

5<sup>th</sup> International Conference on  
**Theoretical and  
Applied Physics**

July 02-03, 2018 | Vienna, Austria



**UK: Conference Series Ilc LTD**

47 Churchfield Road, London, W3 6AY

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<https://appliedphysics.physicsmeeting.com/>

Day 1 July 02, 2018

08:30-09:00 Registration Desk Opens

Meeting Room-Fleming's Room 6

conference**series**.com 09:00-09:25

# Opening Ceremony

## Keynote Forum

09:25-09:30 Introduction

09:30-10:05 **Title: Unification of gravitational and electromagnetic forces**

Ling Jun Wang, University of Tennessee at Chattanooga, USA

10:05-10:40 **Title: Natural field: A new fundamental entity of nature**

Debabrata Saha, Northern Virginia Section of IEEE Information Theory Society, USA

Networking and Refreshments Break 10:40-11:00 @ Foyer

## Group Photo 11:00-11:10

11:10-11:45 **Title: Classification of multidimensional solitary solutions of the GKP equation by use of qualitative and asymptotic analysis**

Vasily Yu Belashov, Kazan Federal University, Russia

Sessions: Theoretical Physics | Experimental Physics | Computational Physics | Plasma Physics | Superconductivity

Session Chair: Ling Jun Wang, University of Tennessee at Chattanooga, USA

Session Co-Chair: Vasily Yu Belashov, Kazan Federal University, Russia

11:45-12:05 **Title: Theory and applications of inverted fireballs**

Johannes Gruenwald, Gruenwald Laboratories, Austria

12:05-12:25 **Title: Analyzing causality of molecular interactions: A case study of molecular dynamics simulation of protein-RNA system**

Hiqmet Kamberaj, International Balkan University, Republic of Macedonia

12:25-12:45 **Title: Spectroscopic manifestation of the strong nuclear interaction in solids**

Vladimir G Plekhanov, Fonoriton Sci. Lab, Estonia

12:45-13:05 **Title: Quasi-isentropic compressibility of deuterium at pressure region of ~12 TPa**

Mikhail A Mochalov, Russian Federal Nuclear Center, Russia

Lunch Break 13:05-14:05 @ Flemings Restaurant

14:05-14:25 **Title: About the new axioms and laws**

Valentina Markova Kirilova, Bulgarian Academy of Sciences, Bulgaria

14:25-14:45 **Title: Ultrafast photoemission from plasmonic nanotriangles and applications**

Benedek J Nagy, Wigner Research Centre for Physics, Hungary

14:45-15:05 **Title: Verification of Cooper pairing prior to superconductivity, applying electric field**

Naoum Karchev, Sofia University, Bulgaria

15:05-15:25 **Title: Parametrical optimization of inductively coupled RF ion thruster design**

Ümmügül Erözbek Güngör, Middle East Technical University, Turkey

15:25-15:45 **Title: The EOS properties of asymmetric nuclear matter with the effect of the three-body force**

Mohamed El-Zohry, Sohag University, Egypt

Networking and Refreshments Break 15:45-16:05 @ Foyer

16:05-16:25 **Title: Problems of high-power laser radiation measurement**

Shaidullin R I, Moscow Institute of Physics and Technology, Russia

**16:25-16:45** Title: **Study slow particle and total disintegration production nucleus-nucleus collisions at relativistic energies**

**Albiomy Abd El-Daiem**, Sohag University, Egypt

**16:45-17:05** Title: **Piezoelectric resonance spectroscopy of crystals exhibiting ionic conductivity**

**Aleksei Koniashkin**, Moscow Institute of Physics and Technology, Russia

### Panel Discussion

**Day 2 July 03, 2018**

**Meeting Room-Fleming's Room 6**

### Keynote Forum

**09:30-09:35** Introduction

Title: **Explosion of collapsed supernova and hot big bang of the universe driven by magnetic monopoles**

**09:35-10:10**

**Qiuhe Peng**, Nanjing University, China

**10:10-10:45**

Title: **History and current status of research on nitride semiconductors**

**Takashi Matsuoka**, Tohoku University, Japan

**Networking and Refreshments Break 10:45-11:05 @ Foyer**

**11:05-11:40**

Title: **General method for direct transfer function estimation using parallel, non-redundant, complex exponential phase difference chains, with applications to high-speed, high-spatial resolution atmospheric turbulence compensated imaging systems**

**William W Arrasmith**, Florida Institute of Technology, USA

**Sessions: Experimental Physics | Astrophysics | Particle Physics | Lasers and Optics | Biophotonics**

**Session Chair: Qiuhe Peng**, Nanjing University, China

**Session Co-Chair: Takashi Matsuoka**, Tohoku University, Japan

**Session Introduction**

**11:40-12:00**

Title: **Modified CD method and simulation of vortical structures in plasma and fluids**

**Vasily Yu Belashov**, Kazan Federal University, Russia

**12:00-12:20**

Title: **Laser Modal analysis, an effective tool in reshaping a multimode laser beam into an optimized thin light sheet used in ultramicroscopy imaging technique**

**S Saghafi**, Vienna University of Technology, Austria

**12:20-12:40**

Title: **Consequences of the Maneff's theory**

**Ganka Stoeva Kamisheva**, Bulgarian Academy of Sciences, Bulgaria

**12:40-13:00**

Title: **Physical-mathematical method of more precise rendering of gravitation constant magnitude and Plank's parameters of length, time and mass**

**Valentyn A Nastasenko**, Kherson State Maritime Academy, Ukraine

**Lunch Break 13:00-14:00 @ Flemings Restaurant**

**Poster Presentations: 14:00-14:20**

**14:20-14:40**

Title: **Concept of equivalent temperature of laser crystals and glasses**

**Aleksei Koniashkin**, Moscow Institute of Physics and Technology, Russia

**14:40-15:00**

Title: **Direct test for matter – antimatter imbalance in the Universe and experimental methods for testing it**

**Petteri Pusa**, University of Liverpool, UK

**15:00-15:20**

Title: **Thermal limits of fiber lasers power scaling**

**Shaidullin R I**, Moscow Institute of Physics and Technology, Russia

**15:20-15:40**

Title: **Theoretically IR and Raman spectra of propane using GAMESS**

**Ayesha Mohyuddin**, University of Management and Technology, Pakistan

**15:40-16:00**

Title: **Defects of Newton's third law of motion and a new law**

**Rajkumar Thapa**, Holy Angel's E B School, Nepal

**Networking & Refreshment Break: 16:00-16:20 @ Foyer**

**Certificate Felicitation & Closing Ceremony**