

PM'05 SCHEDULE

Friday, June 24

8⁵⁵

OPENING

R. Micnas, A. Jeziarski

I.1 STRONGLY CORRELATED ELECTRONS

Chairmen: R. Micnas, A. Jeziarski

9⁰⁰- 9³⁰

W. METZNER Max-Planck-Institut für Festkörperforschung, Stuttgart, Germany
Magnetic and superconducting correlations in the 2D Hubbard model

9³⁰-10⁰⁰

B.R. BULKA Institute of Molecular Physics, Polish Academy of Sciences, Poznań, Poland
Correlations in electronic transport through nanostructures

10⁰⁰-10³⁰

P. HORSCH Max-Planck-Institut für Festkörperforschung, Stuttgart, Germany
Magnetism and charge response in quasi-1d Wigner lattice compounds

10³⁰-11⁰⁰

B. DĄBROWSKI Physics Department, Northern Illinois University, DeKalb, USA
Magnetic properties of nonstoichiometric and substituted SrRuO₃

11⁰⁵-11³⁰

coffee break

I.2 MOSTLY MAGNETIC NANOSTRUCTURES

Chairman: H. Szymczak

11³⁰-12⁰⁰

G. BAYREUTHER Institut für Experimentelle und Angewandte Physik,
Universität Regensburg, Regensburg, Germany
Ground state properties and spin excitations in ferromagnetic nanostructures

12⁰⁰-12³⁰

A. EHRESMANN Fachbereich Naturwissenschaften, Universität Kassel, Kassel, Germany
In-plane magnetic micro- and nanopatterns: fundamentals, applications, and possibilities

12³⁰-13⁰⁰

A. MAZIEWSKI Institute of Experimental Physics, University of Białystok, Białystok, Poland
New spin configurations in nano-sized magnets near reorientation phase transitions

13⁰⁰-13³⁰

M. MIGLIERINI Department of Nuclear Physics and Technology,
Slovak University of Technology, Bratislava, Slovakia
Magnetic microstructure of NANOPERM-type nanocrystalline alloys

13³⁵-15⁰⁰

lunch break

15⁰⁰-16⁴⁰

ORAL SESSIONS (concurrent)

O1 Chairman: K.I. Wysokiński

O-1-15 **J. Stankowski:**
Fluctuation of Cooper pairs

O-1-07 **A. M. Oleś**, L.F. Feiner, P. Horsch, and G. Khaliullin:
Microscopic theory of magnetic interactions in KCuF₃ AND LaMnO₃-the role of charge transfer

O-1-03 **I. Eremin**, D. K. Morr, A. V. Chubukov, D. Manske K. H. Bennemann, M. R. Norman
Resonant magnetic excitations in high-T_c cuprates: influence of orthorhombicity and upward dispersion

O-1-09 **T. Domański**
Quantum fluctuations of the ultracold atom-molecule mixtures

O-1-12 **L. Kowalewski**, R. J. Wojciechowski and P. Wojtuś
Andreev reflection at ferromagnetic metal- triplet superconductor junctions

O-1-14 **P. Wróbel**, A. Maciąg and R. Eder
Single particle spectral weight and ARPES spectra from cuprates in the bond-ordered, bond-centered stripe phase

O2 Chairman: A. Ślebarski

- O-4-05 **B. Andrzejewski**, A. Kowalczyk, J. Frąckowiak, T. Toliński, A. Szlaferek, S. Pal, Ch. Simon
Unusual negative magnetisation effect in antiferromagnetic YbFe_4Al_8 compound
- O-2-04 **H. Wende**, A. Scherz, C. Sorg, P. Jensen, M. Bernien, N. Ponpandian, K. Baberschke
Importance of spin fluctuations in coupled two-dimensional magnetic trilayers
- O-2-08 **S. van Dijken**, M. Żołądź, M. Czapkiewicz, and T. Stobiecki
Asymmetric magnetization reversal in exchange-biased Co/Pt multilayers
- O-2-09 **M. Czapkiewicz**, S. van Dijken, T. Stobiecki, R. Rak, M. Żołądź and P. Mietniowski
Magnetization dynamics of perpendicular exchange-biased (Pt/Co)-Pt-IrMn multilayers studied by MOKE microscopy and magnetometry
- O-3-01 **G. Pristáš**, M. Reiffers, J. Šebek, E. Šantavá, K. Andersen and B. Hamelin
Electron-quasiparticle interaction in van Heusler alloy Cu_2MnAl

16⁴⁰-17⁰⁰

coffee break

17⁰⁰-18³⁰

POSTER SESSION I (categories 2, 6, 7)

18⁴⁵- 20¹⁵

WELCOME PARTY

20³⁰

TRANSPORTATION TO HOTEL

Saturday, June 25

I.3 HIGH TEMPERATURE SUPERCONDUCTORS

Chairman: S. Robaszkiewicz

9⁰⁰- 9³⁰

K. MAKI Department of Physics and Astronomy,
University of Southern California, Los Angeles, USA
D-wave density waves in high T_c cuprates and CeCoIn_5

9³⁰-10⁰⁰

C. DI CASTRO Dipartimento di Fisica, Universita' di Roma "La Sapienza",
and Istituto Nazionale per la Fisica della Materia, Rome, Italy
Charge-ordering fluctuations and anomalous Raman response in cuprates

10⁰⁰-10³⁰

S. MAEKAWA Institute for Materials Research, Tohoku University, Sendai, Japan
Spin-charge separation and non-linear optical response in one-dimensional cuprates

10³⁰-11⁰⁰

D. POILBLANC Laboratoire de Physique Théorique, Université Paul Sabatier and CNRS,
Toulouse, France
Doped 2D frustrated quantum magnets: spin-charge separation and non-conventional superconductivity

11⁰⁵-11³⁰

coffee break

I.4 MOSTLY MAGNETIC PROPERTIES

Chairman: J. Baszyński

11³⁰-12⁰⁰

K. DÖRR Leibniz-Institut für Festkörper- und Werkstoffforschung Dresden, Dresden, Germany
Magnetism in manganites and manganite-titanate biferroics

12⁰⁰-12³⁰

S. BLÜGEL Institut für Festkörperforschung, Forschungszentrum Jülich, Jülich, Germany
Magnetic tunneljunctions made from half-metals

12³⁰-13⁰⁰

H. EBERT Department Chemistry/Physical Chemistry,
Ludwig-Maximilians-University of Munich, Munich, Germany
Relativistic and correlation effects in magnetic solids

13⁰⁰-13³⁰

R. WIESENDANGER Institute of Applied Physics and Microstructure Advanced Research Center
Hamburg (MARCH), University of Hamburg, Hamburg, Germany
Physics of nanomagnetism revealed by spin-polarized scanning tunneling spectroscopy

13³⁵-15⁰⁰

lunch break

15⁰⁰-16²⁵

ORAL SESSIONS (concurrent)

O3 Chairman: B. Fechner

- O-2-05 **P. Stefański**, A. Tagliacozzo and B.R. Bułka
"Charge sensing" effects in conductance through quantum dots and point contacts
- O-2-10 **K.-I. Imura** and R. Shindou
Wave-packet dynamics of Bloch electrons - role of Berry phase
- O-2-11 **T. Story**, P. Dziawa, V. Osinniy, M. Arciszewska, W. Dobrowolski, W. Domuchowski, K. Dybko, O. Fedorych, E. Łusakowska, B. Taliashvili, C.J.P. Smits, H.J.M. Swagten
Ferromagnetic (Eu,Gd)Te semiconductor layers
- O-2-12 **J. Martinek**, J. Barnaś, J. König, G. Schön, S. Maekawa, J. von Delft, D.C. Ralph
Kondo effect in the presence of ferromagnetism
- O-2-15 **J.-C. S. Levy** and A. Ghazali
Monte- Carlo simulation of solid state and melting of 2D confined magnetic particles

O4 Chairman: A. Szytuła

- O-1-01 **A. Szewczyk**, M. Gutowska, and B. Dąbrowski
Phase diagram of heavily doped ($x > 0.5$) $La_{1-x}Sr_xMnO_3$
- O-1-05 **A. Wiśniewski**, R. Puźniak, V. Markovich, I. Fita, Ya.M. Mukovskii
Pressure effects on magnetic properties of manganites near percolation threshold
- O-1-06 **R. Puźniak**, A. Wiśniewski, J. Jun, S.M. Kazakov, J. Karpiński
Influence of chemical substitutions on anisotropic upper critical field in MgB_2 : impact of Fermi surface changes
- O-1-08 **V. H. Tran**, S. Paschen, F. Steglich, R. Troć, and Z. Bukowski
Hall effect in the low charge-carrier density ferromagnet $UCo_{0.5}Sb_2$
- O-1-11 **V.Yu. Ivanov**, A.A. Mukhin, V.D. Travkin, A.S. Prokhorov, A.M. Kadomtseva, Yu.F. Popov, G.P. Vorobev, K.I. Kamilov, and A.M. Balbashov
New orthorhombic multiferroics $R_{1-x}Y_xMnO_3$ ($R = Eu; Gd$)

16³⁰-17¹⁵

TRANSPORTATION TO PALACE IN KÓRNIK

18⁰⁰ - 21⁰⁰

BANQUET

21¹⁵

TRANSPORTATION TO HOTEL

Sunday, June 26

**I.5 MOSTLY DILUTED MAGNETIC SEMICONDUCTORS,
SPINTRONICS AND MIXED VALENCE**

Chairman: S. Krompiewski

- 9⁰⁰- 9³⁰ **T. DIETL** Institute of Physics, Polish Academy of Sciences, Warsaw, Poland
Carrier-controlled ferromagnetic semiconductors
- 9³⁰-10⁰⁰ **B.L. GALLAGHER** School of Physics and Astronomy, University of Nottingham, Nottingham, UK
GaMnAs materials and nanoscale devices
- 10⁰⁰-10³⁰ **P. DEDERICHS** Institut für Festkörperforschung, Forschungszentrum Jülich, Jülich, Germany
Percolation effects in dilute magnetic semiconductors
- 10³⁰-11⁰⁰ **P. WACHTER** Laboratorium für Festkörperphysik, ETH Zürich, Zürich, Switzerland
Superfluidity in condensed excitons below 20 K
- 11⁰⁵-11³⁰ coffee break
- 11³⁰-13⁴⁰ **ORAL SESSIONS** (concurrent)
- O5** Chairman: A.M. Oleś
- O-1-13 **C. Knecht, N. Blümer, and P.G.J. van Dongen**
Orbital-selective Mott transitions in the anisotropic two-band Hubbard model at finite temperatures
- O-7-02 **R. Eder** and H. Winter
Cluster perturbation theory for transition metal oxides
- O-7-01 **P. Kratzer**, H. Wu, J. Hashemifar, M. Hortamani and M. Scheffler
Calculation of structural, electronic and magnetic properties of MnSi and Co₂MnSi(001) thin films
- O-2-14 **A. Rycerz** and J. Spałek
Electronic structure and parity effects in correlated nanosystems
- O-6-02 **R. Lemański** and P. Mikołajczyk
Magnetic properties of correlated electrons
- O-2-13 **S. Krompiewski**, G. Cuniberti, and N. Nemeč
Spin transport in disordered single-wall carbon nanotubes contacted to ferromagnetic leads
- O-3-02 G.A. Gehring, **A. Lehmann-Szweykowska**, R.J. Wojciechowski, P.E. Wigen and R. Mienas
Charge transport through ionic clusters of the magnetic oxides
- O6** Chairman: Z. Jacyna-Onyszkiewicz
- O-6-01 **M.W. Gutowski**
On the symmetry of a Preisach map
- O-3-03 **I.Škorvánek**, J. Marcin, T. Krenický, J. Kováč, P.Švec and D. Janičkovič
Improved soft magnetic properties in hitperm nanocrystalline alloys by heat treatment under external magnetic field
- O-3-06 **J. Przewoźnik**, Cz. Kapusta, J. Żukrowski, K. Krop, M. Sikora, D. Rybicki, D. Zając, B. Sobanek, C. J. Oates, P. C. Riedi
On the strength of the double exchange and superexchange interactions in La_{0.67}Ca_{0.33}Mn_{1-y}Fe_yO₃ - an NMR and Mössbauer study
- O-1-10 R. Zalecki, **A. Kołodziejczyk**, J. Korecki, A. Kozłowski, N. Spiridis and Z. Kąkol
Electronic states of magnetite from electron photoemission spectroscopy
- O-2-01 **V.K. Dugaev**, P. Bruno, M. Taillefumier, B. Canals, and C. Lacroix
Intrinsic mechanism of anomalous Hall effect in a two-dimensional magnetic system with impurities
- O-4-01 **B. Idzikowski**, A. Kreyssig, M. Loewenhaupt, Z. Śniadecki, A. Hoser, K.-H. Müller
Magnetic structures in cubic RCu₅ (R=Tb, Dy, Ho) compounds
- O-4-02 **A. Szytuła**, D. Kaczorowski and B. Penc
Electronic structure of RAg₂Ge₂ (R = Pr, Nd) compounds
- 13⁴⁰-15⁰⁰ lunch break

15⁰⁰-16³⁰ POSTER SESSION II (categories: 1, 3, 4, 5)

FREE TIME

Monday, June 27

**I.6 SPIN DEPENDENT TRANSPORT, MAGNETIC JUNCTIONS
AND MAGNETIC LAYERS**

Chairman: J. Barnaś

- 9⁰⁰- 9³⁰ **A. FERT** Unité Mixte de Physique CNRS-Thomson CSF, Orsay, France
Magnetization reversal by injection and transfer of spin: experiments and theory
- 9³⁰-10⁰⁰ **S. YUASA** National Institute of Advanced Industrial Science and Technology (AIST) Tsukuba, Japan
and PRESTO, Japan Science and Technology Agency (JST), Saitama, Japan.
Giant room-temperature TMR effect in magnetic tunnel junctions with MgO(001) tunnel barrier
- 10⁰⁰-10³⁰ **B. HILLEBRANDS** Fachbereich Physik, Technische Universität Kaiserslautern, Kaiserslautern, Germany
Propagation, tunneling and phase shift of spin waves at a magnetic field inhomogeneity
- 10³⁰-11⁰⁰ **H. PUSZKARSKI** Institute of Physics, A. Mickiewicz University, Poznań, Poland
Magnetic excitations in magnonic crystals and in small magnetic particles
- 11⁰⁵-11³⁰ coffee break

I.7 LOW DIMENSIONAL MAGNETISM

Chairman: L. Kowalewski

- 11³⁰-12⁰⁰ **R.K. KREMER** Max-Planck-Institut für Festkörperforschung, Stuttgart, Germany
Frustrated antiferromagnetic quantum chain systems
- 12⁰⁰-12³⁰ **J. SZNAJD** W. Trzebiatowski Institute for Low Temperature and Structure Research,
Polish Academy of Sciences, Wrocław, Poland
Renormalization group approach to weakly interacting spin and Fermion chains
- 12³⁰-13³⁰ **ORAL SESSION**
- O-4-04 **R. Troć**, Z. Bukowski, C. Sułkowski, J. Stepień-Damm
Magnetic and transport properties of Cu-flux-grown UCu₂Si₂
- O-1-02 **A. Ślebarski** and K. Szot
Non-Fermi liquid ground state in CeRhSn: effect of grain boundary defects on the electric transport behavior
- O-1-04 **T. Cichorek**, A.C. Mota, F. Steglich, N.A. Frederick, W.M. Yuhasz and M.B. Maple
Low-field magnetic investigations of the superconducting state in PrOs₄Sb₁₂
- 13³⁰-15⁰⁰ lunch break

I.8 MOSTLY HEAVY FERMION SYSTEMS

Chairman: R. Troć

- 15⁰⁰-15³⁰ **F. STEGLICH** Max-Planck Institute for Chemical Physics of Solids, Dresden, Germany
Unconventional forms of superconductivity and quantum criticality in heavy-electron metals
- 15³⁰-16⁰⁰ **J. SPAŁEK** M. Smoluchowski Institute of Physics, Jagiellonian University, Kraków, Poland
Magnetic properties of almost localized Fermions - revisited
- 16⁰⁰-16³⁰ **SUMMARY and CLOSING**