Tentative Program

3rd International Conference on

Magnetism and Magnetic Materials

October 22-23, 2018 | Rome, Italy



Interactive Sessions

Keynote Lectures

Plenary Lectures

Workshops

Exhibitors

B2B Meetings

For available speaker slots

magneticmaterials@internationalmeets.com

3rd International Conference on

Magnetism and Magnetic Materials

October 22-23, 2018 | Rome, Italy

Program at a Glance

Day 1

Morning Sessions	Reception/Registration	08.00-09.00	
		Time	General Session
		09.00-09.15	Inaugural Address
	Least of 3 Keynote/Plenary Talks	09.15-09.45	Keynote/Plenary Talk 1
		09.45-10.15	Keynote/Plenary Talk 2
		10.15-10.45	Keynote/Plenary Talk 3
	Panel Discussions/Group Photo		
	Coffee/Tea Break 10.45-11.00 (Networking)		
Evening Sessions	11.00-12.40	5 Speakers (20 Mins Each)	
	Lunch Break 12.40-13.30		
	13.30-15.30	6 Speakers (20 Mins Each)	
	Coffee/Tea Break 15.30-15.45 (Networking)		
	15.45-17.25	5 Speakers (20 Mins Each)	

19 Speakers for Day 1

Day 2

	Time	Session 1	Session 2
Morning Sessions	09.00-10.40	5 Speakers (20 Mins Each)	5 Speakers (20 Mins Each)
	Coffee/Tea Break 10.40-10.55 (Networking)		
	10.55-12.35	5 Speakers (20 Mins Each)	5 Speakers (20 Mins Each)
	Lunch Break 12.35-13.25		
Evening Sessions	13.25-15.05	5 Speakers (20 Mins Each)	5 Speakers (20 Mins Each)
	Poster Sessions		
	Coffee/Tea Break 15.05-15.20 (Networking)		
	15.20-17.00	5 Speakers (20 Mins Each)	5 Speakers (20 Mins Each)
	Closing Cermony		
	NOTE: Program Shedule is subject to change with final allotment of the speaker slots		

30 Speakers on Day 2

Call for Abstract: https://magneticmaterials.physicsmeeting.com/call-for-abstracts.php

Registration: https://magneticmaterials.physicsmeeting.com/registration.php

Abstract Submission: https://magneticmaterials.physicsmeeting.com/abstract-submission.php

Brochure:: https://magneticmaterials.physicsmeeting.com/conference-brochure.php

For more Details PS: https://magneticmaterials.physicsmeeting.com/

magneticmaterials@internationalmeets.com

Conference Highlights

- Magnetism
- Electromagnetism
- Spintronics
- Nanotechnology
- Materials Science
- Magnetoelectronic Materials
- Magnetization Dynamics
- Hard Magnetic Materials
- Soft Magnetic Materials
- Structured Materials
- Special Magnetic Materials
- Superconductivity and Superfluidity
- Geomagnetism
- Novel Magnetic Materials and Device Applications



conferenceseries.com

3RD INTERNATIONAL CONFERENCE ON

MAGNETISM AND MAGNETIC MATERIALS

OCTOBER 22-23, 2018 | ROME, ITALY

AGENDA

Improvement of Magnetic Properties using High Magnetic Fields

Ke Han
Group Leader
National High Magnetic Field Laboratory
USA

Ke Han completed his PhD in 1992 from Oxford University. He is a faculty member of the National High Magnetic Field Laboratory (MagLab), which is operated by Florida State University (FSU), the University of Florida, and Los Alamos National Laboratory. The MagLab is supported by the US National Science Foundation (DMR-1157490 and DMR-1644779) and the state of Florida. The MagLab possesses some of the world's strongest magnets. Han is involved in the development of materials for those magnets. He has published more than 100 papers in peer-reviewed journals and has been awarded Distinguished University Scholar by FSU. His research interests are magnet materials and magnetic materials.

Condensed Matter Physics in 100 – 1000 T Ultrahigh Magnetic Fields

Yasuhiro Matsuda
University of Tokyo
Japan

Yasuhiro H. Matsuda completed his PhD in the year 1996 at the age of 27 years from Tohoku University. He is the Associate Professor of The Institute for Solid State Physics, The University of Tokyo. He has published more than 100 papers in reputed journals. He is expertise in high-magnetic-field science and condensed matter. His discoveries of novel field-induced phases shed new light on condensed matter physics.

Enhanced Magnetization in the BiFeO3-RMnO3 Thin Films (R= Rare Earth)

Abdelilah LAHMAR
Laboratory of condensed Mater Physics, University of Picardie
France

A. Lahmar received his 'Doctorat es Sciences' in materials chemistry in 2007 from la Rochelle University (France)/ University Mohamed V (Morocco). Subsequently he worked in institute of materials and surface technology (IMST) in Kiel (Germany) until 2012. Then he moved to Amiens, in laboratory of condensed Matter Physics, where he obtained his Habilitation thesis in 2017. His research interests encompass the broad range of multifunctional materials (multiferroic, electrocaloric, magnetoelectrics). he possesses more than 50 papers published in peer reviewed journals and contributed to numerous international conferences

SPEAKER SLOTS AVAILABLE

Unusual Properties of Multilayer Nanoisland Magnetic Systems: Supervortices, Flat Spin Springs, Optical Nonreciprocity

Fedor Pudonin
Head of Laboratory
P.N.Lebedev Physical Institute
Russian Academy of Science
Russia

Fedor Pudonin is the Head of Laboratory, dr. of science in P.N.Lebedev Physical Institute Russian Academy of Science, Russia.

The Experimental Evidences of The Magnetism of Water Arising from a Magnetic-Field

Pang Xiao Feng
University of Electronic Science and Technology
China

Pang Xiao Feng is from the Institute of Life Science and Technology, University of Electronic Science and Technology of China, Chengdu 610054, P.R. China.

Surface Electromagnetic Waves: Past, Present, Future

Vladimir Datsko
Institute of Applied Geophysics
Russia

Vladimir Datsko belongs to the school of the Nobel Prize winner academician P L Kapitza (a student of Ernest Rutherford). After graduating from the Moscow Physical-Technical Institute, he has started study of surface electromagnetic waves (SEV). In 1970 slow surface waves magnitoplazmennaye-a new class of surface excitations of solid-state plasma in magnetized semiconductors were opened; to optical frequencies they were dubbed plasmon and magnetoplasmon. He has observed SEV experimentally on salt water (1980), thereby confirmed experimentally the verification and validation of theoretical model of Sommerfeld-Zennek. He has watched SEV in metals (2012), and on the human body (2013). His dissertation for the Degree of Doctor of Hab. is

SPEAKER SLOTS AVAILABLE

Efficiency of Nanotechnologies in the High Performance of Buildings

Consiglia Mocerino
Professor of Architecture
Sapienza University
of Rome
Italy

Consiglia Mocerino, graduated cum laude with a Master of Science degree in Architecture, Ph.D. in Urban Recovery and Regeneration and specialist in Restoration of monuments, has held at the Faculty of Architecture, Sapienza University of Rome, teaching and research collaboration and teaching assignments, as a contract professor, in Architectural Technology. In the same Faculty she obtained the nomination of subject expert in the discipline of Technology of Architecture and Industrial Design. She is an expert in research on issues related to innovation and technological experimentation of systems

Modelling of the Superconductivity by using Accelerating Longitudinal Vortices

Valentina
Markova
Institute of Mathematics and
Informatics
Bulgaria

I was born in Sofia, Bulgaria. I graduated from St. Kliment Ohridski University of Sofia, specialty Mathematics and Informatics 1981. I graduated also from Sofia Technical University as a distance learning. I defended my doctorate received a PhD degree in Scientific Institute of the Ministry of Military Defense in 1990. I started working at the Bulgarian Academy of Sciences, Institute of Mathematics and Informatics on special topics

Process, Characterization and Physical Properties of 3D Transition Ion Doped-Tetrahedrite Compounds

Adil Guler
Marmara University

Dr. Adil Guler, Lecturer (Ph.D. physics), now is a Researcher in Marmara University, Ataturk Faculty of Education, Department of Computer and Instructive Technology Teacher. He got his B. Sc. in physics and Specialist in Magnetic and Superconductive materials. He got his Ph. D. at Marmara University department of physics. He works in the research group of Prof. Dr. Arunava Gupta as a research scientist in Alabama State University. He also makes projects with Assist. Prof. Dr. Cihat Boyraz on superconductivity and magnetism. Dr. Guler's magnetic superconductivity group has been working on Fe-based superconductors for 5 years.

SPEAKER SLOTS AVAILABLE

Novel Behaviours of Driven Magnets

Muktish Acharyya
Professor
Presidency University

Muktish Acharyya completed his PhD in the year 1996 from Saha Institute of Nuclear Physics (Calcutta University). Now he is Professor of Physics at Presidency University, Kolkata, INDIA. He has published more than 50 papers in reputed journals and has been serving as an editorial board member of repute. His main area of research is nonequilibrium phase transition in magnetic model systems (Rev. Mod. Phys. 71 (1999) 847).

Direct Energy Gap in Light Rare Earth Nitrides: EuN and SmN

Muhammad Azeem
University of Sharjah

Muhammad Azeem is from the Department of Applied Physics and Astronomy, University of Sharjah, Sharjah 27272, United Arab Emirates.

Ultraslow Magnetization Relaxation in Rhombohedral Structured Weak Ferromagnets and Piezomagnets

Namrata Pattanayak
Indian Institute of Science Education and Research

Namrata Pattanayak has completed her Master of Science in Physics from Utkal University Odisha with first class distinction. Since then she has been working on her PhD in the Dept. of physics, Indian Institute of Science Education and Research, Pune under the supervision of Dr. Ashna Bajpai. Namrata's research area includes 'Synthesis and characterization of weakly ferromagnetic and piezomagnetic compounds'.

SPEAKER SLOTS AVAILABLE

Enhancement the Magneto-Electric Properties of Some Ferrite- PVDF Nano Composite

Osama Hemeda
Tanta University

Osama Hemeda is a Professor of Tanta University, Faculty of science, physics department , Egypt

The Energy Performances of Caloric Materials in an Active Caloric Refrigerator

Claudia Masselli
Department of Industrial Engineering
University of Salerno
Italy

Claudia Masselli is a Postdoctoral Research Fellow at University of Salerno. She earned the Ph.D. title in Industrial Engineering on March 2017, discussing the thesis entitled "Magnetic refrigeration an attraction toward our future". Main research topic is caloric refrigeration both experimentally and numerically: she investigates the energetic performances of caloric materials. Her researches embrace, also, the energy and environmental optimization of vapor compression cycles. She is the winner of the Young Researcher Award Certificate of merit for the paper

Structural, Electronic, Magnetic and Transport Properties of Co2Fe1-xCrxSi Heusler Alloys

Deepika Rani
Indian Institute of Technology
Bombay

Deepika Rani is a PhD student in department of physics IIT Bombay, India. Her research work is focused on finding potential materials for applications in the field of Spintronics.

SPEAKER SLOTS AVAILABLE

Biography

Process, Characterization and Physical Properties of 3d Transition Ion Doped-Tetrahedrite Compounds

Cihat Boyraz
Marmara University

Cihat Boyraz, Lecturer (Ph.D. physics), now is a Researcher in Marmara University, Faculty of Technology, Department of Mechanical Engineering. He got his B. Sc. in physics and Specialist in Magnetic and Superconductive materials. He got his Ph. D. at Marmara University department of physics. He worked in the research group of Prof. Dr. Arunava Gupta as a research scientist in Alabama State University. He also makes projects with Prof. Dr. Yildirhan Oner on superconductivity and magnetism. Dr. Boyraz's magnetic superconductivity group has been working on Fe-based superconductors for 5 years.

Synthesis and Investigation of Pr-Cu Substituted CTAB Assisted Microwave Absorbing Nano-Material Suitable for Super High Frequency Applications

Imran Sadiq
University of the Punjab

Dr. Imran Sadiq has earned his PhD in 2014. Currently he is working in as assistant professor in Centre of Excellence in Solid State Physics, University of the Punjab, Lahore, Pakistan. Currently, he is supervising three research students. He has published more than 25 research papers in international peer reviewed journals.

Structural and Magnetic Properties of TbNi-Substituted Calcium Strontium M-Type Nano-Structured Hexa-Ferrites

Hasan Khan
The Islamia University of Bahawalpur

Hasan M. Khan has expertise in manufacturing magnetic materials and their characterization resulting in the wide variety of applications such as electromagnetic interference suppression and recording media. I have 21 high impact factor international publications. I am working as assistant professor in a well esteemed institution The Islamia University of Bahawalpur, Pakistan

SPEAKER SLOTS AVAILABLE

Ab-Initio Study of Structural, Electronic and Magnetic Properties of VFe2O4

Iqra Asif
University of the Punjab

I am Iqra Asif student of MPhil in center of excellence solid state physics Punjab university Lahore. I am doing my research work on magnetic properties using the DFT. I am interested to study about the magnetic material

First-Principles Study of Structural, Elastic and Magnetic Properties of CuCoMnZ (Z=Si, Sn, Sb)

Shanian Boota
University of the Punjab

My name is Shanian. Recently I am a student of M.Phil. at Centre for excellence in solid state physics, university of the Punjab, Lahore Pakistan. During my research work I investigated structural, elastic, mechanical and magnetic properties of CuCoMnZ (Z=Si, Sn, Sb) quaternary Heusler alloys by using First-Principles calculation. I have also presented a poster on "Structural, Elastic, mechanical, Electronic and Electronic Properties of CuCoMnGe" in an international conference at Centre of excellence in solid state physics, university of the

To Study the Structural and Magnetic Properties of Calcium Titanate CaTiO3 Nanoparticles

Muhammad Usama Khan
University of the Punjab

I am Muhammad Usama khan student of MS-NANOTECHNOLOGY at Centre of excellence in solid state physics, university of the Punjab, Lahore 54590, Pakistan under the supervision of Dr. Saira Riaz (associate professor of physics at Centre of excellence in solid state physics, university of the Punjab, Lahore 54590, Pakistan. My session of MS is 2016-2018.

SPEAKER SLOTS AVAILABLE

conferenceseries.com

Biography

The electron correlation effect on the magnetic properties of quasi-one dimensional-materials on the base of graphitic nanoclusters with embedded transition metals

Vladyslav Cheranovskii
Professor
V.N.Karazin Kharkiv National University
Ukraine

Vladyslav Cheranovskii completed his Doctor of Sciences in the year 1994 at the age of 38 years from Institute for Single Crystal. He is the Professor of V.N.Karazin Kharkiv National University, department of Chemistry. He has published 49 papers recognized by Scopus and Web of Science databases. He is working in field of solid state physics and quantum chemistry. Main subject of interest: strongly correlated electron system quantum theoretical simulation of electron structure and thermodynamics of nanomagnets

Study of influence of Pr3+ ions on the structural, optical and magnetic properties of R-type hexagonal

Abdul Basit Javaid
University of the Punjab

I am a student Studying MS in Nanotechnology in CoE in Solid State Physics in University of Punjab, Lahore, Pakistan. My research topic is synthesis and characterization of r-type hexaferrites

SPEAKER SLOTS AVAILABLE

First-Principles Studies for the Structural and Magnetic Properties of CuCoMnZ (Z=Si, Sb) Equiatomic Quaternary Heusler Alloys

Abu Bakar
University of the Punjab Lahore
Pakistan

Abu Bakar completed his MPhil in the year 2016 at the age of 27 years from Centre of Excellence in Solid State Physics University of the Punjab, Lahore Pakistan. He is currently working as a research assistant at CSSP, a premier Centre in the field of Solid State Physics. He has two accepted publication in reputed journals and has two publications under review. He has expertise in Density Functional Theory based calculations using Wien2k and Quantum ESPRESSO codes. He also has the interest in theoretical analytical field.

Soft Magnetic Materials

Bashir Ahmad
Bahauddin university Multan
Pakistan

I am interested to engage in innovative research of material chemistry, which includes the synthesis of New Nano composites and oxides having novel structures surface morphologies, developments of more efficient and exploration of New chemical transmutation process.

Macroscopic Dynamics of Ferrofluids

Victor Sokolov
Professor
Mirea – Russian Technological University
Russia

Dr. Victor V. Sokolov is a professor at Mirea-Russian Technological University, Russia. His activities and awards are Russian Government Premium in Education (2013), Honored worker of higher education of the Russian Federation (2003), Certificate of Soros's Associate Professor of Physics (1998). He is a member of Russian National Committee on Theoretical and Applied Mechanics. Research interests are macroscopic theory of continuum with frozen-in magnetization and Hamiltonian dynamics of complex fluid.

SPEAKER SLOTS AVAILABLE

Biography

Shaping Nanoscale Magnetic Domain Memory in Exchange-Coupled [Co/Pd]IrMn Thin Films by Field Cooling

Karine Chesnel
Associate Professor
Brigham Young University
USA

Karine Chesnel received her PhD in Physics in 2002 at the University Joseph Fourier in Grenoble France. She is currently an Associate Professor in the department of Physics and Astronomy at Brigham Young University. Her research focuses on Nanomagnetism, the study of magnetic properties at the nanoscale. Materials she has been investigated include ferromagnetic thin films with exchange bias, and superparamagnetic nanoparticles. She has published about 40 papers on these topics including a book chapter on magnetic domain memory

Simulated Thermomagnetic Properties of DyAl2, HoAl2 and ErAl2 Compounds Calculated by ATOMIC MATTERS MFA Computation System

Rafal Michalski
CEO
Atomic Systems Ltd.
Poland

Rafał Michalski graduated in 1996 from the Pedagogical of University Krakow, Poland in the department of Physics, Mathematics and Computer science. He worked in the Institute of Physics and Computer Science as an Assistant Professor (1996-2001) and then in 2001 he gained a Ph.D in physics in the department of Nuclear Physics and Solid State Physics at Krakow University of Mining and Metallurgy (AGH). Subsequently, he became an associate professor. His PhD Thesis was "Calculations of the thermal evolution properties of 4f-electron compounds with the use of the self-consistent methods". In 2001, dr R. Michalski become a leader of a Polish Scientific Research Committee project (no 1463/P03/2002/22) entitled "The Effects of crystalline symmetry in ThCr2Si2 type Rare Earth compounds". The project ended 31.12.2002. Simultaneously,

Potential of the "NMR-In-Magnetics" Technique in the Study of Local Structure of Various Magnetic Materials

Vladimir Matveev
Saint Petersburg University
Russia

Vladimir V. Matveev has completed his PhD at the age of 32 years from Semenov Institute of Chemical Physics of USSR Academy of Sciences. He is a Senior Researcher of Department of Nuclear-Physics Investigation Techniques of Saint Petersburg State University, Russia. He has published more than 25 papers in reputed journals and made a lot of reports/lectures at International conferences.

SPEAKER SLOTS AVAILABLE

Biography

Synthesis and Microwave Characteristic of Y and Z type Hexaferrite

Tatyana Koutzarova
Associate Professor
Bulgarian Academy of Sciences
Bulgaria

Tatyana Koutzarova completed her PhD in 2002 from the Institute of Electronics, Bulgarian Academy of Sciences. She is Head of the Microwave Magnetics Laboratory of the Institute of Electronics. She has published more than 65 papers in international journals and has been co-authors of four book chapters. She has expertise in the field of magnetic oxides preparation – Multiferroic materials, Nano-powders, Films, Nano-composites and Microwave absorbers; Superconductors – powders, Polycrystalline bulk, Single-domain, Thick films; Diluted-magnetic semiconductors - thin films.

Iron Oxides/Hydroxides Magnetic Biomaterials for Application in Electronics & Medicine

Ivan Nedkov
Professor
Bulgarian Academy of Sciences
Bulgaria

Ivan Nedkov is Professor in Institute of Electronics, was completed PhD (1978) and DrSc (2000) in Bulgarian Academy of Sciences. Specialized in Magnetism and Mössbauer spectroscopy (1984) in Laboratoire de Magnetism CNRS, France. Published more than 110 papers in reputed journals and was editor and author of 6 books. His research areas are: material science, magnetism and magneto electronics. He was invited professor in many reputed Universities - Indian Institute of Technology; Okayama University, Japan; University "P. Sabatie", France; Gent University, Belgium etc. He is membership of Group 4 of European Commission and the Programme Committee of European Research Council.

SPEAKER SLOTS AVAILABLE

Local Gauge Invariance and Spin Superconductivity in Materials Magnetic described by the Two-Dimensional Compass Model with Heisenberg Interactions

Leonardo S. Lima
Departamento de Física, Centro Federal de Educação Tecnológica de Minas Gerais
Brazil

He holds a degree in Physics from the Federal University of Minas Gerais (2002), a PhD in Physics from the Federal University of Minas Gerais (2005), a PhD in Physics from the Federal University of Minas Gerais (2009) and a postdoctoral degree from the Technische Universität Kaiserslautern. He has experience in Physics, with emphasis on Condensed Matter Physics, working mainly on the following topics: Quantum Field Theory applied to Condensed Matter Physics, Magnetism and Magnetic Materials.

Non-Local Spin Transport in Topological Insulator Nanowires

Jia G. Lu
University of Southern California
USA

Professor Lu received dual B.S. degrees in Physics and Electrical Engineering in 1992 at Washington University in St. Louis. After studying in Professor Michael Tinkham's research group at Harvard University on superconducting single-electron transistors, she received her Ph.D in 1997. She subsequently conducted her postdoctoral research on the electron transport of individual carbon nanotubes at UC Berkeley under the University of California President's Postdoctoral Fellowship.

Critical Behavior of GaMnAs Diluted Magnetic Semiconductors near the Curie Temperature

Shavkat Yuldashev
Professor Dongguk University
South Korea

Shavkat Yuldashev completed his PhD in the year 1983 at the age of 28 years from A.F. Ioffe Institute, Saint-Petersburg. He is the Professor of Department of Physics of Dongguk University, Seoul, South Korea. He has published more than 175 papers in reputed journals. His expertise is in diluted magnetic semiconductors and spintronics.

SPEAKER SLOTS AVAILABLE

Photo-Induced Magneto-Optical Phenomena in Magnetic Semiconductors: Europium Chalcogenides

Victor Pavlov
Ioffe Institute, the Russian Academy of Sciences, St. Petersburg Russia

Victor Pavlov completed his PhD in the year 1993 and second PhD in the year 2007 at the Ioffe Institute, St. Petersburg, Russia. He is the laboratory head of optical phenomena in magnetic and semiconductor crystals. He has published more than 80 papers on linear and nonlinear magneto-optical phenomena in bulk magnetically ordered materials and nanostructures.

Detection of Small Size Defect in the Insulated Pipe using Pulsed Eddy Current

Deuk Gun Park Principal Researcher Nuclear Materials Research Division, Korea Atomic Energy Research Institute
South Korea

Dr. Duck-Gun Park has his expertise for the study of radiation damage and its evaluation in the reactor pressure vessel steel. He concentrated his study in for the nondestructive evaluation of radiation embrittlement using magnetic methods such as hysteresis and Barkhausen noise. He also interested in the development of magnetic sensor and its applications. Recently he developed the method to detect the damage of biomaterials by the combination of magnetic nano particles and biomaterials in connection with magnetic sensor, and nondestructive evaluation of steel pipe covered with insulation using pulsed eddy current

The role of Nano Sized Defects in the Fe-Cu Alloy studied by Magnetic Nuclear Scattering

Kyeong Ho Kim
Principal Researcher Nuclear Materials Research Division, Korea Atomic Energy Research Institute
South Korea

Kyung-Ho Kim has his expertise in the development the technology of materials properties measurement, and also concentrated his passion in the nanotechnologies which produce magnetic nano particle and its applications. He developed the technology to weld dissimilar metals using special filler materials. He also interested in the commercialization of technology, and served as a manager for this department in the Korea Atomic Energy Research Institute

SPEAKER SLOTS AVAILABLE

Structure and Magnetic Properties of Alloys based on SmFe17 Nitride after Serve Plastic Deformation by Torsion

Shchetinin Igor
Head of Laboratory National University of Science and Technology
Russia

Igor V. Shchetinin completed his PhD in the year 2012 at the age of 27 years from National University of Science and Technology. He is the head of "X-ray structure analysis and diagnostic of materials" laboratory . He has published more than 60 papers in reputed journals and has been serving as an editorial board member of repute.

Influence of Production Methods on Structure and Magnetic Properties of NdFe11Ti Based Allovs and their Nitrides

Shchetinin Igor
Head of Laboratory National University of Science and Technology
Russia

Igor V. Shchetinin completed his PhD in the year 2012 at the age of 27 years from National University of Science and Technology. He is the head of "X-ray structure analysis and diagnostic of materials" laboratory . He has published more than 60 papers in reputed journals and has been serving as an editorial board member of repute.

SPEAKER SLOTS AVAILABLE

Thermal Conductance of Zero Modes on the Surface Boundary of a Weyl Semimetal

David Schmeltzer
Professor
City College of the City University of New York
USA

B.Sc., Hebrew Univ.; M.Sc., Technion, D.Sc.
Condensed Matter Theory

Theoretical Investigation of the Coexistence of Superconductivity and Antiferromagnetism in Superconductor CeRhIn5

Tamiru Negussie
Debre Markos University
Ethiopia

This research work focuses on the theoretical investigation of the possible coexistence of superconductivity and antiferromagnetism in superconductor CeRhIn5. By developing a model Hamiltonian for the system under consideration and using double time temperature dependent Green's function formalism, we obtained expressions for superconducting transition temperature (Tc),Neel temperature (TN) , superconductivity order parameter ( ) and magnetic order parameter ( ). By employing appropriate experimental and theoretical values for the parameters in the developed expressions, a phase diagram that shows the possible coexistence of superconductivity and antiferromagnetism in CeRhIn5 is demonstrated.

Toward Addressing the Stability Challenge of Solution Processed Organic Solar Cells

Zhe Li
Cardiff University
UK

Dr Zhe LI has completed his PhD in early 2012 from University of Cambridge and postdoctoral studies from Imperial College of London in 2014. Later on, he joined Swansea University as a research fellow (2014-2016) and senior research fellow (2016-2017). He is now a Lecturer in Energy Materials at School of Engineering, Cardiff University. He has published more than 30 papers in reputed journals and holder of 1 industrial patent.

SPEAKER SLOTS AVAILABLE

Sustainability of Nanomaterials in Architecture

Consiglia Mocerino
Sapienza University of Rome
Italy

Consiglia Mocerino, graduated cum laude with a Master of Science degree in Architecture, Ph.D. in Urban Recovery and Regeneration and specialist in Restoration of monuments, has held at the Faculty of Architecture, Sapienza University of Rome, teaching and research collaboration and teaching assignments, as a contract professor, in Architectural Technology. In the same Faculty she obtained the nomination of subject expert in the discipline of Technology of Architecture and Industrial Design. She is an expert in research on issues related to innovation and technological experimentation of systems and products in efficient, intelligent, low impact, environmentally friendly architectures, innovative materials and the application of third generation nanotechnologies.

Synthesis and Controllable Time and Feed Ratio of Organic-Inorganic Hybrids with Near Infrared Absorption for Solar Cells

NAHLA OMER ELSADIG
Donghua University
China

College of Material Science and Engineering & State Key Laboratory for Modification of Chemical Fibers and Polymer Materials, Donghua University, Shanghai 201620, China.

SPEAKER SLOTS AVAILABLE

Toward Addressing the Stability Challenge of Solution Processed Organic Solar Cells

Zhe Li
Cardiff University
UK

Dr Zhe LI has completed his PhD in early 2012 from University of Cambridge and postdoctoral studies from Imperial College of London in 2014. Later on he joined Swansea University as a research fellow (2014-2016) and senior research fellow (2016-2017). He is now a Lecturer in Energy Materials at School of Engineering, Cardiff University. He has published more than 30 papers in reputed journals and holder of 1 industrial patent.

A Step towards Magnetic Separation of Rare Earth Ions

Liubov Lukina
Materials Engineering Department, KU Leuven
Belgium

Liubov Lukina obtained her Engineer diploma from the National Mineral Resources University in Saint Petersburg, Russia in 2015. Subsequently, Liubov completed the Master program in Chemical Engineering in Lappeenranta University of Technology (Finland) in 2016. Since her Master Thesis work concerned separation of rare earth metals, Liubov decided to pursue researching this direction. Right now Liubov is working on her doctoral thesis on the border of chemistry, physics and engineering in university of KU Leuven in Belgium. She hopes that her work will help developing green methods for rare earth metal recycling from electronic and mining waste.

Enhancement of Germination in Maize (Zea Mays Variety: Ganga Safed) by Magnetic Field – Signal Transduction

K. N. Guruprasad
Director
Shri Vaishnav Vidyapeeth Vishwavidyalaya

Dr. K. N. Guruprasad is Director of Shri Vaishnav Institute of Science, SVVV, Indore, Madhya Pradesh, India. He has worked in the area of photobiology and magneto-biology for over 30 years and has published over 85 research papers in journals of international repute. His work on improvement of crop yields by magnetic field treatment is gaining importance in the field of agriculture as a non-invasive physical method that can enhance the performance of crop plants.

SPEAKER SLOTS AVAILABLE

Biography

Nanoisland Magnetic Films: Technology and Possible Applications

Fedor Pudonin
Head of Laboratory
P.N.Lebedev Physical Institute
Russian Academy of Science
Russia

Fedor Pudonin is the Head of Laboratory, dr. of science in P.N.Lebedev Physical Institute Russian Academy of Science, Russia.

Pretreatment by Pulsed Electric Field for the Extraction of the Microwave Assisted Essential Oil of an Aromatic Plant

Mohammed M.K. Matar
Université Mustapha Stambouli de Mascara
Algeria

This work concerns the extraction of the essential oil of a medicinal and aromatic plant peppermint by hydro distillation then by a pulsed electric field treatment and a hydro distillation assisted by microwave to study the parameters having an impact on the yield in the essential oil. In this work, we discussed the different bibliographic knowledge on pulsed electric field (PEF) treatment, microwave technology, essential oils and aromatic and medicinal plants.

Magneto-electronic and Thermodynamic Properties of Cr2GdGe1-xSnx Heusler Alloys

Ismail Chaib
Hassiba Benbouali University of CHLEF
Algeria

Ismail Chaib is master's student at Hassiba Benbouali University of Chlef, materials science specialty. He is supervised by the associate professor Habib Rached from the same university.

SPEAKER SLOTS AVAILABLE

Peculiarities of The Energy Spectrum and the Magnetic Properties of Strongly Correlated Electron Systems on Bipartite Lattices Formed by Weakly Interacting Linear Segments

Vladyslav Cheranovskii
Prof. V.N.Karazin Kharkiv National University
Ukraine

Vladyslav Cheranovskii completed his Doctor of Sciences in the year 1994 at the age of 38 years from Institute for Single Crystal. He is the Professor of V.N.Karazin Kharkiv National University, department of Chemistry. He has published 49 papers recognized by Scopus and Web of Science databases.He is working in field of solid state physics and quantum chemistry. Main subject of interest: strongly correlated electron system quantum theoretical simulation of electron structure and thermodynamics of nanomagnets.

Low Temperature Properties of Low-Dimensional Exactly Solvable Spin Models with Impurities

Elena Ezerskaya
VN Karazin Kharkiv National University
Ukraine

Elena Ezerskaya completed her PhD in the year 1985 from VN Karazin Kharkiv National University. She is Associate Prof. at the Theoretical Physics Department of VN Karazin Kharkiv National University. She has published more than 30 papers in reputed journals. She is experienced university teacher and researcher in field of Theoretical Physics for more the 30 years, supervisor of MS and PhD students.

Phase Diagram for the O(n) Model with defects of different types and Verity of the Imry-Ma Theorem

Alexander Sigov
MIREA - Russian Technological University
Russian Federation

Alexander Sigov has his expertise in evaluation and passion in improving the theory of defect-induced anomalies of physical properties near phase transitions. His first paper on this subject was published in 1978, and from that time there arrived more than a hundred of publications. Most results have been obtained within the framework of the phenomenological approach. Elucidating the range of applicability of the mean-field theory for systems with defects of different types, A. Morosov and A. Sigov demonstrated that the theory is valid up to a very narrow vicinity of the phase transition temperature to open a possibility of adequate interpretation of experimental results. In the field of magnetic materials, multilayer magnetic nanostructures were studied and it was found that in the ferromagnet-antiferromagnet multilayer nanostructure the behavior of magnetic order parameters in the layers strongly depends on the

SPEAKER SLOTS AVAILABLE

Direct Volumetric Measurement of Crystallographic Texture using Acoustic Waves

Bo Lan
Imperial College London

Bo Lan completed his PhD in the year of 2014 at the age of 26 from University of Oxford, UK. He is currently a Research Associate at the Dpeartment of Mechanical Engineering of Imperial College London. He has published a number of papers on reputed journals, and his main contribution to literature so far is a systematic solution, covering from theoretical framework to experimental validations, to a long-standing problem of obtaining crystallographic texture information from polycrystalline bulk materials. This enable a radically different non-destructive material evaluation capability (e.g. material property prediction and utilisation) for industrial usages, but also opens up further scientific research opportunities on wave-material interactions.

Magnonic Supercurrents

Dmytro Bozhko
Technische Universität Kaiserslautern

Dmytro Bozhko completed his PhD in the year 2017 in the University of Kaiserslautern. Now he is postdoctoral researcher in the group Magnetismus at the University of Kaiserslautern. His areas of expertise are spintronics, magnonics and Brillouin light scattering. He made significant contribution to development of the area of magnon gases and condensates, in particular to the discovery of magnon supercurrents - macroscopic quantum transport phenomenon at room temperature.

Magnetic Fluctuations in Unconventional Superconductors: The onset of Superconducting Phase Transition

Sung-Ho Salk
Korea Academy of Science and Technology and Pohang University of Science and Technology
Korea

Sung-Ho Salk completed his doctoral degree in physics and earned Phi Kapa Phi honor from the University of Texas at Austin in the year of 1972. He is now permanent fellow in the Korea Academy of Science and Technology and professor emeritus in the Pohang University of Science and Technology. He has published more than 300 hundred referred, invited and proceeding papers in renowned journals and conference proceedings. He is a leading physicist who developed a gauge theoretic slave-boson theory of high temperature superconductivity, in that his theory agrees with most of measurements unlike other proposed theories thus far.

SPEAKER SLOTS AVAILABLE

Plan your trip to Rome



Colosseum



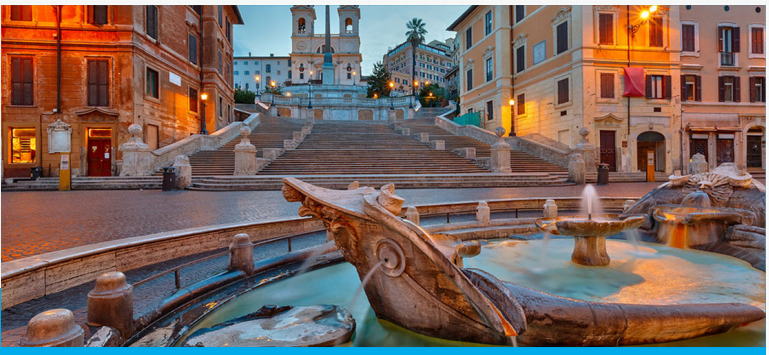
St. Peter's Basilica



Pantheon



Trevi Fountain



Spanish Steps



Roman Forum



Vatican Museums and Sistine Chapel



Castle Saint Angelo

SCIENTIFIC PROGRAM

International Conference on

Magnetism and MagneticMaterials

October 09-10, 2017 London, Uk

Conference Day 1 | Monday, October 09, 2017

Atlantis 1

Registration Desk Opens

Opening Ceremony

KEYNOTE FORUM

Introduction

Title: Processing of τ- MnAl
Ian Baker, Dartmouth College, USA

Title: Metal hydride magnetocaloric compounds
Valérie Paul-Boncour, Institute of Chemistry and Materials Paris East (ICMPE), France

Title: Control ferromagnets at room temperature without external magnetic field
Kaiyou Wang, Institute of Semiconductors, CAS, PR China

Title: Advanced spintronic materials based on ordered alloys
Koki Takanashi, Tohoku University, Japan

GROUP PHOTO

NETWORKING & REFRESHMENT BREAK

SPECIAL SESSION

Title: Additive manufacturing of high performance NdFeB Magnets
M Parans Paranthaman, Oak Ridge National Laboratory, USA

Sessions: **Magnetism and Magnetic Materials | Functional Magnetic Materials | Magnetization Dynamics | Hard and Soft Magnetic Materials**

Session Chair: R K Pandey, Texas State University, USA

Session Co-chair: Ian Baker, Dartmouth College, USA

Session Introduction

Title: Ternary phase soft magnetic coating on grain oriented electrical steel
Sreedhara Sarma, Tata Steel Europe Warwick Technology Centre, UK

Title: Influence of the pressure on the multiferroic properties of the RMn_2O_5 series
P Foury-Leylekian, Univ. Paris Sud Université Paris-Saclay, France

Title: Growth and characterisation of antiferromagnetic/ferromagnetic heusler alloy films
Atsufumi Hirohata, University of York, England

Title: Phase diagram for the O(n) model with defects of random local field type and verity of the Imry-Ma theorem
A S Sigov, Moscow Technological University, Russian Federation

Title: Identification of wall thinning of steel pipe using PEC spectrum Analysis
Kyung-Ho Kim, Korea Atomic Energy Research Institute, South Korea

LUNCH BREAK

Title: Artificial magnetic lattices and their applications in optical and spin wave micro-devices
Mitsuteru Inoue, Toyohashi University of Technology, Japan

Title: Fabrication and application of Magnetorheological fluids
Hyoung Jin Choi, Inha University, South Korea

Title: Exploring multiferroic materials for enhanced magnetoelectric coupling
Anju Ahlawat, Raja Ramanna Centre for Advanced Technology, India

Title: Heusler alloy thin films for data storage and energy
Francesca Casoli, IMEM of the Italian National Research Council (CNR), Italy

Title: Research on Fe-based amorphous alloys with high-Fe content and excellent soft magnetic property
Ke-Fu Yao, Tsinghua University, China

NETWORKING & REFRESHMENT BREAK

Sessions: **Magnetism and Magnetic Materials | Magnetic Data Storage**

Session Chair: Koki Takanashi, Tohoku University, Japan

Session Co-chair: Atsufumi Hirohata, University of York, England

Session Introduction

Title: Microwave heating mechanism of liquid crystals as revealed by microwave irradiation NMR spectroscopy
Akira Naito, Yokohama National University, Japan
Title: Magnetic energy optimization of Cobalt-based nanostructured magnet
Silvana Mercone, Université Sorbonne Paris Cité, France
Title: Electric tuning of Magnetic Permeability
Chenglong Jia, Lanzhou University, China
Title: Modeling non-linear magneto-elastic effects in hydrogels filled with ferromagnetic nanoparticles
Olga Kuksenok, Clemson University, USA
Title: Role of spin-charge coupling on antiferromagnetic universal scaling behaviors in unconventional Cu-based and Fe-based high temperature superconductors
Sung-Ho S Salk, Korea Academy of Science and Technology, South Korea
Title: Linear acceleration over water surface by using magnetic strips
Suresh Kumar Baliyan, Saipem, Saudi Arabia
Title: Applications of rapidly solidified magnetic materials for structural health monitoring of engineering components
Amitava Mitra, CSIR-National Metallurgical Laboratory, India
Title: Study on the permanent magnetic properties of a series of W-type hexagonal ferrites
Xiansong Liu, Anhui University, Hefei, China

PANEL DISCUSSION

Conference Day 2 | Tuesday, October 10, 2017

Atlantis 1

KEYNOTE FORUM

Title: Magnetic Impurities in cold atom systems
Yshai Avishai, Ben Gurion University (Israel), NYU-Shanghai (China) and YITP (Japan)
Title: Effect of induced magnetic field on structure and properties of electrodeposited Ni-W alloy coatings
A Chitharanjan Hegde, National Institute of Technology Karnataka, India
Title: Spin superfluidity, coherent spin precession and magnon BEC
Edouard B Sonin, Hebrew University of Jerusalem, Israel

NETWORKING & REFRESHMENT BREAK

Sessions: **Electromagnetism | Nanomaterials and Nanotechnology | Materials Science and Engineering | Superconductivity and Superfluidity | Spintronic Effects and Devices**

Session Chair: Nicholas G Kioussis, California State University Northridge, USA

Session Co-chair: Sayan Bhattacharyya, Institute of Science Education and Research (IISER) Kolkata, India

Session Introduction

Title: Application of magnetic field for enhancement of yield in soybean and maize
K N Guruprasad, Shri Vaishnav Vidyapeeth Vishwavidyalaya, India
Title: Magnetic transistor and sensor based on Varistor diodes
R K Pandey, Texas State University, USA
Title: Electron acceleration by Chirped axicon Gaussian laser in *vacuum*
Niti Kant, Lovely Professional University, India
Title: Features of tunnel magneto resistive effect in various types of nanocomposites
Oleg V Stognei, Voronezh State Technical University, Russia
Title: Anti-ferromagnetism in paramagnetic ion doped semiconductor nanocrystals
Shun-Jen Cheng, National Chiao Tung University, Taiwan
Title: Structure-Property correlations of magnetic nanoheterostructures
Sayan Bhattacharyya, Indian Institute of Science Education and Research (IISER) Kolkata, India
Title: Perpendicular magnetic anisotropy and its reorientation in two-dimensional structures
Dorj Odkhuu, Incheon National University, South Korea

LUNCH BREAK

Title: Magnetomigration of rare-earth ions in strong magnetic fields
Isadora R Rodrigues, KU Leuven, Belgium
Title: Hexagonal ferrite Ecoceramics: Magnetic biomorphic / biomimetic 3DOM foams produced using cork as a natural sustainable template
Robert C Pullar, University of Aveiro, Portugal
Title: From high-spin single molecule magnets to low-spin single ion magnets
Roman Boča, University of SS Cyril and Methodius in Trnava, Slovakia
Title: Electric field and strain control of magnetism: Towards ultralow energy memory devices
Nicholas G Kioussis, California State University Northridge, USA
Title: Antiferromagnet-based tunnel junctions
Cheng Song, Tsinghua University, China

Title: Magnetic and thermodynamic models of iron-based alloys for fusion materials application
Duc Nguyen-Manh, United Kingdom Atomic Energy Authority, UK

NETWORKING & REFRESHMENT BREAK

Title: Process, Characterization and ESR Properties of 3d Transition Ion Doped-Tetrahedrite Compounds
Cihat Boyraz, Marmara University, Turkey
Title: Magnetism in Pt-nanoparticles
Roberto D'Agosta, Universidad del Pais Vasco, Spain
Title: Effect of Cu substitution on the magnetism and electronic structure of hexagonal $YMnO_3$
Qi Li, Southeast University, China
Title: Comparative study of structural, electrical and dielectric properties of Ni and Mg substituted Zn nano-ferrites
Nasir Amin, Government College University Faisalabad, Pakistan

Poster Presentations

Young Researchers Forum

Title: Magneto-elastic effect on ferromagnetism induced by quantum-well states in Pd thin film
Yusuke BAN, Keio University, Japan
Title: Aspects of magnetocaloric effects and hyperthermia using magnetic materials
Elena Yuan, INCDIE-ICPE CA, Romania
Title: The effect of alkali concentration on the structural and magnetic properties of Mn-ferrite nanoparticles prepared via the co-precipitation method
Somayeh Pourbafarani, Isfahan University, Iran
Title: Lock-in thermography: A new method for magnetic nanoparticles and the quantification of heat
Federica Crippa, University of Fribourg, Switzerland
Title: Defect induced magnetism in ZnO: A first spintronic device application
Lukas Botsch, University of Leipzig, Germany
Title: Computation of neutral points in magnetic flux density due to magnets in magnetic motor for cogging reduction
Amrit Panthi, Tribhuvan University, Nepal

VIDEO PRESENTATIONS

Title: Magnonic studies of ferromagnetic nanostructures
Guru Venkat, Indian Institute of Technology Madras, India
Magnetic ground state and multiferroic nature of hexagonal $LuFeO_3$ nanoparticles
Pittala Suresh, Indian Institute of Science, India

PANEL DISCUSSION

Awards & Closing Ceremony

Bookmark your dates

3rd International Conference on

Magnetism and Magnetic Materials

October 22-23, 2018 | Rome, Italy

E-mail: magneticmaterials@internationalmeets.com; magneticmaterials@physicsconference.org
Website: https://magneticmaterials.physicsmeeting.com/