

DyProSo XXXII, University of Antwerp, Belgium, 2009

Sunday, September 13

18:00 Registration

19:00 Opening reception

Monday, September 14

08:30 Registration

08:45 Opening

Carbon-based materials I

09:00 K. Novoselov
"Graphene and its chemical derivatives"

09:50 E. Castro
"Valley asymmetry in graphene double layer: consequences to the dHvA and quantum Hall effects"

10:30 Coffee break

Carbon-based materials II

11:00 H. Kuzmany
"Raman Scattering from single-walled carbon nanotubes"

11:40 S. Rols
"Probing the physics of nano-peapods using neutron spectroscopy"

12:20 X. Ke
"Electron beam induced deposition of Pt contacts on carbon nanotubes"

12:40 Lunch

Multiferroics I

14:10 S. Petit
"Spin-lattice coupling in multiferroic hexagonal RMnO₃"

15:00 S. Kamba
"Tuning of phonon frequencies and THz ϵ in SrTiO₃ and EuTiO₃ strained thin films by means of electric and/or magnetic field"

15:40 Coffee break

Materials at extreme pressure

16:10 R. Caracas
"Lattice dynamics and theoretical spectroscopy at high pressure"

16:50 B. Mihailova
"Pressure-induced structural transformations in Pb-based perovskite-type relaxor ferroelectrics"

17:30 J. Tempere
"Pressure dynamics in a laser heated diamond anvil cell"

Tuesday, September 15

Relaxor ferroelectrics

- 09:00** R.A. Cowley
"Relaxor Ferroelectrics"
- 09:50** B. Hehlen
"The hyper-Raman spectroscopy of $PbMg_{1/3}Nb_{2/3}O_3$ "
- 10:30** A. Bussman-Holder
"Relaxor ferroelectrics and intrinsic inhomogeneity"

10:50 Coffee break

Superconductors I

- 11:20** E. Gross
"How to predict the critical temperature of superconductors?"
- 12:10** A. Coldea
"The Fermi surface topology of iron pnictides determined from quantum oscillations"

12:50 Lunch

Nanostructures I

- 14:20** J. Verbeeck
"Characterising nanostructures with EELS"
- 15:00** H. Peelaers
"Electronic and dynamical properties of silicon nanowires"
- 15:20** P. Zielinski
"Stress controlled dynamics of bulk and surface lattice waves in materials with internal degrees of freedom"
- 15:40** E. Durgun
"Polarization vortices in germanium tellurite nanoplatelets: towards non-volatile ternary logic memories"

16:00 Beer and poster session

16:00 Advisory board meeting

Wednesday, September 16

Crystalline soft matter I

- 09:00** M. Dijkstra
"Colloidal self-assembly: Predicting and designing new structures"
- 09:50** P. Schall
"Visualization of the crystal-liquid interface in colloidal systems"

10:30 Coffee break

Multiferroics II

- 11:00** C. Ederer
"Strain effects and magneto-electric coupling in BiFeO₃ from first principles"
- 11:40** S. Yampolskii
"Self-consistent phenomenological model of charge injection in insulating media"
- 12:00** W. Petry
"Dynamics of ferromagnetic shape memory alloys in the austenite and martensite phase"

12:20 Lunch

Carbon-based materials III

- 13:50** A. Fasolino
"The structure of graphene: ripples, edges and folds"
- 14:30** M. Eckert
"Insights into the growth of (ultra)nanocrystalline diamond: a combined molecular dynamics and Monte Carlo investigation"

14:50 Coffee break

Crystalline soft matter II

- 15:20** P. Keim
"Elasticity of a two-dimensional colloidal crystal near melting"
- 16:00** J. Fornleitner
"Ordering in two-dimensional colloidal systems"
- 16:20** J. Koppensteiner
"Confinement effects on glass forming liquids probed by dynamic mechanical analysis"

17:00 Guided tour in Antwerp

20:00 Conference dinner

Thursday, September 17

Advances in experimental techniques

- 09:00** R. Cucini
"Nanoscale dynamics by FEL-based transient grating technique: the "TIMER" project"
- 09:40** E. Morenzoni
"Depth dependent studies of magnetic and superconducting properties of thin films and heterostructures with polarized low energy muons"
- 10:20** A. Bosak
"Inelastic x-ray scattering from polycrystalline materials for lattice dynamics reconstruction"

10:40 Coffee break

Superconductors II / Nanostructures II

- 11:10** P. Lin
"Dynamical response of vortex matter in superconductors"
- 11:30** V. Kozhevnikov
"The nonlocal effect in magnetic field penetration in a Pippard superconductor probed by polarized neutrons and low-energy muons"
- 11:50** P. Koenraad
"Single impurity manipulation and analysis in semiconductors by STM"

12:30 Closing