SCIENTIFIC PROGRAM

16th International Conference on High Magnetic Fields in Semiconductor Physics

SemiMag 16

Invited talks: 30 minutes (25 minutes for presentation plus 5 minutes for discussion)
Contributed talks: 20 minutes (16 minutes for presentation plus 4 minutes for discussion)

Monday, August 2, 2004

9:00 – 9:15 Welcome (Kirby Kemper and Greg Boebinger)

9:15 – 10:45 First Session (MW-Induced I):

9:15 Microwave-Induced Vanishing Resistance in a 2D Electron Gas
R. R. Du, M.A. Zudov, C.L. Yang, L.N. Pfeiffer, and K.W. West

9:45 Theory of Oscillatory Photoresistivity and Zero Resistance State in Microwave Driven 2DEG
Igor Aleiner

10:15 Radiation-Induced Zero-Resistance States in High Mobility GaAs/AlGaAs Devices
R.G. Mani

10:45 – 11:05 Coffee Break

11:05 – 12:35 Second Session (Nanotube Session):

11:05 Optical Signature of the Aharonov-Bohm Phase in Carbon Nanotubes in High Magnetic Fields
J. Kono, S. Zaric, G.N. Ostojic, J. Shaver, V.C. Moore, M.S. Strano, R.H. Hauge, R.E. Smalley, and X. Wei

11:35 Persistence of Fano and Aharonov-Bohm Phases in an Interferometer with a Quantum Dot
Takeshi Nakanishi, Kiyoyuki Terakura1, and Tsuneya Ando

11:55 Dephasing and Aharonov-Bohm Oscillations in Disordered Lettinger Liquids
I.V. Gornyi, A.D. Mirlin, and **D.G. Polyakov**

12:15 Fermi Surface Studies of Q1D and Q2D Organic Superconductors Using Periodic Orbit Resonance in High Magnetic Fields
S. Takahashi, A.E. Kovalev, D. Benjamin, S. Hill, S. Takasaki, J. Yamada, H. Anzai, K. Kawano, M. Tamura, T. Naito, and H. Kobayashi

12:35 – 2:05 Lunch

2:05 – 3:35 Third Session (FQHE and Luttinger liquid):

2:05 Tunneling and Quantum Interference of Coupled Luttinger Liquid Across a Quantum Hall Line Junction
I. Yang, P. Jiang, **W. Kang**, L.N. Pfeiffer, K.W. Baldwin, and K.W. West

2:35 Reconstruction of Fractional Quantum Hall Edges
Kun Yang, Xin Wan, and Akakii Melikidze

2:55 Pinning and Sliding of Quantum Hall Stripes and Bubbles
R. Côté, M.-R. Li, H.A. Fertig, A. Faribault, and H. Yi

3:15 Two-flux Composite Fermion Series of Fractional Quantum Hall States in Strained (100) Si
K. Lai, W. Pan, D.C. Tsui, S. Lyon, M. Muhlberger, and F. Schäffler

3:35 - 3:55 Coffee Break

3:55 – 4:45 Fourth Session (General Transport I, Osada, Piot)

3:55 Ultra-High Magnetic Field Transport Measurements of Low-Dimensional Conductors
T. Osada, T. Inokuchi, A. Ogasawara, and S. Ikeda

4:25 Further Evidence for a Collapse of the Exchange-Enhanced Spin Splitting in Two-Dimensional Systems
B. Piot, D.K. Maude, K.J. Friedland, R. Hey, K.H. Ploog, Z. Wasilewski, L. Eaves, M. Henini, R. Airey, and G. Hill

Tuesday, August 3, 2004

9:00 – 10: 30 First Session (IQHE):

9:00 The Quantized Hall Conductance Unveils Hofstadter's Fractal Energy Spectrum
M.C. Geisler, **J.H. Smet**, V.Umansky, K.v. Klitzing, B. Naundorf, R. Ketzmerick, and H. Schweizer

9:30 Suppression of Backscattering in Quantum Hall Narrow Channel Under Transversally Modulated Magnetic Field
M. Hara, A. Endo, S. Katsumoto, and Y. Iye

9:50 Scaling and Universality in the Integer Quantum Hall Plateau-to-Plateau Transitions
Wanli Li, G.A. Csathy and D.C. Tsui, L.N. Pfeiffer, and K.W. West

10:10 Correlations of the Resistance Components of Mesoscopic Samples at the Quantum Hall Regime
E. Peled, D. Shahar, Y. Chen, E. Diez, D.L. Sivco, and A.Y. Cho

10:30 – 10:50 Coffee Break

10:50 – 12:20 Second Session (Coupled System):

10:50 Single and Vertically Coupled Type II Quantum Dots in High Magnetic Fields
François M. Peeters, M. Tadic, K. Janssens, and B. Partoens

11:20 Magnetization of Bilayer 2D Electron Gases
I.M.A. Bominaar-Silkens, M.R. Schaapman, U. Zeitler, P.C.M. Christianen, D. Reuter, A.D. Wieck, and J.C. Maan

11:40 Hysteresis in the quantum Hall regimes in electron double-quantum-well structures
W. Pan, J.L. Reno, and J.A. Simmons

12:00 Modulation of Coupled 2D Electron and Hole Gases Using AFM Lithography: Commensurability Effects in the Magnetoresistance
T. O. Stadelmann, R.J. Nicholas, and P.A. Shields

12:20 – 1:50 Lunch

1:50 – 3:50 Third Session (Optics I):

1:50 Magnetooptical Experiments Using the Explosive Flux-Compression Up to 1000 T
S. Hansel, T. Tran-Anh, A. Kirste, N. Puhlmann, M. von Ortenberg, O.M. Tatsenko, V.V. Platonov, A.N. Moiseenko, and V.D. Selemir

2:20 Macroscopic Size Effect of Inter-Landau-Level Scattering in Quantum Hall Systems
Y. Kawano and T. Okamoto

2:50 Bose-Einstein Condensate of Two-Dimensional Excitons in a Ring: Necklace-Like Modulation of Order Parameter
S.-R. Eric Yang, Q-Han Park, and J. Yeo

3:10 Zeeman-Level Diagrams of the Positively Charged Exciton
M. Hayne, T. Vanhoucke, and V.V. Moshchalkov

3:30 Singlet and Triplet Trions in GaAs Quantum Wells in High Magnetic Fields
V.V. Rudenkov, P.C.M. Christianen, S.A. Crooker, D.R. Yakovlev, D. Reuter, A.D. Wieck, and J.C. Maan

3:50 – 4:10 Coffee break

4:10 – 6:00 Poster Session I:

TuP1 Spatial Variations of the Electron Temperature in Quantum Hall Systems with Slowly-Varying Confining Potential
S. Kanamaru, H. Akera, and H. Suzuura

TuP2 Magnetoresistively Detected Electron-Nuclear Double Resonance Spectroscopy in the Regime of the Quantum Hall Effect
C.R. Bowers, A.E. Kovalev, J.D. Caldwell, E.Prati, and M. Fanciulli

TuP3 Temperature Dependence of the Aharonov–Bohm Effect in Chirality Fermi-System
D.V. Nomokonov, A.A. Bykov, A.K. Bakarov, and J.C. Portal

TuP4 NMR studies of Magnetic Field Effects on Kondo Insulator SmB_6
T. Caldwell, A.P. Reyes, D.P. Young, P. Kuhns, W.G. Moulton, Z. Fisk, R. Achey, and P. Schlottmann

TuP5 Magnetotransport in Dilute 2D Si-MOSFET System
M.V. Cheremisin

TuP6 Magnetic Field Enhanced Backscattering of Focused Electrons in Mesoscopic Metallic Bridges
J. de Jonge, U. Zeitler, G.M. Mikhailov, and J.C. Maan

TuP7 Goldstone-Mode Decay in a Quantized Hall Ferromagnet
S. Dickmann

TuP8 Current Breakdown of the Fractional Quantum Hall Effect in Two-Dimensional Hole Systems Using Contactless Detection of Induced Currents
J.D. Gething, A.J. Matthews, A. Usher, M. Elliott, W.G. Herrenden-Harker, and M. Henini

TuP9 Anisotropy of Transport of 2D Electron Gas in Parallel Magnetic Field
A.V. Goran, A.A. Bykov, A.K. Bakarov, A.V. Latyshev, A.I. Torpov, and J. C. Portal

TuP10 Anomalous Hall Effect in a Wide Parabolic Well
G.M. Gusev, A.A. Quivy, T.E. Lamas, J.R. Leite, A.K. Bakarov, and A.I. Toropov

TuP11 InAs/GaAs Self-Assembled Quantum Dot Occupation: Influence of Temperature and Magnetic Field
T. Nuytten, M. Hayne, M. Henini, F. Pulizzi, A. Patanè, L. Eaves, and V.V. Moshchalkov

TuP12 Vertical Transport and Orbital Chaos in Semiconductor Superlattices under Tilted Magnetic Fields and Interlayer Electric Fields
M. Kobayakawa, S. Ikeda, E. Ohmichi, and T. Osada

TuP13 Angular Dependent Interlayer Transport of Semiconductor Superlattices near the High Magnetic Field Quantum Limit
K. Kobayashi, E. Ohmichi, and T. Osada

TuP14 Observation of a Node in the Quantum Oscillations Induced by Microwave Radiation
A.E. Kovalev, S.A. Zvyagin, C.R. Bowers, J.L. Reno, and J.A. Simmons

TuP15 Temperature Dependence of the High-Current Breakdown of the Quantum Hall Effect
A.J. Matthews, K. Kavokin, A. Usher, M.E. Portnoi, M. Zhu, J.D. Gething, M. Elliott, W.G. Herrenden-Harker, K. Phillips, D.A. Ritchie, M.Y. Simmons, C.B. Sorensen, O.P. Hansen, O.A. Mironov, M. Myronov, D.R. Leadley, and M. Henini

TuP16 Theory of Coulomb Drag in High Landau Levels
I.V. Gornyi, A.D. Mirlin, and F. von Oppen

TuP17 Resonant Transport in Semiconductor Superlattices Under a Tilted Magnetic Field
N. Mori, C. Hamaguchi, A. Patane, and L. Eaves

TuP18 Anisotropic Transport on the υ=1 Bilayer Hall System Under Titled Magnetic Field
M. Morino, K. Iwata, M. Suzuki, A. Sawada, Z.F. Ezawa, N. Kumada, K. Muraki, T. Saku, and Y. Hirayama

TuP19 Shubnikov-de Haas Effect in a Two-Dimensional p-Type Medium-Infrared HgTe/CdTe Superlattice
Ab. Nafidi, A. El kaaouachi, Ah. Nafidi, and B. Bouallal

TuP20 Weak Coupling Approach to Frictional Drag in a Strong Magnetic Field
K. Nomura and A.H. MacDonald

TuP21 Hall and Magnetoresistance Effects Obtained from Simultaneous Measurements of Liquid Metals and Semiconductors
M.Ogita, T. Ito, M. Isai, I. Mogi, S. Awaji, and K. Yokoo

TuP22 Development of the High Field Magneto-Optical Measurement System with a Rotational Cavity for the Study of Organic Conductors
H. Ohta, M. Kimata, K. Koyama, Y. Oshima, M. Motokawa, H. Nishikawa, K. Kikuchi, I. Ikemoto, H.M. Yamamoto, and R. Kato

TuP23 The Effect of the Microscopic State of a Ballistic Ring on the Aharonov-Bohm Oscillations Temperature Dependence
E.B. Olshanetsky, V.A. Tkachenko, O.A. Tkachenko, Z.D. Kvon, V. Renard, D.V. Sheglov, A.V. Latyshev, and J.C. Portal

TuP24 On the Current Domain Picture of the Microwave Induced Zero-Resistance of High Mobility Quantum Hall Systems
M. Oswald and J. Oswald

TuP25 Local Electron Density Profile Near the Sample Boundary Investigated by Magneto-Capacitance in Quantum Hall Regime
K. Oto, M. Kimura, and Y. Miwa

TuP26 Disorder Induced Coherence-Incoherence Crossover in Random GaAs/AlGaAs Superlattices
Yu.A. Pusep, M.B. Ribeiro, H. Arakaki, C.A. de Souza, S. Malzer, and G.H. Döhler

TuP27 Parallel Magneto-Transport in MQW Structures
M. Marchewka, D. Ploch, E.M. Sheregii, G. Tomaka, A. Kolek, K. Mleczko, A. Stadler, R. Jakie Ba, A. Jasik, and W. Strupinski

TuP28 The Interrelation Between Incompressible Strips and Quantum Hall Plateaus
A. Siddiki and R.R. Gerhardts

TuP29 Magnetization and Magnetic Phases of Conduction-Band Dilute-Magnetic-Semiconductor Quantum Wells with Non-Step-Like Density of States
C. Simserides

TuP30 The Effect of Magnetic Field on Electromagnetically Induced Transparency in Dispersive and Photonic Band-Gap Materials
M.R. Singh

TuP31 Electron-Vortex Interaction in a Quantum Dot
M.B. Tavernier, E. Anisimovas, and F.M. Peeters

TuP32 Double Magnetoresistance Minima Induced by the In-Plane Magnetic Field for the υ=1 Double-Layer Quantum Hall State
D. Terasawa, K. Nakada, S. Kozumi, A. Sawada, Z.F. Ezawa, N. Kumada, K. Muraki, T. Saku, and Y. Hirayama

TuP33 Magnetoconductance through a Chain of Rings in the Presence of Spin-Orbit Interaction
B. Molnár, P. Vasilopoulos, and F.M. Peeters

TuP34 Kinetic Confinement and Zero-Electric-Field Binding in HgCdTe Accumulation Layers
V.F. Radantsev, G.I. Kulaev, and V.V. Kruzhaev

TuP35 Spin Structures in Inhomogeneous Fractional Quantum Hall Systems
K. Vyborny and D. Pfannkuche

TuP36 Novel Liquid Crystalline Phases of Electrons in Two Dimensions
C. Wexler and C.M. Lapilli

TuP37 Quasiparticle Interactions in Fractional Quantum Hall Systems
A. Wójs and J.J. Quinn

TuP38 New Results in the Fractional Quantum Hall Regime in the Second Landau Level
J.S. Xia, W. Pan, C. Vicente, E.D. Adams, N.S. Sullivan, H.L. Stormer, D.C. Tsui, L.N. Pfeiffer, K.W. Baldwin, and K.W. West

TuP39 Multi-Valence-Subband Magnetotransport in a Modulation-Doped p-Type $Ge_{1-x}Si_x/Ge/Ge_{1-x}Si_x$ Quantum Well
M.V. Yakunin, G.A. Alshanskii, V.N. Neverov, Yu. G. Arapov, G.I. Harus, N.G. Shelushinina, O.A. Kuznetsov, A. de Visser, and L. Ponomarenko

TuP40 Composite Film of Magnetically Aligned Single-Walled Carbon Nanotubes in Micelle-Suspension
H. Yokoi, Y. Kim, S. Usuba, Y. Kakudate, S. Iijima, S. Kazaoui, and N. Minami

TuP41 Quantum Hall Effect Regime in Wire: Transition from Multimode to Single-Mode Regime
Z.D. Kvon, E.B. Olshanetsky, and J.C. Portal

TuP42 Dielectric and Transport Properties of the Single Molecule Magnet $K_6\{V_{15}As_6O_{42}(H_2O)\}\cdot{}^8H_2O$
D. Zipse, R. Vasic, J.S. Brooks, N.S. Dalal, and P. Kogerler

Wednesday, August 4, 2004

9:00 – 10:30 First Session (MW-Induced II):

9:00 Absolute Negative Conductivity in 2DES in Magnetic Field: Mechanisms and Zero-Resistance/Conductance States
Victor Ryzhii

9:30 Absorption and Temperature Damping Experiments on Microwave-Induced Resistance Oscillations in High-Mobility 2DEG
S.A. Studenikin, M. Potemski, A. Sachrajda, M. Hilke, L.N. Pfeiffer, and K.W. West

10:00 Theory of the Oscillatory Photoresistivity of a 2D Electron Gas
L.A. Dmitrie, M.G. Vavilov, I.L. Aleiner, **A.D. Mirlin**, and D.G. Polyakov

10:30 – 10:50 Coffee Break

10:50 – 12:20 Second Session (Magnetic and II-VI):

10:50 Electronic Spins and Localized Magnetic Moments in Dilute Magnetic Semiconductor Quantum Wells
F.J. Teran, M. Potemski, **D.K. Maude**, Z. Wilamowski, A.K. Hassan, D. Plantier, A. Sachrajda, J. Jaroszynski, T. Wojtowicz, and G. Karczewski

11:20 Current Heating of Mn Ions in a Magnetic 2DEG
C.R. Becker, Y.S. Gui, J. Liu, M. Konig, V. Daumer, M.N. Kiselev, M. Schafer, J.H. Chu, H. Buhmann, and L.W. Molenkamp

11:40 Quantum Hall Effect in II-VI Diluted Magnetic Heterostructures and Wires
J. Jaroszynski, T. Andrearczyk, E.A. Stringer, G. Karczewsko, J. Wrobel, T. Wojtowicz, D. Popovic, and T. Dietl

12:00 High-Field Magnetotransport Studies of Ferromagnetic GaAs/Mn Digital Alloys
G.B. Kim, M. Na, G. Acbas, B.D. McCombe, S. Wang, M. Cheon, H. Luo, X. Liu, Y. Sasaki, and J.K. Furdyna

12:20 – 5:00 Box Lunch and Excursion to Wakulla Spring

5:00 – 6:30 Tour of Magnet Lab

6:30 – 8:30 Picnic at NHMFL

Thursday, August 5, 2004

9:00 – 10:30 First Session (Spin and Phonon Excitations):

9:00 Phonon Excitations of Composite Fermion Landau Levels
F. Schulze-Wischeler, F. Hohls, U. Zeitler, D. Reuter, A.D. Wieck, and R.J. Haug

9:30 Giant Quantum Oscillations of the Nuclear Spin Relaxation Rate in Quantum Hall Effect Systems with Magnetic Impurities
P. Dahan and I.D. Vagner

9:50 Sharply Increasing Spin Susceptibility near the 2D Metal-Insulator Transition
S. Anissimova, M.R. Sakr, A.A. Shashkin, **S.V. Kravchenko,** V.T. Dolgopolov, and T.M. Klapwijk

10:10 Dependence of Spin Susceptibility of a Two-Dimensional Electron System on Valley Degree of Freedom
Y.P. Shkolnikov, K. Vakili, E.P. De Poortere, and M. Shayegan

10:30 – 10:50 Coffee Break

10:50 – 12:20 Second Session (MW and THz at High B):

10:50 Microwave Spectroscopy of Charge Density Wave Phases in High Landau Levels
R.M. Lewis, Y. Chen, L.W. Engel, D.C. Tsui, P.D. Ye, L.N. Pfeiffer, and K.W. West

11:20 Quantum Phases in Partially Filled Landau Levels
M.O. Goerbig, P. Lederer, and C. Morais Smith

11:40 Terahertz Quantum Cascade Lasers Operating in Magnetic Fields
R. Zobl, V. Tamosiunas, G. Fasching, J. Ulrich, G. Strasser, **K. Unterrainer**, R. Colombelli, C. Gmachl, L.N. Pfeiffer, K.W. West, and F. Capasso

12:00 Terahertz Spectroscopy of Strained MQW Ge/GeSi Heterostructures in High Magnetic Fields
A. Ikonnikov, I. Erofeeva, D. Kozlov, O. Kuznetsov, V. Aleshkin V. Gavrilenko, **D. Veksler**, and M. Shur

12:20 – 1:50 Lunch

1:50 – 3:40 Third Session (Transport in Coupled System):

1:50 Vanishing Hall and Longitudinal Resistance in Bilayer 2DES at $\upsilon_T = 1$
M. Kellogg, J.P. Eisenstein, L.N. Pfeiffer, and K.W. West

2:20 Counterflow Measurements in GaAs Hole Bilayers: Evidence for Electron-Hole Pairing
E. Tutuc and M. Shayegan

2:50 Destruction and Re-Entrance of Correlated Bilayer States in Coupled Two-Dimensional Electron Systems Subjected to Tilted Magnetic Fields
U. Zeitler, J.C. Maan, D. Reuter, and A.D. Wieck

3:20 High Field Magnetotransport in Strongly Coupled InAs/GaSb Superlattices
R.S. Deacon, R.J. Nicholas, P. Shields, and N.J. Mason

3:40 – 4:00 Coffee Break

4:00 – 6:00 Poster Session II:

ThP1 Studies of Charged Excitons at p-Type GaAlAs/GaAs Single Heterostructures and Wells in Magnetophotoluminescence Experiments
L. Bryji, M. Kubisa, K. Ryczko, J. Misiewicz, R. Stepniewski, M. Byszewski, M. Potemski, M. Kneip, and M. Bayer

ThP2 Microwave Resonance in the Reentrant Insulating Phases Around $\upsilon = 1/3$ and 1/5 in 2DES
Y. Chen, Z. Wang, R.M. Lewis, P.D. Ye, L.W. Engel, D.C. Tsui, L.N. Pfeiffer, and K.W. West

ThP3 Magneto-Luminescence of a Single Lateral Island Formed in the Type – II GaAs/AlAs QW
B. Chwalisz, A. Wysmolek, R. Stempniewski, A. Babinski, M. Potemski, and V. Thierry-Mieg

ThP4 Hidden Crossover of Singlet and Triplet Charged Excitons Induced by High Magnetic Fields
G.V. Astakhov, D.R. Yakovlev, V.V. Rudenkov, P.C.M. Christianen, S.A. Crooker, W. Ossau, J.C. Maan, G. Karczewski, T. Wojtowicz, and J. Kossut

ThP5 Many-Body Effects in Landau Levels: Novel Squeezed Correlated States and Optics
A.B. Dzyubenko

ThP6 Static and Dynamic Properties of Bubble Phases of 2DEs in Strong Magnetic Fields
A.M. Ettouhami, F.D. Klironomos, and A.T. Rorsey

ThP7 Antilocalization and Spin-Orbit Coupling in 2DHG in Strained GaAs/InGaAs/GaAs Quantum Well Heterostructures
A.V. Germanenko, G.M. Minkov, O.E. Rut, A.A. Sherstobitov, and V.A. Larionova

ThP8 Second Generation of Composite Fermions and the Self-Similarity of the Fractional Quantum Hall Effect
M.O. Goerbig, P. Lederer, and C. Morais Smith

ThP9 Magnetotransport Anomalies in Hole System in a Wide Parabolic Well
G.M. Gusev, C.S. Sergio, A.A. Quivy, T.E. Lamas, J.R. Leite, and J.C. Portal

ThP10 Transport of the Quasi-Three-Dimensional Hole System in a Strong Magnetic Field
G.M. Gusev, A.A. Quivy, T.E. Lamas, J.R. Leite, and J.C. Portal

ThP11 Optical Pulsed Field Calibration Using Synthetic Diamond
J. Maes, M. Hayne, K. Iakoubovskii, A. Stesmans, and V.V. Moshchalkov

ThP12 Photoluminescence in Fields up to 50T of Novel GaAs/$Al_xGa_{1-x}As$ Quantum Dots
N. Schildermans, M. Hayne, A. Rastelli, O.G. Schmidt, B. Koopmans, and V.V. Moshchalkov

ThP13 Thermal Quenching of the Magnetic Field Induced Sharp Band-Edge Optical Absorption in Europium Chalcogenides
A.B. Henriques, N.F. de Oliveira, Jr., L.K.Hanamoto1, E. Abramof, A.Y. Ueta, and P.H.O. Rappl

ThP14 Optical Measurement of Miniband Dispersion and Bandgap Renormalization in Modulation-Doped AlGaAs/GaAs Superlattices
R.F. Oliveira, A.B. Henriques, E. Abramo, T.E. Lamas, and A.A. Quivy

ThP15 Magneto-Photoluminescence Study at a Fractional Quantum Hole Regime of Charged Excitons in a Dilute Magnetic Semiconductor
Y. Hirayama, K. Oto, H. Mino, K. Uchida, S. Takeyama, G. Karczewski, T. Wojtowicz, and J. Kossut

ThP16 Raman Scattering in the Magnetised Semiconductor Plasma
Z. Jankauskas and V. Kvedaras

ThP17 Interband Magneto-Spectroscopy of a High-Density Two-Dimensional Electron Gas in a Strong In-Plane Magnetic Field
Y.D. Jho, S.A. Crooker, X. Wang, X. Wei, F.V. Kyrychenko, J. Kono, C.J. Stanton, C. Kadow, A.C. Gossard, and D.H. Reitze

ThP18 Magnetic Field Dependence of Indirect Transition Photoluminescence in Modulation-Doped ZnSe/BeTe Type-II Quantum Wells
Z. Ji, H. Yamamoto, H. Mino, K. Oto, R. Akimoto, and S. Takeyama

ThP19 Photoluminescence Anomalies in CdS/ZnSe Type II Heterostructure in Pulsed High Magnetic Fields
K. Ono, K. Uchida, S. Takeyama, Y. Izawa, H. Mino, and R. Akimoto

ThP20 Tunneling Between Bilayer Quantum Hall Structures in a Strong Magnetic Field
F.D. Klironomos and A.T. Dorsey

ThP21 Bulk Nonparabolic Effective Mass Applied to Calculation of Landau Level Energy and Comparison with Cyclotron Resonance in InGaAs/InAlAs Quantum Wells
N. Kotera, K. Tanaka, and N. Miura

ThP22 Magnetospectroscopy of Shallow Impurities in InP to 30 T
R.A. Lewis, P.E. Simmonds, and Y.-J. Wang

ThP23 Development of a Plastic Diamond Anvil Cell for High Pressure Magneto-Photoluminescence in Pulsed High Magnetic Fields
Y.H. Matsuda, K. Uchida, K. Ono, Zi Wu Ji, and S. Takeyama

ThP24 Triplet Biexciton Transition Under High Magnetic Field in (Cd,Mn)Te/CdTe/(Cd,Mg)Te Asymmetric Quantum Wells
A. Kobayashi, H. Mino, S. Takeyama, G. Karczewski, T. Wojtowicz and J. Kossut

ThP25 Magneto-Photoluminescence of Chirality-Characterized Single-Walled Carbon Nanotubes
L.J. Li and R.J. Nicholas

ThP26 High Magnetic Field to Probe the Nanometer Scale Structure in Low Dimensional Molecular Conductors
Y.W. Park

ThP27 Recombination of Fractionally Charged Excitons in Quantum Hall Systems
J.J. Quinn and A. Wójs

ThP28 Inter-Landau-Level Transitions and Ultrafast Dynamics of 2D Magnetoexcitons
T.V. Shahbazyan, N. Fromer, and D.S. Chemla

ThP29 Galvanomagnetic Properties of Irradiated PbSe Single Crystals in Stationary Magnetic Fields up to 13.6 T
A.E. Kar'kin, V.V. Shchennikov, S.V. Ovsyannikov, E.P. Skipetrov, and B.N. Goshchitskii

ThP30 Ground State Properties of Bilayer $\upsilon = 2$ Quantum Hall States
Y. Shimoda, T. Nakajima, and A. Sawada

ThP31 Near Field Spectroscopy of Single and Coupled Quantum Dots Under Magnetic Field
A. Zora, C. Simserides, and G. Triberis

ThP32 The Effect of Magnetic and Electric Fields on Polaron Hopping in DNA Structures
M.R. Singh

ThP33 Characterisation of Quantum Cascade Lasers at High Magnetic Fields
A. Wade and D. Smirnov

ThP34 Structural and Magnetic Properties of Mn Implanted GaAs
S.-l. Song, N.-f. Chen, J.-p. Zhou, C.-l. Chai, S.-y. Yang, and Z.-k. Liu

ThP35 High Frequency EPR Study of a Centered Ferric Tetrahedron
A.C. Stowe, H. van Tol, E. Brechin, and N.S. Dalal

ThP36 Tunneling Between Spin Polarized Edge States Studied at High Magnetic Fields
G. Sukhodub, F. Hohls, D.K. Maude, D. Reuter, A.D. Wieck, and R.J. Haug

ThP37 Magnetic, X-Ray, and Optical Studies of $Zn_{1-x}M_xS$ (M = V, Cr, Mn, Co) Alloys
T.P. Surkova, A.V. Korolyov, E.Z. Kurmaev, V.R. Galakhov, A.V. Galakhov, and M.Godlewski

ThP38 Landau Spectra of ZnH and Neutral Zn in Germanium
P. Fisher, R.E.M. Vickers, and K. Ishida

ThP39 Influence of Spin-Orbit Interaction on the Magnetotransport of a Periodically Modulated Two-Dimensional Electron Gas
X.F. Wang, P. Vasilopoulos, and F.M. Peeters

ThP40 Effect of the Voigt Magnetic Field on the Exciton Complexes in ZnSe/BeTe Type-II Single Quantum Wells
H. Yamamoto, Ziwu Ji, H. Mino, K. Oto, R. Akimoto, and S. Takeyama

ThP41 Hole Maximum Density Droplets of an Antidot in Strong Magnetic Fields
N.Y. Hwang, S.-R. Eric Yang, H.-S. Sim, and H. Yi

ThP42 Magnetization of Digitally Mn-Doped Magnetic Semiconductor Quantum Wells
H.J. Kim and K.S. Yi

ThP43 Negative Quasiclassical Magnetoresistance in a Very High Density Two-Dimensional Electron Gas in AlGaN/GaN Heterostructure
Z.D. Kvon, V. Renard, H.-I. Cho, J.-H. Lee and J.C. Portal

6:00 – 7:00 Break

7:00 – 9:00 Conference Banquet

Friday, August 6, 2004

9:00 – 9:50 First Session (General Transport II):

9:00 Anisotropic Transport at Landau Level Crossing of AlAs 2D Electron
J.G.S. Lok, M. Lynass, W. Dietsche, M. Hauser, K. von Klitzing, and S.J. Bending

9:30 Resistance Spikes Induced by Gate-Controlled Valley-Splitting in Silicon
K. Takashina, Y. Hirayama, A. Fujiwara, and Y. Takahashi

9:50 – 10:10 Coffee Break

10:10 – 11:40 Second Session (Optics II):

10:10 Large Splitting of the Cyclotron-Resonance Line in III-V Heterostructures
H.L. Stormer, S. Syed, E. Henriksen, M.J. Manfra, Y.J. Wang, L.N. Pfeiffer, K.W. West, and R.J. Molnar

10:40 Emission from a Two-Dimensional Electron Gas in the Fractional Quantum Hall Regime
M. Byszewski, B. Chwalisz, D.K. Maude, M.L. Sadowski, M. Potemski, S. Studenikin, D.G. Austing, A.S. Sachrajda, P. Hawrylak, T. Saku, and Y. Hirayama

11:00 Exciton Spin States in Nanocrystal Quantum Dots Revealed by Spin-Polarized Resonant PL and Raman Spectroscopy
M. Furis, T. Barrick, S.A. Crooker, M. Petruska, V. Klimov, and Al. L. Efros

11:20 Observation of Photoluminescence from Magneto-Plasmas under Intense Femtosecond Excitation in Strong Magnetic Fields
X. Wang, **Y.D. Jho**, D.H. Reitze, G.D. Sanders, F.V. Kyrychenko, C.J. Stanton, J. Kono, X. Wei, C. Kadow, and A. C. Gossard

11:40 – 12:20 Box Lunch and buses to the Wine Tasting Party