

PNCMI 2012 Program

Session: Geometrical frustration, Monday, 02.07.2012, Chair:

9:00 **Opening**

9:10 **Steve Bramwell**, Magnetism and Magnetic Monopoles in Spin ice, *University College London*.

9:45 **Pascale Deen**, Disorder in the Laves phase compound $ZrMn_2$, *European Spallation Source, Lund, Sweden*.

10:05 **Shigeki Onoda**, Higgs transition from magnetic Coulomb liquid to ferromagnet in $Yb_2Ti_2O_7$, *Condensed Matter Theory Laboratory, RIKEN, Japan*.

10:35 **Lieh-Jeng Chang**, Polarized neutron studies on the Higgs transition in the quantum spin ice $Yb_2Ti_2O_7$, *National Cheng Kung University, Taiwan*.

10:55 coffee break

Session: Frustration and Chirality Chair:

11:15 **Virginie Simonet**, Magneto-structural transitions in the frustrated spinel compound $GeCo_2O_4$, *Institut Néel, CNRS & UJF, Grenoble, France*.

11:45 **Sergey Grigoriev**, The hexagonal spin structure of A-phase in $MnSi$, *Petersburg Nuclear Physics Institute, Gatchina, Saint-Petersburg, Russia*.

12:05 **Dieter Lott**, Chirality effects in Rare-Earth Multilayers investigated by polarized neutrons, *Helmholtz Zentrum Geesthacht, Germany*.

12:35 **Jonas Kindervater**, Spherical neutron polarimetry with MiniMuPAD: Investigations of the transition from heli-paramagnetism in $MnSi$, *Technische Universität München, Germany*.

12:50 **Robert Georgii**, Polarised neutron scattering from skyrmions, *Forschungsneutronenquelle Heinz Maier-Leibnitz, Technische Universität München, Germany*.

13:10 – 14:30 Lunch

Session: Multiferroics and chirality, Monday, 02.07.2012, Chair:

14:30 **Markus Braden**, Polarised neutron-scattering investigations on chiral multiferroics, *Universität zu Köln, Germany*.

15:00 **Laurent Chapon**, Electric field control of the magnetic chiralities in ferroaxial multiferroic $RbFe(MoO_4)_2$, *Institut Laue Langevin, Grenoble, France*.

15:30 **Sylvain Petit**, Spin dynamics in multiferroic $RMnO_3$, *Laboratoire Léon Brillouin CEA/CNRS, Saclay, France*

16:00 **Catherine Pappas**, From Liquid Crystals to Chiral Magnets, *Delft University of Technology, the Netherlands*

16:20 **Kirill Nemkovski**, Resonance mode in rare-earth systems with valence instability, *Forschungszentrum Jülich, Jülich Centre for Neutron Science, Outstation FRM II, Germany*.

16:40 – 19:00 POSTER SESSION A and coffee break

Session: Strongly correlated electron systems and polarisation, Tuesday, 03.07.2012, Chair:

9:00 **Martin Greven**, Hidden magnetic excitations in a model cuprate superconductor, *University of Minnesota, USA*.

9:30 **Balint Náfrádi**, Structural and Antiferromagnetic Domains in Undoped $\text{YBa}_2\text{Cu}_3\text{O}_6$, *Ecole Polytechnique Federale de Lausanne, Switzerland*.

9:50 **Andrew Boothroyd**, Spin anisotropy of the resonance peak in unconventional superconductors, *University of Oxford, United Kingdom*.

10:20 **Meng Wang**, Antiferromagnetic order and superlattice structure in nonsuperconducting and superconducting $\text{Rb}_y\text{Fe}_{1.6+x}\text{Se}_2$, *Chinese Academy of Sciences, Beijing, China*.

10:40 **Emilio Lorenzo**, Spin-Peierls phase transition in CuGeO_3 revisited in the light of polarized neutron scattering experiments, *Institut Néel, CNRS et Université Joseph Fourier, Grenoble, France*.

11:00 coffee break

Session: Strongly correlated electron systems and polarisation, Tuesday, 03.07.2012, Chair:

11:20 **Frédéric Bourdarot**, Polarized Neutron on URu_2Si_2 , *CEA & Univ. Joseph Fourier, Grenoble, France*.

11:40 **Louis-Pierre Regnault**, Temperature dependence of magnon lifetimes in the quasi-2D collinear $S=1$ honeycomb-lattice antiferromagnet $\text{BaNi}_2(\text{PO}_4)_2$, *CEA & Univ. Joseph Fourier, Grenoble, France*.

12:00 **Markos Skoulatos**, Magnetism and orbital physics of the Mott insulator LuVO_3 , *Paul Scherrer Institut, Villigen, Switzerland*.

12:20 **Vladimir Voronin**, Measurement of neutron electric charge by the spin interferometry technique *Petersburg Nuclear Physics Institute, Gatchina, Russia*.

12:40 **Vladimir Kozhevnikov**, Magnetic field profile and microscopic parameters of nonlocal superconductors, *Tulsa Community College, Tulsa, OK, USA*.

13:00 – 14:20 LUNCH

Session: Imaging, Tuesday, 03.07.2012, Chair:

14:20 **Nikolai Kardjilov**, invited, Imaging of magnetic structures with polarised neutrons, *Helmholtz Centre Berlin for Materials and Energy, Germany*.

15:00 **Takenao Shinohara**, Development of quantitative magnetic field imaging using time-of-flight neutron polarization analysis, *J-PARC Center, Japan Atomic Energy Agency, Japan*.

15:20 **Wolfgang Treimer**, Imaging Quantum Mechanical Effects in Superconductors with Polarized Neutrons, *Helmholtz Centre Berlin for Materials and Energy, Germany*.

15:40 **Markus Strobl**, Multiple potential of TOF spin-echo induced spatial beam modulation (SEMSANS), *European Spallation Source, Lund, Sweden*.

16:00 coffee break

Session: Facilities News, Tuesday, 03.07.2012, Chair:

16:20 Alain Menelle, The CAP 2015 program at the Laboratoire Léon Brillouin, *Laboratoire Léon Brillouin CEA/CNRS, Saclay, France.*

16:35 Masahiro Hino, Design of VIN ROSE at BL06 beam line in J-PARC/MLF, *Research Reactor Institute, Kyoto University, Kumatori, Osaka, Japan.*

16:50 Thomas Krist, Polarizing neutron optics from Helmholtz-Zentrum Berlin, *Helmholtz-Zentrum Berlin for Materials and Energy, Germany.*

17:05 Klaus Habicht, New polarised neutron opportunities at the upgraded three-axis spectrometer FLEXX, *Helmholtz-Zentrum Berlin für Materialien und Energie, Germany.*

17:20 Takeda Masayasu, A New Polarized Neutron Reflectometer (SHARAKU) at the Intense Pulsed Neutron Source of the Materials and Life Science Experimental Facility of J-PARC, *Quantum Beam Science Directorate, Japan Atomic Energy Agency, Tokai, Japan.*

17:35 Garry McIntyre, Up-Coming Polarised Neutron Capabilities on ANSTO Instruments Using Polarised ^3He Neutron Spin Filters, *Australian Nuclear Science and Technology Organisation, Lucas Heights, Australia.*

17:50 Xin Tong, Current status of the polarized ^3He R&D work at SNS, *Oak Ridge National Laboratory, USA.*

18:05 Takayuki Oku, Current status of polarized neutron related activity of J-PARC, *JAEA J-Parc Center, JAEA.*

18:20 End of the session

Session: Thin films and nanomagnets Wednesday, 04.07.2012, Chair:

9:00 Fernando Palacio, Spin Densities in Molecule-Based Magnets: Understanding Magnetic Interaction Mechanisms, *Material Science Institute of Aragón, CSIC-University of Zaragoza, Spain*.

9:35 Maxime Deutsch, Joint charge and spin densities refinement, *Institut Jean Barriol, Université de Lorraine, France*.

9:55 Dominique Luneau, Polarized Neutron Diffraction and molecular magnetic anisotropy: The local susceptibility tensor approach, *Université de Lyon, France*.

10h15 Oksana Zaharko, Source of magnetic anisotropy in a soft layered magnet WCuT, *Laboratory for Neutron Scattering, Paul Scherrer Institute, Switzerland*.

10:35 Erwin Jericha, USANSPOL studies of the microstructure of magnetic ribbons, *Vienna University of Technology, Atominstytut, Austria*.

11:55 coffee break

11:15 Andreas Michels, Magnetic neutron scattering on nanomagnets: Decrypting cross-section images using micromagnetic simulations, *Laboratory for the Physics of Advanced Materials University of Luxembourg*.

11:50 Kathryn Krycka, Disrupting Interparticle Magnetic Cross-Talk within Fe₃O₄ Nanocubes Using FePt Inclusions, *NIST Center for Neutron Research, Gaithersburg, USA*.

12:10 Valeria Lauter, Controlled interfaces for novel physical phenomena and functionality: Interface-induced ferromagnetism at paramagnetic/antiferromagnetic perovskite films, *Oak Ridge National Laboratory, USA*.

12:30 Yuri Nikitenko, Magnetic layer in a neutron wave resonator.

12:45 Kirill Zhernenkov, RF field stimulated magnetization kinetics probed in thin films with MIEZE based Time-Resolved AC(TRAC)PNR, *Ruhr University Bochum, Germany*.

13:00 Lunch

Session: Soft Matter Wednesday, 04.07.2012, Chair:

14:20 Michihiro Nagao, Neutron spin echo revealed thickness fluctuations in surfactant membranes Center for Exploration of Energy and Matter, *Indiana University and NIST Center for Neutron Research, USA*.

15:00 Jin Kui Zhao, Polarized neutron in structural biology – present and future outlook, *NIS-Division, Oak Ridge National Laboratory, USA*.

15:20 Yohei Noda, Spin contrast Variation Study of fuel-efficient tire rubber, *Japan Atomic Energy Agency, Japan*.

15:40 Earl Babcock, Polarization Analysis using ³He for incoherent background reduction in SANS, *Forschungszentrum Jülich, Jülich Centre for Neutron Science, Outstation FRM II, Germany*.

16:00 Florian Piegsa, Dynamically Polarised Proton Spins as a Tool to Tune the Scattering Cross Section in Neutron Laue Diffraction, *ETH Zürich, Switzerland*.

16:20 Poster session B and coffee break

19:00 end of the session

Session: Instrumentation and methods - polarised neutrons, Thursday, 05.07.2012,

Chair :

09:00 Werner Schweika, Towards TOF spectroscopy and Laue diffraction with spherical polarimetry, *Forschungszentrum Jülich, Jülich Centre for Neutron Science, Outstation FRM II, Germany.*

09:20 F. William Hersman, Polarized ^3He production exceeding 100 liters per day using Spin Exchange Optical Pumping, *University of New Hampshire, Durham, USA.*

09:35 Jeroen Plomp, Demonstration of spatial intensity modulated TOF SESANS with simple tools, *Delft University of Technology, The Netherlands.*

09:50 Thomas Keller, Frontiers of Neutron Larmor Diffraction, *Max-Planck-Institut für Festkörperphysik, Stuttgart, Germany.*

10:10 Tatsuro Oda, A beam divergence correction for NRSE spectrometer using polygonal 2D-focusing supermirrors, *Kyoto University, Japan.*

10:25 Felix Groitl, Larmor labeling methods: Neutron Resonance Spin Echo spectroscopy beyond standard line width measurements, *Helmholtz-Zentrum Berlin für Materialien und Energie, Germany.*

10:40 Alexander Ioffe, *Forschungszentrum Jülich, Jülich Centre for Neutron Science, Outstation FRM II, Germany.* To be announced

10:55 Coffee break

11:20 Stephan Mattauch, MARIA – The high-intensity polarized neutron reflectometer of JCNS, *Jülich Centre for Neutron Science (JCNS), Garching, Germany.*

11:35 Wolfgang Haeussler, Studying slow dynamics and depolarizing systems with NRSE-MIEZE at the ESS, *FRM II, Garching, Germany.*

11:50 Wang Chun Chen, A Polarized ^3He Neutron Spin Analyzer for SANS Polarization Analysis, *National Institute of Standards and Technology, Gaithersburg, Maryland.*

12:05 Patrick Hautle, Neutron spin filtering with dynamically polarized protons using photo-excited triplet states, *Paul Scherrer Institute, Villigen, Switzerland.*

12:20 Thomas Gentile, Wide Angle Polarization Analysis with Polarized ^3He Neutron Spin Filters, *Stop 8461, NIST, 100 Bureau Drive, Gaithersburg, Maryland USA.*

12:35 Sergey Kozhevnikov, Polarizing Fe-Co-Fe planar waveguide for neutron microbeam production, *Frank Laboratory of Neutron Physics, JINR, Dubna, Russia*

12:50 closing remarks

13:00 End of the conference