



UNIVERSITÉ
DE GENÈVE

FACULTÉ DES SCIENCES
Département de physique
de la matière condensée



MaNEP
SWITZERLAND NATIONAL CENTRE OF COMPETENCE IN RESEARCH
Materials with Novel Electronic Properties

2006 Martin Peter Colloquium and MaNEP Topical meeting on "Novel Superconductors"

Wednesday September 27, 2006

The colloquium Martin Peter will be given by
P.W. Anderson, Princeton University, USA

10⁰⁰ - 10⁴⁵ Welcome coffee

Topical meeting 1st session

Chair: *D. van der Marel (UniGE)*

- 10⁴⁵ **J. Chang (ETHZ & PSI)**, "*Interplay between high-and low energy excitations in optimally doped LSCO: an ARPES study*".
- 11⁰⁵ **G. Levy (UniGE)**, "*Scanning tunneling spectra on HTS: the interplay of the gap, the bosonic mode and the van Hove singularity*".
- 11²⁵ **J. L. M. van Mechelen (UniGE)**, "*Electron-phonon coupling in SrTi_{1-x}Nb_xO₃*".
- 11⁴⁵ **C. Berthod (UniGE)**, "*Breakup of the Fermi surface near the Mott transition in low-dimensional systems*".
- 12⁰⁵ **P. S. Häfliger (UniZH)**, "*Muon-spin rotation measurements of the penetration depth in the noncentrosymmetric superconductors Li₂(Pd/Pt)₃B*".

12²⁵ - 14³⁰ Lunch sandwich poster session

Topical meeting 2nd session

Chair: *G. Blatter (ETHZ)*

- 14³⁰ **Z. Bukowski (ETHZ)**, "*Single crystal growth and properties of superconducting β -pyrochlore osmates KOsO₆ and Rb Os O₆. Novel pyrochlore compounds synthesized under high pressure*".

DPMC – MaNEP, Ecole de Physique, 24 quai Ernest-Ansermet, CH-1211 Genève 4, <http://dpmc.unige.ch>, <http://www.manep.ch>

- 14⁵⁰ **A. Rüfenacht (UniNE)**, *"Probing the superfluid properties of ultrathin copper-oxide superconducting films with the electric-field effect"*.
- 15¹⁰ **N. Reyren (UniGE)**, *"Electric field effect modulation of transition temperature, mobile carrier density and in-plane penetration depth in NdBa₂Cu₃O_{7- δ} thin films"*.
- 15³⁰ **C. Weber (EPFL)**, *"Magnetism and superconductivity of strongly correlated electrons on the triangular lattice"*.
- 15⁵⁰ **D. Eichenberger (UniFR)**, *"Superconductivity in the two-dimensional repulsive U Hubbard model"*.

16¹⁰ - 17⁰⁰ Coffee break

17⁰⁰ - 18⁰⁰ **M. Peter Colloquium: Prof. P.W. Anderson, Princeton University**
"RVB after all: the theory of High T_c"
 Chair: T.M. Rice (ETHZ)

18¹⁵ Aperitif

19⁰⁰ END MaNEP Topical Meeting

Poster list

- **P. Lezza (UniGE)**, *"Simultaneous addition of B₄C + SiC to MgB₂ wires and consequences for J_c and B_{irr}"*.
- **C. Senatore (UniGE)**, *"Specific heat, a method to determine the T_c distribution in superconducting wires"*.
- **C. Dubois, (UniGE)**, *"Vortex cores in PbMo₆S₈ and KOs₂O₆ probed by STM"*.
- **N. Reyren (UniGE)**, *"Electrostatic modulation of superconductivity in Nb-doped SrTiO₃ Films"*.
- **E. van Heumen (UniGE)**, *"Illuminating cuprate superconductors"*
- **N.B. Christensen (ETHZ & PSI)**, *"One-dimensional spin modulation in a charge ordered cuprate"*.
- **J. Karpinski (ETHZ & PSI)**, *"MgB₂ single crystals, influence of magnetic and non-magnetic ions substitution and hole and electron doping on superconducting properties and structure"*.
- **D. Eschenko (UniZH)**, *"Low energy muon studies of PrBa₂Cu₃O₇ thin layers"*.
- **K. Schmidt (EPFL)**, *"Magnetic excitations in the stripe phase of high-T_c superconductors"*.
- **F. Mila (EPFL)**, *"The emergence of RVB physics in quantum dimer models of Mott insulators"*.
- **G. Leon (UniGE)**, *"Hall effect in organic superconductors"*.