



5th Annual International Conference on Physics, 17-20 July 2017, Athens, Greece

Organized by the Physics Unit

Sponsored by the Athens Journal of Sciences

Conference Venue: Titania Hotel, 52 Panepistimiou Avenue, Athens, Greece (close to Omonoia metro station)

Monday 17 July 2017

08:00-09:00 Registration and Refreshments

09:00-09:30 (Room B-10th Floor) Welcome and Opening Address

Gregory T. Papanikos, President, ATINER.

09:30-11:00 Session I (Room C-10th Floor): Theoretical Physics I

Chair: Ethel Petrou, Academic Member, ATINER & Professor and Chair, Department of Physics, Erie Community College-South, State University of New York, USA.

1. Itzhak Orion, Head of the Nuclear Engineering Department, Ben-Gurion University of the Negev, Israel. Quark Model versus Shell Model for the Neutron: Electrical Field Simulations.
2. Evaldo Mendonca Fleury Curado, Professor, Centro Brasileiro de Pesquisas Físicas – CBPF, Brazil. A Lorentz Invariant Velocity Distribution of a Relativistic Gas.
3. Haiduke Sarafian, Professor, The Pennsylvania State University, USA. Kinematics of a Point-like Charged Particle in a Dynamic Super Nonlinear Electric Field.

11:00-12:30 Session II (Room C-10th Floor): Materials Design and Characterization I

Chair: Itzhak Orion, Head of the Nuclear Engineering Department, Ben-Gurion University of the Negev, Israel.

1. Victor Manuel Duran Ramirez, Research Professor, Universidad de Guadalajara, Mexico, Alejandro Martinez Rios, Research Professor, Centro de Investigaciones en Óptica, A.C., Mexico, Jesus Munoz Maciel, Research Professor, Universidad de Guadalajara, Mexico & Gerardo Peña Lecona, Research Professor, Universidad de Guadalajara, Mexico. Laser Diffractometer for Measuring the Refractive Index of Liquids.
2. Aleksei Koniashkin, Senior Scientist, Kotelnikov Institute of Radio Engineering and Electronics of RAS, Russia, Andrei Korolkov, PhD Student, Moscow Institute of Physics and Technology, Russia & Oleg Ryabushkin, Head of Department, Kotelnikov Institute of Radio Engineering and Electronics of RAS, Russia. Probe Piezoelectric Crystals as Temperature Sensors for Optical Materials.
3. Ali Azab, Researcher, National Research Centre, Egypt. Effect of Cobalt on Structural, Magnetic and Dielectric Properties of Fe₃O₄ Nano-Particles Prepared by co-Precipitation Method.

12:30-14:00 Session III (Room C-10th Floor): Applied Physics**Chair:** Daniel Schertzer, Professor, Ecole des Ponts ParisTech, France.

1. Liudmyla Kozak, Associate Professor, Taras Shevchenko National University of Kyiv, Ukraine, Bogdan Petrenko, Student, Taras Shevchenko National University of Kyiv, Ukraine, Elena Kronberg, Scientist, Max Planck Institute for Solar System Research, Göttingen, Germany, Elena Grigorenko, Scientist, Space Research Institute, RAS, Russia & Antony Lui, Principal Professional Staff, Johns Hopkins University Applied Physics Laboratory, USA. Characteristics of the Turbulence Processes in the Magnetohydrodynamic Environment.
2. Zafar Wazir, Associate Professor, Riphah International University, Pakistan. Study of the Cumulative Number Distribution of Charged Particles Produced in $p^{12}\text{C}$ -Interactions at 4.2 A GeV/c.
3. Mehmet Yuksel, Specialist, Çukurova University, Turkey. Theoretical Study on Heating Rate Effect Using Simulated Thermoluminescence Glow Peaks.
4. Tamer Dogan, Instructor, Çukurova University, Turkey. A Preliminary Thermoluminescence Dose Response Results of Jadeit Mineral as Dosimetric Material.
5. Nikita Voronkov, Postgraduate, Kotelnikov Institute of Radio Engineering and Electronics of RAS, Russia, Victor Sypin, Moscow Institute of Physics and Technology, Russia & Oleg Ryabushkin, Head of Department, Kotelnikov Institute of Radio Engineering and Electronics of RAS, Russia. Longitudinal Temperature Distribution inside Active Optical Fiber in Lasing Condition.

14:00-15:00 Lunch**15:00-16:30 Session IV (Room C-10th Floor): Special Topics in Sciences I****Chair:** Robert Moonsamy Gengan, Associate Professor, Durban University of Technology, South Africa.

1. Daniel Schertzer, Professor, Ecole des Ponts ParisTech, France & Ioulia Tchiguirinskaia, Ecole des Ponts ParisTech, France. Spatial Chaos, Multifractal Vector Fields and Stochastic Clifford Algebra.
2. Isai Urusa, Professor, Hampton University, USA. Citizen Science in the Context of Indigenous Knowledge.

16:30-18:30 Session V (Room B-10th Floor): A Symposium on The Future Developments and Prospects of Engineering and Science Education & Research in a Global World I**Chair:** Nikos Mourtos, Head, Mechanical Engineering Unit, ATINER & Professor, San Jose State University, USA.

1. Bala Maheswaran, Professor, Northeastern University, USA. Engineering Education via Innovations and Inventions (E2 via I2).
2. Itzhak Orion, Head of the Nuclear Engineering Department, Ben-Gurion University of the Negev, Israel. Nuclear Science Research and Education in Israel.
3. Jin He, Professor, Peking University, Shenzhen SOC Key Laboratory, China. New Teaching Technique and Method Function in the Engineering and Science Education and Research.
4. Haiduke Sarafian, Professor, The Pennsylvania State University, USA. The Research Aspect of College Education.
5. Thomas J. J. Mueller, Professor, University of Dusseldorf, Germany. Life Science – Society.

For details on the discussion please [click here](#).**21:00-23:00 The Pragmatic Symposium of the Conference as Organized in Ancient Athens with Dialogues, Food, Wine, Music and Dancing but fine tuned to Synchronous Ethics**

Tuesday 18 July 2017

07:30-10:30 Session VI: An Educational Urban Walk in Modern and Ancient Athens

Chair: Gregory Katsas, Vice President of Academic Affairs, ATINER & Associate Professor, The American College of Greece-Deree College, Greece.

Group Discussion on Ancient and Modern Athens.

Visit to the Most Important Historical and Cultural Monuments of the City (be prepared to walk and talk as in the ancient peripatetic school of Aristotle)

11:00-12:30 Session VII (Room C-10th Floor): Materials Design and Characterization II

Chair: Olga Gkounta, Researcher, ATINER.

1. Branko Pivac, Senior Scientist, Ruder Boskovic Institute, Croatia, Pavo Dubcek, Senior Research Associate, Ruder Boskovic Institute, Croatia, Jasna Dasovic, Ruder Boskovic Institute, Croatia, Sigrid Bernstorff, Elettra-Sincrotrone Trieste, Italy & Branislav Vlahovic, North Carolina Central University, USA. Photoluminescence in Ge Nanoparticles Grown in Dielectric Matrix.
2. Dzmitry Protasenya, PhD Student, Moscow Institute of Physics and Technology, Russia & Oleg Ryabushkin, Head of Department, Kotelnikov Institute of Radio Engineering and Electronics of RAS, Russia. Surface Defects Detection in Optical Materials by Radiofrequency-Optical Spectroscopy.
3. Pavo Dubcek, Senior Research Associate, Ruder Boskovic Institute, Croatia, Branko Pivac, Ruder Boskovic Institute, Croatia, Jasna Dasovic, Ruder Boskovic Institute, Croatia, Vesna Janicki, Ruder Boskovic Institute, Croatia & Sigrid Bernstorff, Elettra Sincrotrone Trieste, Italy. Cu Nanoparticles Formation, Growth and Properties in and on Dielectric Film.

12:30-14:00 Session VIII (Room C-10th Floor): Theoretical Physics II

Chair: Branko Pivac, Senior Scientist, Ruder Boskovic Institute, Croatia.

1. Valentina Markova, Bulgarian Academy of Sciences, Bulgaria. New Axioms to Describe Gravitation.
2. Feliks Gorbatcevich, Scientist, Kola Science Centre Russian Academy of Science, Russia. The Basis for Propagation of Electromagnetic Waves.

14:00-15:00 Lunch

15:00-16:30 Session IX (Room C-10th Floor): Special Topics in Sciences II

Chair: Jasim Salman, Deputy Dean and Assistant Professor, Al-Nisour University College, Iraq.

1. Santhi Sambamoorthy, Associate Professor, Bharathidasan University, India & Amala Subbiah, Lecturer, Bharathidasan University, India. Highly Selective and Sensitive Dual Channel Schiff Base Chemosensors for the Detection of Al(III), Fe(III) & Cu(II).
2. Latifa Bouissane, Assistant Professor, Sultan Moulay Slimane University, Morocco & Issam Forsal, Assistant Professor, Sultan Moulay Slimane University, Morocco. Novel Polysubstituted Indazoles Derivatives as Potential Antitumor Agents: Growth Inhibition and Apoptosis Induction.

16:30-18:30 Session X (Room B-10th Floor): A Symposium on The Future Developments and Prospects of Engineering and Science Education & Research in a Global World II

Chair: Bala Maheswaran, Professor, Northeastern University, USA.

1. Nikos Mourtos, Professor, San Jose State University, USA. Teaching & Learning Engineering in the 21st Century: Challenges and Opportunities.
2. Lluís Jofre, Professor, Polytechnic University of Catalonia (UPC), Spain. Catalonia Engineering and Science Educations and Research trends in the European Context.
3. Dong-Wook Jerng, Professor, Chung-Ang University, South Korea. Some Thoughts for Future Direction of Engineering/Science Education with Insights from a K-POP Story of BTS.
4. Isai Urasa, Professor, Hampton University, USA. International Higher Education: A Vehicle for Global Cooperation and Development in Science and Engineering.
5. Santhi Sambamoorthy, Associate Professor, Bharathidasan University, India. Creative and Inimitable Role Played by Indian Universities in Science, Engineering and Research in a Global World.
6. Ethel Petrou, Professor and Chair, Department of Physics, Erie Community College-South, State University of New York, USA. Emerging trends in New York State Community Colleges-SUNY.

For details on the discussion please [click here](#).

21:00- 22:30 Dinner

Wednesday 19 July 2017
Educational Island Tour or Mycenae and Epidaurus Visit

Thursday 20 July 2017
Delphi Visit

All ATINER's conferences are organized by the Academic Committee (<https://www.atiner.gr/academic-committee>). This conference has been organized with the assistance of the following academics, who contributed by chairing the conference sessions and/or by reviewing the submitted abstracts and papers:

1. Gregory T. Papanikos, President, ATINER.
2. Ethel Petrou, Academic Member, ATINER & Professor and Chair, Department of Physics, Erie Community College-South, State University of New York, USA.
3. Haiduke Sarafian, Academic Member, ATINER & Professor, The Pennsylvania State University, USA.
4. Itzhak Orion, Head of the Nuclear Engineering Department, Ben-Gurion University of the Negev, Israel.
5. Daniel Schertzer, Professor, Ecole des Ponts ParisTech, France.
6. Nikos Mourtos, Head, Mechanical Engineering Unit, ATINER & Professor, San Jose State University, USA.
7. Bala Maheswaran, Academic Member, ATINER & Professor, Northeastern University, USA.
8. Robert Moonsamy Gengan, Associate Professor, Durban University of Technology, South Africa.
9. Jasim Salman, Deputy Dean and Assistant Professor, Al-Nisour University College, Iraq.
10. Mehmet Yuksel, Academic Member, ATINER & Specialist, Cukurova University, Turkey.
11. Branko Pivac, Senior Scientist, Ruder Boskovic Institute, Croatia.
12. Vassilis Skianis, Research Fellow, ATINER.
13. Olga Gkounta, Researcher, ATINER.
14. Hannah Howard, Research Assistant, ATINER.