport properties of embedded magnetic cells for a front-end MRAM design** — Theodoros Dimopoulos

FrM2q: New Materials, Concepts and Techniques

Friday 11:00–12:30; Poster

11:00 FrM2q.1 **Optical band gap and bonding character of Li_3GaN_2** — Kazuo Kuriyama

11:00 FrM2q.2 **Atomic force microscopy observation of the Jahn-Teller instability in spinel $LiMn_2O_4$embedded in silicon substrates** — Kazuo Kuriyama

11:00 FrM2q.3 **Shiva diagrams for composite exciton many-body effects** — Monique Combescot

11:00 FrM2q.4 **Optical Properties of Cylindrite** — Chris Sturm

11:00 FrM2q.5 **Superionic Conduction in Hydrogen-Bonded Dielectric Materials** — Hiroshi Kamimura

11:00 FrM2q.6 **Electrodynamic properties of multilayered semiconductor structure** — Oksana V Shramkova

11:00 FrM2q.7 **Large nitrogen composition of GaNSb grown by RF-MBE** — Kouichi Akahane

11:00 FrM2q.8 **Vertical-Cavity Surface-Emitting Laser (VCSEL) Performance Optimized by a Genetic Algorithm** — Wolfgang W Rühle

11:00 FrM2q.9 **Determination of the U term by a density-density correlation function in the LDA+U Hamiltonian** — Koichi Kusakabe

11:00 FrM2q.10 **Optical and structural properties of InN layers grown by high-pressure CVD** — Nikolaus Dietz

11:00 FrM2q.11 **electron-beam induced Deposition - A novel Approach for Semiconductor Device Fabrication?** — Gottfried Hochleitner

11:00 FrM2q.12 **A Novel Method for Heterostructures with High Symmetry: Fixed Variance Development on Symmetrized Bloch Functions** — Marc-André Dupertuis

11:00 FrM2q.13 **Ferroelectric Electron/Hole Surface Conduction Layer** — Yukio Watanabe

11:00 FrM2q.14 **Hard x-ray photoelectron spectroscopy on ultra shallow plasma-doped silicon layers** — M. Kobata

11:00 FrM2q.15 **Simulation of Guided-Wave Photonic Devices with Variational Mode-Matching** — N. Finger

11:00 FrM2q.16 **High Precision Alignment in Multi-Layer NanoImprint Lithography** — Michael M Mühlberger

11:00 FrM2q.17 **Experimental investigation on carrier dynamics at the thermal breakdown** — Susanna Reggiani

11:00 FrM2q.18 **Optical modulation spectroscopy based on real-space electron transfer in semiconductor selectively doped heterostructures** — Oleg A Ryabushkin

11:00 FrM2q.19 **Ultra-compact scanning nearfield optical microscope (SNOM) for low-temperature photoluminescence investigations of single quantum dots** — Kai Hodeck

11:00 FrM2q.20 **Ni-filled selforganized mesoporous silicon exhibiting novel ferromagnetic properties** — Klemens Rumpf

11:00 FrM2q.21 **Optically detected extended x-ray absorption fine structure study of InGaN/GaN single quantum well structures** — Darren M Graham

FrA1a: Optical Studies: Dots IV: Spins and Spin Dynamics

Friday 14:00–15:45; Festsaal; Chair: M. Skolnick

14:00 FrA1a.1 **Spin Dynamics of Optically Stimulated Charges in InGaAs Self-Assembled Quantum Dots** — Dominik Heiss

14:15 FrA1a.2 **Ultrafast Spectral Hole Burning Spectroscopy of Exciton Spin Relaxation in Quantum Dots** — Thomas Müller

14:30 FrA1a.3 **Spin storage and readout in self-organized quantum dots** — Till Warming

14:45 FrA1a.4 **Probing spin excitations in AlGaAs/GaAs few-electron quantum dots by inelastic light scattering** — Sokratis Kalliakos

15:00 FrA1a.5 **Spin lifetime in electron-doped InP quantum dots** — Y. Masumoto

15:15 FrA1a.6 **Optically pumped nuclear spin polarization in a self-assembled quantum dot** — Satoru Adachi

15:30 FrA1a.7 **Spin mixing for one and two electron states in quantum dots** — Thomas Grange

FrA1b: Electronic Transport in Dots and Coupled Dots

Friday 14:00–15:45; Zeremoniensaal; Chair: T. Ihn

14:00 FrA1b.1 **Tunable tunnel and exchange couplings in a few electron double-dot** — Tsuyoshi Hatano

14:15 FrA1b.2 **Current gain in a quantum dot with three leads** — Jürgen Weis

14:30 FrA1b.3 **Phase information from two-terminal conductance of quantum dot systems** — Tomohiro Otsuka

14:45 FrA1b.4 **Lateral Quantum Dot in strained Si/SiGe Heterostructures** — Thomas Berer

15:00 FrA1b.5 **The Stability Diagram of a Few Electron Artificial Triatom** — Andrew S. Sachrajda

15:15 FrA1b.6 **Silicon charge qubit** — David A Williams
(Invited talk)

FrA1c: Wide Gap Semiconductors

Friday 14:00–15:45; Gartensaal; Chair: H. Katayama-Yoshida

14:00 FrA1c.1 **Steps on III-Nitride 0001 surfaces: implications on growth morphologies and superlattice formation.** — Liverios Lymperakis

14:15 FrA1c.2 **Impact of inhomogeneous excitonic broadening in nitride based microcavities operating in the strong exciton-photon coupling regime** — Raphaël Butté

14:30 FrA1c.3 **ZnO ultraviolet light emitting diodes** — Masashi Kawasaki
(Invited talk)

15:00 FrA1c.4 **Optical properties of p-type ZnO and ZnMnO doped by N and/or As acceptors** — Ewa Przezdziecka

15:15 FrA1c.5 **Conventional superconductivity and metal-insulator transition in heavily boron-doped single crystal diamond** — Etienne Bustarret

15:30 FrA1c.6 **On the mechanism of dislocation and stacking fault formation in a-plane GaN films grown by hydride vapor phase epitaxy** — Roland Kroeger

FrA1d: THz, Intersubband and Ultrafast Phenomena

Friday 14:00–15:45; Rittersaal; Chair: C.R. Pidgeon

14:00 FrA1d.1 **Multi-wavelength operation and vertical emission in THz quantum-cascade lasers** — Giacomo Scalari
(Invited talk)

14:30 FrA1d.2 **Demonstration of monochromatic terahertz acoustic phonon generation in superlattices under the hopping transport** — Boris A Glavin

14:45 FrA1d.3 **Controlling polariton coupling in intersubband microcavities** — Aji A Anappara

15:00 FrA1d.4 **GaN/AlN quantum wells and quantum dots for unipolar devices at telecommunication wavelengths** — Francois H Julien

15:15 FrA1d.5 **Dimensionality control in GaAs quantum wells dynamically-modulated by surface acoustic waves** — Tetsuomi Sogawa

15:30 FrA1d.6 **Optical detection of ultrafast strain pulses in semiconductor quantum wells** — Andrey V Akimov

FrA1e: Nanocrystals

Friday 14:00–15:45; Geheime Ratstube; Chair: D. Bimberg

14:00 FrA1e.1 **Bright-Exciton Fine Structure and Zeeman Splitting in Individual Colloidal CdSe Nanocrystals** — Madalina I. Furis

14:15 FrA1e.2 **Study of non radiative relaxation and exciton-phonon coupling in colloidal CdTe Quantum Dots** — Giovanni Morello

14:30 FrA1e.3 **Self organized grown Stranski Krastanow II-VI quantum dots vs. colloidal nanocrystals integrated in epitaxial nanostructures** — Klaus Lischka

14:45 FrA1e.4 **Mechanism of Surface-Enhanced Light Emission from Single CdSe Nanoparticles on Metal Substrates** — Yuichi Ito

15:00 FrA1e.5 *(Invited talk)* **Single semiconductor nanocrystals: physics and applications** — Ulrike Woggon

15:30 FrA1e.6 **Controlled Growth of CdSe Tetrapod Nanocrystals** — Lijuan Zhao

FrA2: Plenary lecture

Friday 16:00–16:45; Festsaal; Chair: H. Sakaki

16:00 FrA2.1 *(Plenary talk)* **Semiconductor cavity quantum electrodynamics for quantum information processing** — Atac Imamoglu

FrA3: Closing Ceremony

Friday 16:45–17:15; Festsaal

16:45 FrA3 **Closing Ceremony and IUPAP Young Author Best Paper Awards** — Günther Bauer (Program Chair), Hiroyuki Sakaki (IUPAP C8 Commission Chair)

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