

Poster Programme – Tuesday 14 December 2010

Soft matter in action

P.1.01

Colloids in cholesterics

A Pawsey (University of Edinburgh, UK)

P.1.02

Modelling the creep test of edible fats

C Vithanage (University of Auckland, New Zealand)

P.1.03

Dynamical simulations of polymer folding and unfolding

S Ruzicka (University of Warwick, UK)

P.1.04

Stretching dense colloidal suspensions: from flow to fracture

M Smith (University of Nottingham, UK)

P.1.05

Cracking in thin films of colloidal particles on elastomeric substrates

M Smith (University of Nottingham, UK)

P.1.06

Pseudo-phase diagrams of single polymer molecules

A Swetnam (University of Warwick, UK)

P.1.07

Modelling deformation of polydomain Smectic-C liquid crystal elastomers

A Brown (University of Surrey, UK)

P.1.08

Self-Assembly in the Ising lattice gas

R Grant (University of Bath, UK)

P.1.09

Transient shear banding in ageing soft materials

R Moorcroft (University of Durham, UK)

Biological physics

P.1.10

Fabrication and refractive index sensitivity of gold nanorod arrays for biological sensing applications

C McClatchey (Queen's University Belfast, UK)

P.1.11

Complex permittivity of pure water measured by vector network analysis at w-band as a function of frequency and temperature

B Yang (Queen Mary University of London, UK)

P.1.12

Towards an understanding of polymorphism in protein aggregation

M Smith (University of Nottingham, UK)

P.1.13

Rigidity analysis of HIV-1 protease

J Heal (University of Warwick, UK)

P.1.14

Controlling the morphology of an amyloid scaffold to act as a host for biological quantum tunnelling

C Forman (Cambridge University, UK)

P.1.15

Measurement and interpretation of ionic selectivity in biological nanopores. Insights on the permeability of wide protein channels

A Alcaraz (University Jaume I, Spain)

P.1.16

Real time measurements of conformational change in proteins

P Weightman (University of Liverpool, UK)

P.1.17

Swimmers in thin films: from swarming to hydrodynamic instabilities

M Leoni (University of Bristol, UK)

Polymer physics

P.1.18

Monte-Carlo simulation of lattice trees as a model of entangled ring polymers

W-C Lo (University of Warwick, UK)

P.1.19

A new experimental approach to the study of multiscale structural development in polymers

G R Mitchell (University of Reading, UK)

P.1.20

Soft nano-structures from block copolymers: Cell Dynamics Simu

M Pinna (University of Central Lancashire, UK)

P.1.21

In-situ conductivity and UV-VIS absorption monitoring of iodine doping-dedoping processes in poly(3-hexylthiophene) (P3HT)

V Kysliuk (Taras Shevchenko National University of Kyiv, Ukraine)

P.1.22

Chain pullout and re-deposition on single crystal substrates

S Hanna (University of Bristol, UK)

P.1.23

Effect of hard particles on the adhesion and bulk mechanical properties of waterborne pressure-sensitive adhesives (PSAs)

R Gurney (University of Surrey, UK)

Symmetry and order: frontiers of statistical physics

P.1.24

A structural phase transition in the intermetallic compound $Tm_3Cu_4Sn_4$

R Andres Cobas Acosta (University of Manitoba, Canada)

P.1.25

The random phase property and the Lyapunov spectrum for disordered multi-channel systems

R Römer (University of Warwick, UK)

P.1.26

Fractional scaling of quantum walks on percolation lattices

V Kendon (University of Leeds, UK)

P.1.27

Non-equilibrium fluctuations in a nanomechanical resonator coupled to a single-electron transistor

P Kirton (University of Nottingham, UK)

P.1.28

A novel Monte Carlo Sampling Method to study glassy behaviour in liquid crystal films

J Dontabhaktuni (University of Ljubljana, Slovenia)

Quantum memory

P.1.29

Direct measurement of the current-phase relation in conventional and unconventional junctions

G Klemencic (University of Birmingham, UK)

Correlated electron systems

P.1.30

Study of Magnetic anisotropy in Co doped Mn_2Sb

P Kushwaha (UGC-DAE Consortium for Scientific Research, India)

P.1.31

The peculiarities of δ -plutonium electronic structure and magnetic susceptibility

A Filanovich (Ural Federal University, Russia)

P.1.32

A New method of first principles DFT+U calculation for strongly correlated electron systems

T Hamada (Hitachi Ltd., Japan)

P.1.33

Determination of spin density and orbital occupation in the spin chain $\text{Ca}_3\text{Co}_2\text{O}_6$

M W Butchers (University of Warwick, UK)

P.1.34

Measurements on correlated electron systems in the Nicholas Kurti magnetic field laboratory

S Ghannadzadeh (Clarendon Laboratory, University of Oxford, UK)

P.1.35

Magneto-Optical studies of Fe-doped In_2O_3 thin films

M Alshammari (King Abdulaziz City for Science and Technology, Saudi Arabia)

P.1.36

Exchange bias in the Heusler Alloy $\text{Ni}_2\text{Mn}_{1-x}\text{Sb}_x$

J Lim (University of Birmingham, UK)

P.1.37

Feasibility of approximating spatial and local entanglement in nanostructures using the extended Hubbard model

I D'Amico (Department of Physics, University of York, UK)

P.1.38

Magnetic and optical properties of GdMnO_3 thin Films

M Al-Qahtani (University of Sheffield, UK)

P.1.39

Synchrotron measurements on the charge ordered multiferroic YbFe_2O_4

A Hearmon (Clarendon Laboratory, University of Oxford, UK)

P.1.40

Two-component magnetic ordering in the geometrically frustrated honeycomb compounds SrEr_2O_4 and SrDy_2O_4

T Hayes (University of Warwick, UK)

P.1.41

Y-dilution effects in the $\text{Tb}_{(1-x)}\text{Y}_x\text{RhIn}_5$ antiferromagnet compounds

R Lora-Serrano (Universidade Federal de Uberlândia, Brazil)

P.1.42

Strictly localised triplet dimers in one- and two-dimensional lattices

S Jackson (Loughborough University, UK)

P.1.43

Impurity scattering in Luttinger liquid with electron-phonon coupling

A Galda (University of Birmingham, UK)

P.1.44

A new renormalization group approach for strongly correlated electrons

K Edwards (Imperial College London, UK)

P.1.45

Non-contact ultrasonic measurements of the elastic constants of magnetic materials

R Edwards (University of Warwick, UK)

P.1.46

Quantum oscillations in ultra-pure PdCoO₂

A S Gibbs (SUPA/University of St Andrews, UK)

P.1.47

Mixed singlet magnetism of PrPtAl

G Abdul-Jabbar (University of Edinburgh, UK)

100 years of superconductivity

P.1.48

The reexamination of thermal expansion of ferromagnetic superconductors and the pressure differential of its superconducting transition temperature-Possible application to UGe₂

R Konno (Kinki University Technical College, Japan)

P.1.49

Microscopic study of the superconducting vortex lattice behavior in the critical state at very low temperatures

I Guillamon (University of Bristol, UK)

P.1.50

Spin-orbit coupling and split phase transitions in LaNiC₂

B Mazidian (University of Bristol, UK)

P.1.51

Phase-fluctuating superconductivity in overdoped La_{2-x}Sr_xCuO₄

P M C Rourke (University of Bristol, UK)

P.1.52

Transport in superconducting and ferromagnetic multilayers

A Voysey (University of Bristol, UK)

P.1.53

Angle dependence of the vortex lattice in an iron pnictide superconductor

A S Cameron (University of Birmingham, UK)

P.1.54

Integrated pinning centers in $\text{YBa}_2\text{Cu}_3\text{O}_x$ thick films on single-crystalline and textured metal substrates

P Mikheenko (University of Birmingham, UK)

P.1.55

Non-linear superconducting co-planar resonators

G Tancredi (Royal Holloway, University of London, UK)

Nanoscale magnetism and spintronics

P.1.56

Exchange bias using Spin glass model

S M Mahdi Ghorgidooz (Physics Department, Islamic Azad University, Iran)

P.1.57

DC resistance of an inhomogeneous magnetic texture

I Proskurin (Ural State University, Russia)

P.1.58

A structural phase transition in the intermetallic compound $\text{Tm}_3\text{Cu}_4\text{Sn}_4$

R A Cobas Acosta (University of Manitoba, Canada)

P.1.59

Broadband rectification of ac currents in GaMnAs micro-bars

H Kurebayashi (University of Cambridge, UK)

P.1.60

Ion induced pinning sites to control domain walls in planar nanowires

M Basith (University of Glasgow, UK)

P.1.61

Tuning perpendicular magnetic anisotropy in films of Pt/Co/ AlO_x and Pt/Co/MgO

A Whiteside (University of Leeds, UK)

P.1.62

Long relaxation time of antiferromagnetic CoO cluster in ZnCoO film

Q Feng (University of Sheffield, UK)

P.1.63

The Magnetorefractive Effect in thin films of Fe_3O_4 /MgO(111)

J Naughton (University of York, UK)

P.1.64

All optical spin Hall effect

C Richards (University of Southampton, UK)

P.1.65

High sensitivity magnetoresistance study of anisotropy and magnetisation behaviour in metallic thin films and nanostructures

H Cramman (University of Durham, UK)

P.1.66

Fabrication of magnonic meta-materials using the etched nano-sphere lithography

E Ahmad (University of Exeter, UK)

P.1.67

The role of Antidomain Phase Boundaries in magnetic properties of thin magnetite films

V Lazarov (University of York, UK)

P.1.68

Local control of the magnetic anisotropy in Co/Cu(110) films by e--beam exposure

R Reeve (Cavendish Laboratory / University of Cambridge, UK)

P.1.69

Weak localisation and spin-orbit coupling in graphene

E McCann (Lancaster University, UK)

P.1.70

Magnetic templating by superconducting films, disks and rings

A Amthong (University of Bath, UK)

P.1.71

Magnetic properties of zinc oxide nano powder doped with MnO

M Mollaei (Ferdowsi University of Mashhad, Iran)

Ultracold atoms

Please note that the Ultracold Atoms selection of posters has moved from the Wednesday session. All poster numbers will remain the same to ensure that they correspond with the printed abstract book.

P.2.70

Manipulation of coherent atom waves using accelerated two-dimensional optical lattices

S-T Wu (National Chung Cheng University, Taiwan, China)

P.2.71

Solitons in confining potential: quasiparticle approach

D Wadkin-Snaith (University of Birmingham, UK)

P.2.72

Damping in systems near integrability

A Campbell (University of Birmingham, UK)

P.2.73

Dynamics of thermalisation in small Hubbard-model systems

S Genway (Imperial College London, UK)

P.2.74

Calculation of the Casimir-Polder interaction between Bose-Einstein condensates and microengineered surfaces: a pairwise-summation approach

M N Abdul Halif (University of Nottingham, UK)

P.2.75

Using stochastic webs to control the coupling between a Bose-Einstein Condensate and a vibrating surface

M Greenaway (University of Nottingham, UK)

P.2.76

Towards ultracold mixtures on an atom chip

S Warriar (University of Nottingham UK)

P.2.77

Efficient production of 39K Bose-Einstein condensates

R Campbell (University of Cambridge, UK)

P.2.78

Creation of non-classical states of light from a Rydberg Gas on a two-dimensional lattice

T Laycock (University of Nottingham, UK)

P.2.79

Analytic properties of the ground state of strongly interacting rydberg lattice gases

S Ji (University of Nottingham, UK)