Keynote Forum

08:55-09:00 Introduction

9:00-9:30 Title: In-situ electron paramagnetic resonance studies of paramagnetic point defects in superconducting microwave resonators
Nathan Newman, Arizona State University, USA

9:30-10:00 Title: Photonic applications with a protein complex
DVG LN Rao, University of Massachusetts, USA

10:00-10:30 Title: Theory of thermal expansion of magnetic superconductors
Rikio Konno, Kindai University Technical College, Japan

Networking & Refreshment Break 10:30-10:50

Sessions:

Session Chair: Himanshu Verma, University of South Florida, USA
Session Co-chair: Igor Tralle, University of Rzeszow, Poland

10:50-11:10 Title: Scanning tunneling microscopy across a superconductor/topological insulator interface
Stuart Tessmer, Michigan State University, USA

11:10-11:30 Title: Braiding of majorana fermions and topological quantum computation
Louis H Kauffman, University of Illinois at Chicago, USA

11:30-11:50 Title: Electronic and magnetic behaviors of 2D atom-thin layers: Graphene, black phosphorus, hexagonal boron-nitride and MoS2
Junji Haruyama, Aoyama Gakuin University, Japan

11:50-12:10 Title: Quantum entanglement in electron ballistic transport and jaynes-cummings model
Igor Tralle, University of Rzeszow, Poland

12:10-12:30 Title: Mott-insulators vs. bipolaronic insulators in a deformable lattice and their transitions to metallic ground states by tuning the deformation potential
Gayan Prasad Hettiarachchi, Osaka University, Japan

12:30-12:50 Title: The phase transition in cerium metal studied by an LDA + Gutzwiller method
Haifeng Song, Institute of Applied Physics and Computational Mathematics, China

12:50-13:10 Title: Melting and transport properties of aluminium at high pressure from ab initio molecular dynamics simulations
S C Wang, Institute of Applied Physics and Computational Mathematics, China

Lunch Break 13:10-14:00

14:00-14:20 Title: The properties of α and β-UH3 under extreme conditions (stretching and compressing strains): An ab initio study
Hongzhou Song, Institute of Applied Physics and Computational Mathematics, People’s Republic of China

Panel Discussion

Sessions:
Solid State Physics and Crystallography | Quantum Physics in Condensed Matter and Mesoscopic Physics
Session Chair: C S Ting, University of Houston, USA
Session Co-chair: Rita John, University of Madras, India

14:20-14:40  
**Title:** Novel electronic properties of hydrogenated grapheme: The first principles calculations  
C S Ting, University of Houston, USA

14:40-15:00  
**Title:** Theoretical investigation on 2D materials: grapheme, silicene, germanane, and stanene  
Rita John, University of Madras, India

15:00-15:20  
**Title:** The collective effect of magnetic holes of different dimensions in superparamagnetic continuum subjected to gradient magnetic field: A bireferengence study  
P M Trivedi, Bhavan's Sheth R A College of Science, India

15:20-15:40  
**Title:** Improved electrochromic performance of WO3/PPy thin films  
Anamika Vitthal Kadam, D Y Patil College of Engineering and Technology, India

15:40-16:00  
**Title:** The collective effect of magnetic holes of different dimensions in superparamagnetic continuum subjected to gradient magnetic field: A bireferengence study  
P M Trivedi, Bhavan's Sheth R A College of Science, India

16:20-16:40  
**Title:** Numerical modeling of exciton-light coupling in quantum wells  
Pavel Belov, Saint Petersburg State University, Russia

16:40-17:00  
**Title:** Quantum computation with fibonacci anyons  
Claire Levaillant, University of California at Santa Barbara, USA

17:00-17:20  
**Title:** Study of radiation effects on photoelectric and luminescence parameters of two-barrier structures based on silicon  
F P Abasov, Institute of Radiation Problems of NAS of Azerbaijan, Azerbaijan

17:20-17:40  
**Title:** The thermodynamic and optical properties of diamond: A first-principles study  
Qili Zhang, Institute of Applied Physics and Computational Mathematics, China

Networking and Refreshments 16:00-16:20

17:40-18:00  
**Title:** Degeneracy and interference quantum effects in phase space distribution functions: Path integral approach  
A S Larkin, Joint Institute for High Temperatures-RAS, Russia

Panel Discussions

Day 2   October 27, 2016

**Keynote Forum**

08:45-09:15  
**Title:** Exploration of intermediate phases of matter on surfaces  
Michael W Roth, Northern Kentucky University, USA

09:15-09:45  
**Title:** Topological phase transitions and a two-dimensional Weyl superconductor in a superconductor/half-metal heterostructure  
C S Ting, University of Houston, USA

**Session:** Nano and Mesoscopic Scale

**Session Chair:** Elie. A Moujaes, Federal University of Rondônia, Brazil
**Session Co-chair:** Yuko Ichiyanagi, Yokohama National University, Japan

**Session Introduction**

09:45-10:05  
**Title:** Fundamental mechanisms that determine the loss tangent and temperature coefficient of resonant frequency (\( \tau_f \)) in modern microwave ceramic dielectrics  
Nathan Newman, Arizona State University, USA

10:05-10:25  
**Title:** Strongly localized isoelastic impurities for synthesizing novel semiconductor alloys  
Kirstin Alberi, National Renewable Energy Laboratory, USA
10:25-10:45
Title: Local structure analysis and biomedical applications of multifunctional magnetic nanoparticles
Yuko Ichiyanagi, Yokohama National University, Japan

Networking & Refreshment Break 10:45-11:05

11:05-11:25
Title: Magnetization of ultrathin [Fe1-cNic]n alloy nanojunctions between Fe or Co leads using an EFT-MFT model
Elie A Moujaes, Federal University of Rondonia, Brazil

11:25-11:45
Title: Electronic structure of graphene wormhole and graphitic nanocone
Jan Smotlacha, Joint Institute for Nuclear Research, Russia

11:45-12:05
Title: Synthesis and characterization of Zn-substituted lithium cobalt ferrite using sol-gel auto combustion for a cathode material in lithium ion batteries
Mukhtar Ahmad, COMSATS Institute of Information Technology, Pakistan

12:05-12:25
Title: Transport properties of “man-made” crystalline: Semiconductor superlattice
M Kofoworola Awodele, Ladoke Akintola University of Technology, Nigeria

12:25-12:45
Title: Electronic structure of graphene wormhole and graphitic nanocone
Jan Smotlacha, Joint Institute for Nuclear Research, Russia

12:45-13:05
Title: Synthesis and characterization of Zn-substituted lithium cobalt ferrite using sol-gel auto combustion for a cathode material in lithium ion batteries
Mukhtar Ahmad, COMSATS Institute of Information Technology, Pakistan

Lunch Break 13:05-14:00

14:00-14:20
Title: AFM controlled studies of nanoscale polymeric spheres on a Si substrate
Himanshu Verma, University of South Florida, USA

14:20-14:40
Title: Emission, structure and aging of silver doped ZnO nanorod films
T V Torchynska, Instituto Politécnico Nacional, México

Panel Discussion
Session: Meta Materials and Magnetic Materials
Session Chair: Roberto Zivieri, University of Ferrara, Italy
Session Co-chair: Rikio Konno, Kindai University Technical College, Japan

14:40-15:00
Title: 2D ferromagnetic nanostructures: A new class of metamaterials
Roberto Zivieri, University of Ferrara, Italy

15:00-15:20
Title: Theory of thermal expansion of heavy fermion systems
Rikio Konno, Kindai University Technical College, Japan

15:20-15:40
Title: New types of composite metamaterials
Paweł Zięba, University of Rzeszow, Poland

Networking & Refreshment Break 15:40-16:00

16:00-16:20
Title: Impact of CuZn on structural, morphological and magnetic properties of spinel nanocrystalline ferrites for variety of applications
Majid Niaz Akhtar, COMSATS Institute of Information Technology, Pakistan

16:20-16:40
Title: Titanium doped semiconductor microring laser on optical fibers
Muhammad Maqbool, Ball State University, USA

Video Presentation

16:40-17:00
Title: Large-scale Bose-Einstein condensation in a vapor of sodium atoms at normal temperature (T=343K)
Pei Lin You, Guangdong Ocean University, China
Day 3   October 28, 2016
Hall

Sessions:
Superconductivity and Superfluidity | Organic Electronics | Theoretical and Experimental study of Soft Matter

Session Chair: Ranjan Chaudhury, S N Bose National Center For Basic Sciences, India
Session Co-chair: Myung Joon Han, KAIST Institute for interdisciplinary research, Korea

Session Introduction

09:30-09:50
Title: The rich landscape of organic molecules on graphitic surfaces: What molecular dynamics shows
Michael W Roth, Northern Kentucky University, USA

09:50-10:10
Title: Reduced dimensionality and emerging material property in perovskite oxide superlattices: A first-principles study
Myung Joon Han, Korea Advanced Institute of Science and Technology, Korea

10:10-10:30
Title: Spin superfluidity in the frustrated two-dimensional anisotropic XY model
Leonardo dos Santos Lima, Centro Federal de Educação Tecnológica de Minas Gerais, Brazil

Networking & Refreshment Break 15:40-16:00

10:50-11:10
Title: Functional oxide nanoarchitectures for emerging energy and clinical technologies
Oommen K Varghese, University of Houston, USA

11:00-11:20
Title: Effect of metal-ions (Sn and Li) doping on the structural, optical and gas sensing properties of In$_2$O$_3$
nanocrystalline thin films
S N Pandey, Motilal Nehru National Institute of Technology, India

11:30-11:50
Title: Local properties study of substituted Sr-Ca-Cu-O superconducting structur
A Sklyarova, Nagaoka University of Technology, Japan

11:50-12:10
Title: Microscopic understanding of high temperature superconductivity and its possible role towards enhancement of critical temperature
Ranjan Chaudhury, S N Bose National Center For Basic Sciences, India

12:10-12:30
Title: Dielectric relaxation study and molecular interaction of amides in 1, 4-dioxane by using time domain reflectometry
Gajanan Ramrao Mahajan, Shri Datta Arts, Commerce and Science College, India

12:30-12:50
Title: Morphological studies of virgin and ion irradiated nanostructured BaF$_2$ thin films surfaces
S N Pandey, Motilal Nehru National Institute of Technology, India

12:50-13:10
Title: Electron-phonon interaction in nanostructures at sub-Kelvin temperatures
Dragos Victor Anghel, Institutul National de Cercetare-Dezvoltare pentru Fizica si Inginerie Nucleara Horia Hulubei, Romania

Lunch Break 13:10-14:00
Panel Discussion

Bookmark your dates

3rd International Conference and Exhibition on
Condensed Matter Physics and Materials
October 16-18, 2017   Atlanta, USA

4th International Conference and Exhibition on
Theoretical and Condensed Matter Physics
November 6-7, 2017   Toronto, Canada

e-mail: condensedmatter@physicsconferences.org; condensedmatterphysics@conferenceseries.net
Website: condensedmatterphysics.conferenceseries.com/