DAY-1
September 10, 2018
Meeting Hall: Atlantis 1

09:00-09:30 Registrations

Opening Ceremony

KEYNOTE FORUM

09:55-10:00 Introduction

10:00-10:35
Title: Applications of superconducting electronics to quantum optics and quantum metrology
Ling Hao, National Physical Laboratory, UK

10:35-11:10
Title: Preliminary test of electron spin and muscle resistance
Mark G Frank, State University of New York, USA

Networking & Refreshments 11:10-11:30 @ Foyer

GROUP PHOTO: 11:30-11:40

Title: Magnetic effects on chirality and energy of free electrons in quantum field theory and possible experimental tests
Claudio Verzegnassi, University of Udine, Italy

Sessions: Quantum Optics | Interpretation of Quantum Mechanics | Quantum States | Quantum Field Theory | Quantum Thermodynamics

Chair: Ling Hao, National Physical Laboratory, UK
Co-Chair: J. Berakdar, Martin-Luther University Halle–Wittenberg, Germany

INTRODUCTION

12:15-12:40
Title: A highly sensitive microscopic microphone based on cavity opto-mechanics
Sahar Basiri-Esfahani, Swansea University, UK

12:40-13:05
Title: Quantum electrodynamics with an artificial atom in a superconducting circuit
Pol Forn-Díaz, Barcelona Supercomputing Center–CNS, Spain

Lunch Break 13:05-14:05 @ Hotel Restaurants

14:05-14:30
Title: Towards a deterministic and local interpretation of quantum mechanics
Eduardo Nahmad-Achar, National Autonomous University of Mexico, Mexico

Title: Improved optical-field reconstruction of ultrashort pulses by two-step phase-shifting
Yi Cai, Shenzhen University, China
14:55-15:20  Title: An information-theoretic perspective on the quantum bit commitment impossibility theorem  
Naya Nagy, Imam Abdulrahman Bin Faisal University, KSA

15:20-15:45  Title: Effect of wiggler magnetic field on stimulated surface plasma wave in a semiconductor  
Niti Kant, Lovely Professional University, India

15:45-16:10  Title: Effect of an inverse parabolic confining electric potential on third harmonic generation in cylindrical quantum wires  
Moletlanyi Tshipa, University of Botswana, Botswana

Networking & Refreshments 16:10-16:30 @ Foyer

16:30-16:55  Title: Analysis of polarization coding for subcarrier multiplexing quantum key distribution  
Hailin Xiao, Guilin University of Electronic Technology, China

16:55-17:20  Title: Spintronic and quantum computation in quantum dot  
Elnaz Rostampour, Islamic Azad University, Iran

17:20-17:45  Title: Particle and wave transport in driven quantum networks  
Doniyor Babajanov, Turin Polytechnic University, Uzbekistan

Panel Discussion

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**DAY-2**

September 11, 2018  
Meeting Hall: Atlantis 1

**KEYNOTE FORUM**

10:00-10:05  Introduction

10:05-10:40  Title: Quantum thermodynamics and thermal quantum information transfer  
J. Berakdar, Martin-Luther University Halle–Wittenberg, Germany

Title: Fluorine donors in ZnSe: A raising multifunctional qubit for photonics mediated quantum information technology  
Alexander Pawlis, Peter Grünberg Institut PGI 9–Forschungszentrum Jülich GmbH, Germany

Networking & Refreshments 11:15-11:35 @ Foyer

**Sessions:** Quantum Field Theory | Quantum Thermodynamics | Quantum Photonics | Quantum Plasmonics  
Quantum Metrology and Sensing

**Chair:** Wei-Qi Huang, Guizhou University, China  
**Co-Chair:** Zhong Mei Huang, Guizhou University, China
**INTRODUCTION**

**11:35-12:00**

**Title:** Temporal combs in the Hong-Ou-Mandel effect in noncollinear and frequency-nondegenerate spontaneous parametric down-conversion  
M V Fedorov, A M Prokhorov General Physics Institute—RAS, Russia

**12:00-12:25**

**Title:** Nanocrystal silicon growth under electron irradiation  
Wei-Qi Huang, Guizhou University, China

**12:25-12:50**

**Title:** Crystallizing nanostructures and emission on black silicon prepared by ns-laser  
Zhong Mei Huang, Guizhou University, China

**Lunch Break 12:50-13:50 @ Hotel Restaurants**

**13:50-14:15**

**Title:** Second harmonic generation of self-focused chirped laser pulse in cold quantum plasma  
Vishal Thakur, Lovely Professional University, India

**14:15-14:40**

**Title:** Thermodynamic molecular interaction studies in the mixtures of triethylene glycol and glycerol  
Kirandeep Kaur, Lovely Professional University, India

**14:40-15:05**

**Title:** Spatial architecture impact in mediation open circuit voltage control of quantum solar cell recovery systems  
Moustafa Osman Mohammed, Alexandria University, Egypt

**15:05-15:30**

**Title:** Electromagnetically induced grating in a four-level quantum system in the presence of plasmonic structure  
Mohammad Najafi Sangachin, University of Guilan, Iran

**Networking & Refreshments 15:30-15:50 @ Foyer**

**Awards & Closing Ceremony**