

# PROGRAM of PLMCN4

Wednesday , June 30

**W0 Opening Remarks** Conference Hall 08:50 - 09:15

**W1 Microcavities and Photonic Crystals I** Conference Hall 09:15 - 10:45  
(chairmen: E.L. Ivchenko)

W1-1 09:15 - 09:45

**Microcavities and photonic crystals: a historical perspective on the development of concepts (invited)**

C. Weisbuch

*Laboratoire de Physique de la Matière Condensée and Genewave, X'Tec, Ecole Polytechnique, France*

W1-2 09:45 - 10:15

**Self-interaction effects in the microcavity parametric oscillator (invited)**

D. M. Whittaker

*Dept. of Physics and Astronomy, University of Sheffield, United Kingdom*

W1-3 10:15 - 10:30

**Parametric oscillation in semiconductor microcavities : nonlinear and quantum effects**

J.-Ph. Karr, A. Baas, M. Romanelli, A. Bramati, and E. Giacobino

*Laboratoire Kastler Brossel, Paris, France*

W1-4 10:30 - 10:45

**Continuous wave pump-probe experiment on a planar microcavity: evidence for formation of a parametric stimulated signal at arbitrary k-vectors**

D. Sanvitto, D. M. Whittaker, M. S. Skolnick, and J. S. Roberts

*Dept. of Physics, University of Sheffield, United Kingdom*

Coffee Break

10:45 - 11:15

**W2 Microcavities and Photonic Crystals II** Conference Hall 11:15 - 12:45  
(chairmen: M.C. Skolnick)

W2-1 11:15 - 11:45

**New development in electrodynamics and preparation of left-handed materials (invited)**

A. L. Efros

*Dept. of Physics, University of Utah*

W2-2 11:45 - 12:15

**Waveguide-plasmon polaritons in photonic crystal slabs with metal nanowires (invited)**

S. G. Tikhodeev, N. A. Gippius, A. Christ, J. Kuhl, and H. Giessen

*A.M. Prokhorov General Physics Institute, Russia*

W2-3 12:15 - 12:30  
**Polaritons and nanocavities in photonic crystal slabs**  
D. Gerace, M. Agio, and L. C. Andreani  
*INFM- Dept. di Fisica "A. Volta", Università di Pavia, Italy*

W2-4 12:30 - 12:45  
**Theoretical and experimental studies of optical properties of metal infiltrated opals**  
A. L. Pokrovsky, C. Y. Li, V. Kamaev, Z. V. Vardeny, A. L. Efros, D. A. Kurdyukov, and V. G. Golubev  
*Dept. of Physics, University of Utah, Salt Lake City, USA*

Lunch Break 12:45 - 14:15

**W3 III-N Nanostructures I** Conference Hall 14:15 - 16:00  
(chairmen: B. Monemar)

W3-1 14:15 - 14:45  
**Temporal and spatial recombination dynamics in nitride-based nanostructures (invited)**  
Y. Kawakami  
*Dept. of Electronic Science and Engineering, Kyoto University, Japan*

W3-2 14:45 - 15:15  
**GaN quantum dot density control by rf-plasma molecular beam epitaxy (invited)**  
J. Brown, F. Wu, P. M. Petroff, and J. S. Speck  
*University of California, Santa Barbara, USA*

W3-3 15:15 - 15:30  
**Investigation of the recombination dynamics in low In-content InGaN MQWs by means of cathodoluminescence and photoluminescence excitation**  
A. Reale, A. Di Carlo, A. Vinattieri, M. Colocci, F. Rossi, N. Armani, C. Ferrari, G. Salviati, L. Lazzarini, and V. Grillo  
*INFM, Dept. Ingegneria Elettronica, Università di Roma Tor Vergata, Italy*

W3-4 15:30 - 15:45  
**Carrier dynamics and recombination in GaN quantum discs embedded in AlGaIn nanocolumns**  
M. Zamfirescu, M. Gurioli, A. Vinattieri, J. Ristić, and E. Calleja  
*Dept. of Physics and LENS Università di Firenze, Sesto Fiorentino, Italy*

W3-5 15:45 - 16:00  
**Luminescence from site-controlled InGaIn/GaN quantum dots**  
R. W. Martin, P. R. Edwards, R. A. Taylor, J. H. Rice, J. H. Na, J. W. Robinson, I. M. Watson, and C. Liu  
*Dept. of Physics, University of Strathclyde, Glasgow, United Kingdom*

Coffee Break 16:00 - 16:30

**W4 III-N Microcavities and Quantum Wells** Conference Hall 16:30 - 18:15  
(chairmen: E. Calleja)

- W4-1 16:30 - 17:00  
**Lattice-matched AlInN/GaN distributed Bragg reflectors for nitride microcavities (invited)**  
*J-F. Carlin*, J. Dorsaz, C. Zellweger, N. Grandjean, and M. Ilegems  
*Institute of Quantum Electronics and Photonics, Swiss Federal Institute of Technology / Ecole polytechnique fédérale, Switzerland*
- W4-2 17:00 - 17:15  
**Advances in the realization of GaN-based microcavities: towards strong coupling at room temperature**  
*F. Semond*, F. Natali, D. Byrne, M. Leroux, and J. Massies  
*CRHEA-CNRS, Valbonne, France*
- W4-3 17:15 - 17:30  
**Observation of cavity polaritons in InGaN quantum well microcavities**  
*T. Tawara*, H. Gotoh, T. Akasaka, N. Kobayashi, T. Makimoto, and T. Saitoh  
*NTT Basic Research Laboratories, NTT Corporation, Kanagawa, Japan*
- W4-4 17:30 - 17:45  
**Strong microcavity effects in InGaN/GaN heterostructures on Si-substrates**  
J. Christen, C. Hums, *A. Hoffmann*, Th. Hempel, S. Petzold, A. Dadgar, and A. Krost  
*Institute of Experimental Physics, Otto-von-Guericke-University, Magdeburg, Germany*
- W4-5 17:45 - 18:00  
**Optical properties of nonpolar GaN/(AlGa)N multiple quantum wells**  
N. Akopian, *G. Bahir*, D. Gershoni, M. D. Craven, J. S. Speck, and S. P. DenBaars  
*Solid State Institute, Technion-Israel Institute of Technology, Haifa, Israel*
- W4-6 18:00 - 18:15  
**Digital alloys: short period superlattices of AlN/AlGaN for ultraviolet device applications**  
*S. A. Nikishin*, B. A. Borisov, V. V. Kuryatkov, J. Saxena, G. D. Kipshidze, K. A. Bulashevich, I. A. Zhmakin, S. Yu. Karpov, Yu. N. Makarov, M. Holtz, and H. Temkin  
*Nano Tech Center / Dept. of Electrical and Computer Engineering, Texas Tech. University, Lubbock, USA*

Down Town Excursion and Boat Trip 20:00 - 00:00

## Thursday , July 1

**T1 Polaritons in Microcavities I** Conference Hall 09:00 - 10:30  
(chairmen: A. Kavokin)

- T1-1 09:00 - 09:30  
**Nonlinear dynamics of polariton scattering in semiconductor microcavity: bistability vs stimulated scattering (invited)**  
*N. A. Gippius*, S. G. Tikhodeev, V. D. Kulakovskii, D. N. Krizhanovskii, A. I. Tartakovskii, and L. V. Keldysh  
*A.M. Prokhorov General Physics Institute, Russia*

- T1-2 09:30 - 10:00  
**Towards evidence of spontaneous polariton condensation in II-VI microcavities (invited)**  
*M. Richard*, J. Kasprzak, R. André, R. Romestain, and Le Si Dang  
 CEA-CNRS-UJF joint group Nanophysique et Semiconducteurs Laboratoire de Spectrométrie Physique, Université Joseph Fourier – Grenoble, France
- T1-3 10:00 - 10:15  
**Instability effects in cw FWM of cavity polaritons in planar microcavities**  
*V. D. Kulakovskii*, M. N. Makhonin, D. N. Krizhanovskii, N. A. Gippius, and S. G. Tikhodeev *Solid State Physics Institute, Chernogolovka, Russia*
- T1-4 10:15 - 10:30  
**Amplification of polariton incoherent emission**  
*J. Bloch*, B. Sermage, P. Senellart, R. André, and Le Si Dang  
 LPN/CNRS, Marcoussis, France

Coffee Break

10:30 - 11:00

**T2 Polaritons in Microcavities II**

Conference Hall 11:00 - 12:30

(chairmen: Le Si Dang)

- T2-1 11:00 - 11:30  
**Spin and charge dynamics of polaritons in semiconductor microcavities (invited)**  
*J. J. Baumberg*  
 University of Southampton, United Kingdom
- T2-2 11:30 - 11:45  
**Linear polarisation inversion: A signature of Coulomb scattering of cavity polaritons with opposite spins**  
*K. V. Kavokin*, P. Renucci, T. Amand, X. Marie, P. Senellart, J. Bloch, and B. Sermage  
 Ioffe Institute, St.-Petersburg, Russia
- T2-3 11:45 - 12:00  
**Polarization dynamics of microcavity polaritons: Three excitation regimes**  
*L. Kłopotowski*, A. Amo, M. D. Martin, L. Viña, and R. André  
 Dept. Física Materiales, Universidad Autónoma de Madrid, Spain
- T2-4 12:00 - 12:15  
**Polariton magneto-spectroscopy in GaAs/AlGaAs microcavities with modulation doped quantum wells**  
 A. Gabbay, B. M. Ashkinadze, *E. Cohen*, E. Linder, and L. N. Pfeiffer  
 Solid State Institute, Technion-Israel Institute of Technology, Haifa, Israel
- T2-5 12:15 - 12:30  
**Spin dynamics of exciton polaritons in semiconductor microcavities**  
*I. Shelykh*, K. V. Kavokin, A. V. Kavokin, and G. Malpuech  
 LASMEA / Université Blaise Pascal, Aubière, France

Lunch Break

12:30 - 14:00

**T3 Microcavities and Photonic Crystals III** Conference Hall 14:00 - 15:30  
(chairmen: L. Viña)

- T3-1 14:00 - 14:30  
**Ultrafast photoinduced shift of cavity modes in semiconductor microcavity under femtosecond excitations (invited)**  
E. A. Vinogradov  
*Institute of Spectroscopy of RAS, Troizk, Russia*
- T3-2 14:30 - 14:45  
**Enhanced polariton relaxation by electron- polariton collisions**  
M. Perrin, J. Bloch, A. Lemaître, and P. Senellart  
*LPN/CNRS, Marcoussis, France*
- T3-3 14:45 - 15:00  
**Spontaneous coherence buildup in a polariton laser**  
F. P. Laussy, G. Malpuech, A. Kavokin, and P. Bigenwald  
*LASMEA / Université Blaise Pascal, Aubière, France*
- T3-4 15:00 - 15:15  
**One-dimensional photonic crystals based on periodic quantum well structures**  
L. I. Deych, M. V. Erementchouk, A. A. Lisyansky, E. L. Ivchenko, and M. M. Voronov  
*Physics Dept., Queens College, City University of New York, USA*
- T3-5 15:15 - 15:30  
**Branch-entangled polariton pairs: planar microcavities versus photonic wires**  
C. Ciuti  
*Laboratoire Pierre Aigrain, Ecole Normale Supérieure, Paris, France*

Coffee Break 15:30 - 16:00

**T4 III-N Nanostructures II** Conference Hall 16:00 - 17:45  
(chairmen: A. Di Carlo)

- T4-1 16:00 - 16:30  
**Growth and fabrication of nitride-based UV devices on various substrates (invited)**  
H. Amano, K. Balakrishnan, M. Iwaya, S. Kamiyama, and I. Akasaki  
*High-Tech Research Center, 21st Century COE Nanofactory, Meijo University, Nagoya, Japan*
- T4-2 16:30 - 17:00  
**Microstructure and electronic properties of InGaN quantum wells (invited)**  
F. A. Ponce  
*Dept. of Physics and Astronomy, Arizona State University, Tempe, USA*
- T4-3 17:00 - 17:15  
**Absorption and Raman scattering processes in InN films and dots**  
O. Briot, B. Maleyre, S. Ruffenach, C. Pinguier, F. Demangeot, J. Frandon, and B. Gil  
*Groupe d'Etudes des Semiconducteurs, Université Montpellier II, France*
- T4-4 17:15 - 17:30  
**Correlation among growth conditions, crystal structures and optical properties of InN**  
Y. Nanishi, T. Araki, H. Naoi, M. Kurouchi, and T. Yamaguchi  
*Dept. of Photonics, Ritsumeikan University 1-1-1 Noji-higashi, Kusatsu, Japan*

T4-5 17:30 - 17:45

**Optical properties of InN with stoichiometry violation and indium clustering**

T. V. Shubina, S. V. Ivanov, V. N. Jmerik, M. M. Glazov, A. Vasson, J. Leymarie, A. Kavokin, H. Amano, I. Akasaki, K. S. A. Butcher, Q. Guo, B. Monemar, and P. S. Kop'ev

*loffe Institute, St.-Petersburg, Russia*

**T5p Poster Session**

Poster Hall 18:00 - 20:00

T5p-1

**Exciton relaxation and spin dynamics in  $\text{Al}_x\text{Ga}_{1-x}\text{As}$  films**

A. Amo, M. D. Martin, L. Klotkowski, L. Viña, A. I. Toropov, and K. S. Zhuravlev  
*Dept. Física de Materiales, Universidad Autónoma de Madrid, Spain*

T5p-2

**Quantum switching of spatial modes in the 2D-exciton resonance spontaneous emission**

V. V. Ovsyankin, B. V. Stroganov, Yu. K. Dolgikh, S. A. Eliseev, Yu. P. Efimov, V. V. Petrov, and V. S. Zapasskii

*Vavilov State Optical Institute, St.-Petersburg, Russia*

T5p-3

**Excitonic polaritons in semiconductor solid solutions  $\text{Al}_x\text{Ga}_{1-x}\text{As}$**

R. P. Seisyan, V. A. Kosobukin, S. A. Vaganov, M. A. Markosov, T. S. Shamirzaev, K. S. Zhuravlev, A. K. Bakarov, and A. I. Toropov

*loffe Institute, St.-Petersburg, Russia*

T5p-4

**Quantum confinement in thick epitaxial layers. Interference of polariton waves or quantization of the carrier motion?**

E. Ubyivovk, Yu. K. Dolgikh, Yu. P. Efimov, S. A. Eliseev, I. Ya. Gerlovin, I. V. Ignatiev, V. V. Petrov, V. V. Ovsyankin, and I. A. Yugova

*Institute of Physics, St.-Petersburg State University, Russia*

T5p-5

**Cross-sectional photoelectron spectromicroscopy measurements of quantum dimensional AlGaIn/GaN heterostructures: spatially resolved band structure mapping**

A. Barinov, E. Lutsenko, V. Pavlovskii, V. Zubialevich, L. Gregoratti, L. Aballe, G. Yablonskii, M. Kiskinova, B. Schineller, and M. Heuken

*Sincrotrone Trieste, Italy*

T5p-6

**Thermally detected optical absorption in sophisticated nitride structures**

A. Vasson, T. V. Shubina, and J. Leymarie

*LASMEA / Université Blaise Pascal, Aubière, France*

T5p-7

**Infrared ellipsometry study of strained hexagonal AlN/GaN superlattices**

V. Darakchieva, P. P. Paskov, M. Schubert, T. Paskova, B. Monemar, H. Amano, and I. Akasaki

*IFM, Linköping University, Sweden*

T5p-8

**Surface control of light-emitting structures based on III-nitrides**

A. I. Besyul'kin, A. P. Kartashova, A. G. Kolmakov, V. V. Krivolapchuk, W. V. Lundin, M. M. Mezdrogina, A. V. Sakharov, N. M. Shmidt, A. A. Sitnikova, E. E. Zavarin, and R. V. Zolotareva

*loffe Institute, St.-Petersburg, Russia*

T5p-9

**Laser and optical properties of optically pumped blue InGaN/GaN MQW lasers grown on silicon**

E. V. Lutsenko, A. V. Danilchyk, V. Z. Zubialevich, V. N. Pavlovskii, A. L. Gurskii, G. P. Yablonskii, Y. Dikme, A. Szymakowski, H. Kalisch, R. H. Jansen, B. Schineller, and M. Heuken

*Institute of Physics of National Academy of Sciences, Minsk, Belarus*

T5p-10

**High-reflectivity  $\text{Al}_x\text{Ga}_{1-x}\text{N}$  Bragg reflectors in the ultraviolet spectral region**

R. Butte, D. Sanvitto, T. Wang, A. Alyamani, P. J. Parbrook, R. J. Lynch, D. M. Whittaker, and M. S. Skolnick

*Dept. of Physics and Astronomy, University of Sheffield, United Kingdom*

T5p-11

**E-beam pumped resonant periodic gain GaInP/AlGaInP VCSEL**

V. Yu. Bondarev, V. I. Kozlovsky, A. B. Krysa, J. S. Roberts, and Ya. K. Skasyrsky  
*P.N. Lebedev Physical Institute, Moscow, Russia*

T5p-12

**Vertically emitting InAs LEDs and lasers with cavity formed by gold anode and semiconductor/air interface**

N. V. Zotova, N. D. Il'inskaya, S. A. Karandashev, B. A. Matveev, M. A. Remennyi, and N. M. Stus'

*Ioffe Institute, St.-Petersburg, Russia*

T5p-13

**Low divergence edge-emitting laser with asymmetric waveguide based on one dimensional photonic crystals**

M. V. Maximov, Yu. M. Shernyakov, I. I. Novikov, L. Ya. Karachinsky, N. Yu. Gordeev, V. A. Shchukin, I. Samid, and N. N. Ledentsov

*Ioffe Institute, St.-Petersburg, Russia*

T5p-14

**Characterization of luminescence of thick MgZnO layers and MgZnO/ZnO quantum wells**

F. Bertram, D. Forster, Th. Hempel, J. Christen, R. Kling, C. Kirchner, and A. Waag  
*Institute of Experimental Physics, Otto-von-Guericke-University, Magdeburg, Germany*

T5p-15

**Photoconductivity of Single Crystal ZnO Nanowires**

Z. Fan, P. Chang, D. Wang, W. Tseng, and J. G. Lu  
*University of California, Irvine, USA*

T5p-16

**Two types of emitting states and energy relaxation in ZnCdSe/ZnSe quantum wells with planar CdSe nano-islands**

A. Reznitsky, A. Klochikhin, S. Permogorov, S. Verbin, L. Tennishev, H. Priller, H. Kalt, and C. Klingshirn

*Ioffe Institute, St.-Petersburg, Russia*

T5p-17

**Spiral quantum wire affected by light: optical and electric response**

M. V. Entin and L. I. Magarill

*Institute of Semiconductor Physics, Novosibirsk, Russia*

T5p-18

**Strong light-matter coupling in a quantum dot: local field effects**

G. Ya. Slepyan, A. Magyarov, S. A. Maksimenko, A. Hoffmann and D. Bimberg  
*Institute for Nuclear Problems, Belarus State University, Minsk, Belarus*

T5p-19

**Spin-controlled parametric polariton scattering in quasi-one-dimensional cavities**

G. Dasbach, C. Diederichs, J. Tignon, Ph. Roussignol, and C. Delalande  
*Laboratoire Pierre Aigrain, Ecole Normale Supérieure, Paris, France*

T5p-20

**Photonic band-related minima in transmission spectra of opal-based photonic crystals**

S. G. Romanov, D. N. Chigrin, and A. V. Lavrinenko  
*Ioffe Institute, St.-Petersburg, Russia*

T5p-21

**Photonic eigenmodes in periodically patterned systems**

A. D'Andrea, L. Pilozi, D. Schiumarini, and N. Tomassini  
*CNR, Istituto di Metodologie Inorganiche e dei Plasmi, Rome, Italy*

T5p-22

**Waveguide polaritons: interaction of quantum well exciton with electromagnetic mode of a planar waveguide**

D. M. Beggs, M. A. Kaliteevski, S. Brand, R. A. Abram, V. V. Nikolaev, and A. V. Kavokin  
*Dept. of Physics, University of Durham, United Kingdom*

T5p-23

**Quantum kinetics of spin-polarized polaritons in microcavities**

M. Glazovt, I. Shelykh, K. Kavokin, A. Kavokin, and G. Malpuech  
*Ioffe Institute, Russia and Université Blaise Pascal, France*

T5p-24

**Total resonant absorption of light by plasmons in periodic metallic nanoporous film**

T. V. Teperik, V. V. Popov, and F. J. Garcia de Abajo  
*Institute of Radio Engineering and Electronics, Saratov, Russia*

T5p-25

**Photonic properties of disordered porous materials**

N. Tomassini, A. D'Andrea, L. Pilozi, and D. Schiumarini  
*CNR, Istituto di Metodologie Inorganiche e dei Plasmi, Rome, Italy*

T5p-26

**Observation of spin relaxation in self-assembled InAlAs quantum dots by using four-wave mixing technique**

T. Watanuki, S. Adachi, H. Sasakura, and S. Muto  
*Dept. of Applied Physics, Hokkaido University and CREST, Japan Science and Technology Agency, Sapporo, Japan*

T5p-27

**Spontaneous emission from semiconductor nanocrystals in coupled spherical microcavities**

Yu. P. Rakovich, M. Gerlach, A. L. Bradley, J. F. Donegan, M. Rzyjalgowski, A. Ryder, N. Gaponik, and A. L. Rogach  
*Semiconductor Photonics Group, Department of Physics, Trinity College, Dublin 2, Ireland*



T5p-28

**Multi-phonon Raman scattering in semiconductor quantum dots: the polaron effect**

R. P. Miranda and M. I. Vasilevskiy

*Centro de Física, Universidade do Minho, Campus de Gualtar, Braga, Portugal*

T5p-29

**Optical properties of polaron exciton in spherical and ellipsoidal quantum dots**

I. P. Ipatova, A. Yu. Maslov, and O. V. Proshina

*Ioffe Institute, St.-Peterburg, Russia*

T5p-30

**Electron-dipole resonance of impurity centres embedded in silicon microcavities**

N. T. Bagraev, A. D. Bouravleuv, W. Gehlhoff, L. E. Klyachkin, A. M. Malyarenko, and V. V. Romanov

*Ioffe Institute, St.-Petersburg, Russia*

T5p-31

**2D assemblies of silicon nanocrystallites prepared by sol-gel method from triethoxysilane**

J. Rouquette, M. Pauthe, M. Ramonda, and B. Gil

*Groupe d'Etude des Semiconducteurs - Université de Montpellier II, France*

T5p-32

**Electron-beam pumped blue (462 nm) VCSEL on MOVPE-grown ZnSSe/ZnMgSSe MQW structure**

V.Yu. Bondarev, V. I. Kozlovsky, I. V. Malyshev, P. I. Kuznetsov, V. A. Jitov, G. G. Yakushcheva, L.Yu. Zakharov

*Institute of Radioengineering and Electronics, Fryazino, Russia*

## Friday , July 2

### F1 Quantum Dots

Conference Hall 09:00 - 10:45

(chairmen: K.P. O'Donnel)

F1-1 09:00 - 09:30

**Progress in fabrication and optical properties of GaN-based quantum dots (invited)**

Y. Arakawa

*University of Tokyo, Japan*

F1-2 09:30 - 10:00

**Quantum dot formation induced by surface energy change of a 2D strained layer: the case of II-VI and nitrides nanostructures (invited)**

H. Mariette

*Université Joseph Fourier Grenoble, France*

- F1-3 10:00 - 10:15  
**High-efficiency electron-beam pumped green semiconductor lasers based on multiple quantum disk sheets**  
M. M. Zverev, S. V. Sorokin, I. V. Sedova, D. V. Peregoudov, S. V. Ivanov, and P. S. Kop'ev  
*Ioffe Institute, St.-Petersburg, Russia*
- F1-4 10:15 - 10:30  
**Coherent quantum control of biexciton in a single quantum dot**  
T. Flissikowski, A. Betke, I. A. Akimov, and F. Henneberger  
*Humboldt – Institut für Physik, Universität zu Berlin, Germany / Ioffe Institute, St.-Petersburg, Russia*
- F1-5 10:30 - 10:45  
**Optical spin polarization in double-charged InAs self-assembled quantum dots**  
V. K. Kalevich, K. V. Kavokin, M. Ikezawa, T. Okuno, A. Yu. Shiryayev, A. E. Zhukov, V. M. Ustinov, and Y. Masumoto  
*Ioffe Institute, St.-Petersburg, Russia / University of Tsukuba, Japan*

Coffee Break

10:45 - 11:15

**F2 Quantum Dots in Microcavities**

Conference Hall 11:15 - 12:30

(chairmen: J. Y. Duboz)

- F2-1 11:15 - 11:45  
**Quantum dot VCSELs (invited)**  
V. M. Ustinov  
*Ioffe Institute, St.-Petersburg, Russia*
- F2-2 11:45 - 12:00  
**Single and double photon emission from quantum dots embedded in optical microcavities**  
J. L. Perea, C. Tejedor, D. Porras  
*Universidad Autónoma de Madrid, Spain*
- F2-3 12:00 - 12:15  
**Single dot near-field spectroscopy for photonic crystal microcavities**  
A. Mintairov, Y. Tan, J. Merz, V. Tokranov, and S. Oktyabrsky  
*Electrical Engineering Dept., University of Notre Dame, USA*
- F2-4 12:15 - 12:30  
**CdSe/ZnSe quantum dots in microcavities for single photon emission**  
I. C. Robin, R. André, A. Balocchi, H. Mariette, S. Tatarenko, Le Si Dang, and J. M. Gerard  
*Laboratoire de Spectrométrie Physique, Université J. Fourier-Grenoble I, France*
- F2-5 12:30 - 12:45  
**GaN/AlGaN nanocavities with AlN/GaN Bragg reflectors grown in AlGaN nanocolumns by plasma-assisted MBE**  
J. Ristić, E. Calleja, and S. Fernández  
*ISOM-Dept. Ingeniería Electrónica, Universidad Politécnica, Madrid, Spain*

Excursion and Banquette

13:00 - 23:00

# Saturday , July 3

## S1 Excitonic Effects

Conference Hall 09:00 - 10:45

(chairmen: C. Delalande)

S1-1 09:00 - 09:30

**Collective behavior of interwell excitons in lateral traps (invited)**

V. B. Timofeev

*Institute of Solid State Physics, Russia*

S1-2 09:30 - 10:00

**Electromagnetically-induced transparency from spin coherences in semiconductors (invited)**

H. Wang

*Dept. of Physics / Oregon Center for Optics, University of Oregon, Eugene, USA*

S1-3 10:00 - 10:15

**Excitons and trions in heavily doped QW structures at high magnetic fields**

V. P. Kochereshko, D. A. Andronikov, G. Karczewski, and S. A. Crooker

*Ioffe Institute, St.-Petersburg, Russia*

S1-4 10:15 - 10:30

**Spontaneous emission, elastic scattering and Anderson localization of exciton-polaritons in multilayer quantum-well structures**

V. A. Kosobukin

*Ioffe Institute, St.-Petersburg, Russia*

S1-5 10:30 - 10:45

**Exchange interaction: correction to the effective mass of the yellow exciton in Cu<sub>2</sub>O**

G. Dasbach, D. Frohlich, H. Stolz, R. Klieber, D. Suter, and M. Bayer

*Institut für Physik, Universität Dortmund, Germany / Laboratoire Pierre Aigrain, Ecole Normal Supérieure, Paris, France*

Coffee Break

10:45 - 11:15

## S2 Wide Band-gap Materials

Conference Hall 11:15 - 13:00

(chairmen: S. V. Ivanov)

S2-1 11:15 - 11:45

**ZnO based heterostructures for optoelectronics and magnetoelectronics (invited)**

A. Waag

*Braunschweig Technical University, Germany*

S2-2 11:45 - 12:15

**Biexcitons and their dephasing processes in ZnO (invited)**

S. Adachi, K. Hazu, T. Sota, SF. Chichibu, G. Cantwell, D. C. Reynolds, and C. W. Litton

*Dept. of Applied Physics, Hokkaido University, Japan*

S2-3 12:15 - 12:30  
**Valence-band ordering and magneto-optical properties of bound excitons in ZnO**  
*A. V. Rodina*, M. Strassburg, M. Dworzak, U. Haboeck, A. Hoffmann, A. Zeuner, H. R. Alves, D. M. Hofmann, and B. K. Meyer  
*Ioffe Institute, St.-Petersburg, Russia / Institute of Solid State Physics, Technical University of Berlin, Germany*

S2-4 12:30 - 12:45  
**Temperature-dependent polarized luminescence of exciton polaritons in ZnO films**  
*A. A. Toropov*, O. V. Nekrutkina, T. V. Shubina, Th. Gruber and C. Kirchner, A. Waag, K. F. Karlsson, and B. Monemar  
*Ioffe Institute, St.-Petersburg, Russia*

S2-5 12:45 - 13:00  
**Effects of the strong coupling between light and excitons in slabs of the Pbl<sub>4</sub>-based layered perovskite-type semiconductors**  
*V. V. Popov*, T. Yu. Bagaeva, and T. V. Teperik  
*Institute of Radio Engineering and Electronics, Saratov, Russia*

Lunch Break 13:00 - 14:30

**S3 Magnetic Semiconductors** Conference Hall 14:30 - 15:30  
(chairmen: K. Kavokin)

S3-1 14:30 - 15:00  
**Magnetic circular dichroism in ferromagnetic semiconductors (invited)**  
*T. Dietl*  
*Institute of Physics, Polish Academy of Sciences, Poland*

S3-2 15:00 - 15:15  
**Spin-lattice relaxation in diluted magnetic (Cd,Mn)Se quantum dots**  
*A. Hundt*, J. Puls, and F. Henneberger  
*Institut für Physik der Humboldt Universität zu Berlin, Germany*

S3-3 15:15 - 15:30  
**Exciton quantum beats in CdMnTe quantum wells**  
*M. Vladimirova*, M. Nawrocki, and D. Scalbert  
*Groupe d'Etude des Semiconducteurs, Université Montpellier 2, France*

**S4 Closing Remarks** Conference Hall 15:30 - 15:50