

# Athens Institute for Education and Research





12<sup>th</sup> Annual International Conference on Mathematics and Statistics: Teaching, Theory & Applications 2-5 July 2018, Athens, Greece

Organized by the Mathematics & Statistics Unit of ATINER

Sponsored by the Athens Journal of Sciences

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

# Monday 2 July 2018

#### 08:00-08:45 Registration and Refreshments

08:45-09:30 Welcome and Opening Address (Room C - 10<sup>th</sup> Floor)

Gregory T. Papanikos, President, ATINER.

Nicholas Pappas, Vice President of Academic Membership, ATINER & Professor of History, Sam Houston University, USA.

#### Monday 09:30-11:30

#### Session I (Room C-10<sup>th</sup> Floor): Mathematical and Quantitative Applications I

Chair: Codruta Simona Stoica, Head, Mathematics & Statistics Unit, ATINER & Professor and Vice-Rector, Aurel Vlaicu University of Arad, Romania.

- 1. <u>GiSeung Kim</u>, Professor, Pusan National University, South Korea & Hongye Sun, Pusan National University, South Korea. Unobserved Heterogeneous Bias and Wage Effects of Educational Mismatches across 20 OECD Countries.
- 2. Manoranjan Pal, Professor, Indian Statistical Institute, India, C. S. Biswas, Indian Statistical Institute, India, S. Bannerjee, Indian Statistical Institute, India, A. Ghosh, Indian Statistical Institute, India, S. Chakraborti, Indian Statistical Institute, India & P. Bharati, Indian Statistical Institute, India. Style of Question Matters: An Experiment with Questions on "Family Related" and "Social" Views on Gender Violence.
- 3. <u>Juan Barrios</u>, Associate Professor, Universidad ORT Uruguay, Uruguay & Santiago Acerenza, Universidad ORT Uruguay, Uruguay. Feelings about Competition and Self-reported Trust: Evidence from the World Value Surveys.
- 4. <u>Nizar Zaarour</u>, Assistant Teaching Professor, Northeastern University, USA & <u>Emanuel Melachrinoudis</u>, Professor, Northeastern University, USA. The "Not so Simple" Interpretation of *R*<sup>2</sup>, for Relatively Small Sample Sizes.

#### Monday 11:30-13:00

# Session II (Room C-10<sup>th</sup> Floor): Teaching-Learning-Education I

Chair: Juan Barrios, Associate Professor, Universidad ORT Uruguay, Uruguay.

- 1. Diarmuid O'Driscoll, Head of Department of Mathematics, Mary Immaculate College, Ireland. Teaching Ridge Regression in Polynomial Data Fitting.
- 2. Armine Shahoyan, Business Department Chair, University of Holy Cross and Professor, Tulane University, USA. Teaching Principles of Economics On-Line: Structured Course vs. Self-Paced Mode. An Empirical Study.
- 3. Michael Aristidou, Associate Professor, American University of Kuwait, Kuwait. Is Mathematical Logic Really Necessary in Teaching Mathematical Proofs?
- 4. Lukanda Kalobo, Lecturer, Central University of Technology Free State, South Africa. The Use of Principles of Learning Statistics to Promote the Teaching and Learning of Statistics at High School in South Africa.

#### Session III (Room C-10<sup>th</sup> Floor): Biostatistics

Chair: Ampalavanar Nanthakumar, Professor, State University of New York at Oswego, USA.

- 1. Valeria Sambucini, Professor, Sapienza University of Rome, Italy. A Predictive Approach for Monitoring Multiple Outcomes in Phase II Clinical Trials.
- 2. Sujay Datta, Associate Professor, University of Akron, USA. Bayesian Network Structure Learning with Resampling-Based Confidence: Application to Genomics.
- 3. Chang Yu, Associate Professor, Vanderbilt University Medical Center, USA. Estimating the Proportion from the Null using a Distribution for p-Values in Massive Testing.

#### 14:30-15:30 Lunch

#### Monday 15:30-17:30

#### Session IV (Room C-10<sup>th</sup> Floor): Time Series Studies

Chair: Sujay Datta, Associate Professor, University of Akron, USA.

- 1. Ampalavanar Nanthakumar, Professor, State University of New York at Oswego, USA. A Comparison of Gaussian and Skew-Gaussian Copula.
- 2. Helena Viljoen, Senior Lecturer, Stellenbosch University, South Africa. Forecasting Time Series using Stepwise Common Singular Spectrum Analysis or Horizontal Multi-channel Singular Spectrum Analysis?
- 3. Tim Lueger, Research Assistant, Darmstadt University of Technology, Germany. A VAR Evaluation of Classical Growth Theory.
- 4. Symeon Koumoutsaris, VP, Model Development, Guy Carpenter, UK. A Catastrophe Model for Insurance Losses due to Burst Pipes Resulting from Subfreezing Temperatures using Vine Copulas.

#### 17:30-19:30 Roundtable Discussion

Session V (Room C-10<sup>th</sup> Floor): ATINER's 2018 Series of Academic Dialogues: A Symposium Discussion on Publishing and Researching for Professional Academic Development

Chairs: Gregory T. Papanikos, President, ATINER and Nicholas Pappas, Vice President of Academic Membership, ATINER & Professor of History, Sam Houston University, USA.

- 1. Cleopatra Veloutsou, Head, Marketing Unit, ATINER, Editor, Journal of Product & Brand Management and Professor of Brand Management, University of Glasgow, UK. Main Trends in Publishing in Top Management Journals.
- 2. Codruta Simona Stoica, Head, Mathematics & Statistics Unit, ATINER & Professor and Vice-Rector, Aurel Vlaicu University of Arad, Romania. Implementing the Research Strategy within "Aurel Vlaicu" University of Arad in order to Enhance its International Prestige and Visibility.
- 3. Ampalavanar Nanthakumar, Academic Member, ATINER & Professor, State University of New York at Oswego, USA. Why Did I Engage Myself in Research?
- 4. Manoranjan Pal, Professor, Indian Statistical Institute, India. Publishing and Researching for Professional Academic Development: The Indian Experiences.
- 5. Can Liu, Professor, China National Forestry Economics and Development Research Center, China. How to Train Young Scientists for Researching of Forest Economics and Policy in China.
- 6. Rainer Przywara, President, Cooperative University Baden-Württemberg Heidenheim, Germany. Towards a Research Strategy for the Baden-Württemberg Cooperative State University (DHBW).

#### 21:00-23:00 Greek Night and Dinner

# Tuesday 3 July 2018

Tuesday 07:45-10:45

#### Session VI: An Educational Urban Walk in Modern and Ancient Athens

Chair: Gregory A. 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)

#### Tuesday 11:00-12:30

## Session VII (Room C-10<sup>th</sup> Floor): Mathematical and Quantitative Applications II

Chair: Diarmuid O'Driscoll, Head of Department of Mathematics, Mary Immaculate College, Ireland.

- 1. Stelios Georgiou, Senior Lecturer, RMIT University, Australia. A Step by Step Methodology for Designing Experiments.
- 2. Felicitas Nowak-Lehmann, Senior Researcher, University of Goettingen, Germany. Foreign Aid and its Impact on Investment in Developing Countries: Empirical Evidence.
- 3. Stella Stylianou, Senior lecturer, RMIT University, Australia. New 3-Level Designs for Full Second Order Models.
- 4. Paul Mpuga, Economic Affairs Officer, UNECA, Ethiopia. Do Business-Friendly Regulations Promote Entrepreneurship Growth? Analysis using African Data.
- 5. <u>Luciana Bastos</u>, Professor, University of the State of Paraná, Brazil, Janete Leige Lopes, Professor, University of the State of Paraná, Brazil, Jesus Crepaldi, Professor, University of the State of Paraná, Brazil & Badar Alam Iqbal, Professor, Aligarh Muslim University, India. Analysis of Statistics of Violence by Homicide in the Members Countries of Mercosur, during the Period Extending from 2000-2012.

## Tuesday 12:30-14:00

#### Session VIII (Room C-10<sup>th</sup> Floor): Teaching-Learning-Education II

Chairs: Armine Shahoyan, Business Department Chair, University of Holy Cross and Professor, Tulane University, USA and Tim Lueger, Research Assistant, Darmstadt University of Technology, Germany.

- 1. Michael Gendron, Professor, Department Chair, Management Information Systems, Central Connecticut State University, USA, Jeffrey Peck, Adjunct Professor, Central Connecticut State University, USA & Tera Black, Professor, Central Connecticut State University, USA. Best Practices for Logistics Analytics.
- 2. <u>Henry Morelli</u>, Associate Professor, Central Connecticut State University, USA & Michael Gendron, Professor, Department Chair, Management Information Systems, Central Connecticut State University, USA. Transforming Industry Professionals into Effective Defined Term and Adjunct Faculty.
- 3. Gheorghita Faitar, Assistant Professor, D'Youville College, USA. Grit and Mathematics.
- 4. Matina Rassias, Senior Teaching Fellow, University College London, UK. Teaching Specialist versus non-Specialist Students in Statistics.

#### 14:00-15:00 Lunch

#### Tuesday 15:00-16:30

### Session IX (Room C-10<sup>th</sup> Floor): Mathematics

Chair: Chang Yu, Associate Professor, Vanderbilt University Medical Center, USA.

- 1. Codruta Simona Stoica, Professor, Aurel Vlaicu University of Arad, Romania. On Stochastic Splitting Issues for Evolution Equations.
- 2. Adama Diene, Associate Professor, United Arab Emirates University, UAE. Evaluation of Certain Sums of Polynomials Using the Arithmetic Divisor Functions.

#### Session X (Room C-10<sup>th</sup> Floor): Special Topics

Chair: Samer Elhajjar, Assistant Professor, University of Balamand, Lebanon.

- 1. <u>Timothy Young</u>, Professor, The University of Tennessee, USA, Nana Tian, Forest Economist, Texas Forest Service, USA & Yongke Sun, Southwest Forestry University, China. Improved Predictive Modeling of Wood Composite Products using Bayesian Additive Regression Trees (BART).
- 2. Jan-Erik Lane, Professor, Public Policy Institute, Serbia. Socio-Economic Determinism and Climate Change.
- 3. Enrique Vasquez, Professor / Visiting Research Fellow, Universidad del Pacífico / IBEI, Universitat Pompeu Fabra, Peru / Spain. Understanding the Business-Government Relationship in Chile under an Economic Booming and Social Unrest Scenario: 2000-2015.
- 4. Jose Paulo Oliveira, Professor, Universidade Lusófona de Humanidades e Tecnologias, Portugal. Macroeconomic Impacts of Universal Basic Income Guarantee.
- 5. <u>Abdulla Awadh</u>, Officer, Ministry of Interior Sharjah Police, UAE & Hassan Saleh Al-Dhaafri, Assistant Professor, University of Dubai, UAE. The Effect of IT Management and Strategy Management on Organizational Performance of Sharjah Police.

#### 20:00-21:30 Dinner

# Wednesday 4 July 2018 Mycenae and Island of Poros Visit Educational Island Tour

# Thursday 5 July 2018 Delphi Visit

# Friday 6 July 2018 Ancient Corinth and Cape Sounion

All ATINER's conferences are small events which serve the mission of the association (<a href="https://www.atiner.gr/mission">https://www.atiner.gr/mission</a>) under the guidance of its Academic Committee (<a href="https://www.atiner.gr/academic-committee">https://www.atiner.gr/academic-committee</a>) which sets the policies (<a href="http://www.atiner.gr/acceptance">http://www.atiner.gr/acceptance</a>). In addition, each conference has its own academic committee. Members of the committee include all those who have evaluated the abstract-paper submissions and have chaired the sessions of the conference. The members of the academic committee of the 12<sup>th</sup> Annual International Conference on Mathematics and Statistics: Teaching, Theory & Applications, 2-5 July 2018, Athens, Greece, were the following:

- 1. Gregory T. Papanikos, President, ATINER.
- 2. Nicholas Pappas, Vice President of Academic Membership, ATINER & Professor of History, Sam Houston University, USA.
- 3. Timothy M. Young, Director, Center for Business & Manufacturing Excellence (CBME) & Professor and Graduate Director, Center for Renewable Carbon, The University of Tennessee, USA.
- 4. Codruta Simona Stoica, Head, Mathematics & Statistics Unit & Professor and Vice-Rector, Aurel Vlaicu University of Arad, Romania.
- 5. Theodore Trafalis, Director, Engineering & Architecture Division, ATINER, Professor of Industrial & Systems Engineering and Director, Optimization & Intelligent Systems Laboratory, The University of Oklahoma, USA.
- 6. Ampalavanar Nanthakumar, Academic Member, ATINER & Professor, State University of New York at Oswego, USA.
- 7. Diarmuid O'Driscoll, Head of Department of Mathematics, Mary Immaculate College, Ireland.
- 8. Chang Yu, Associate Professor, Department of Biostatistics, Vanderbilt University School of Medicine, Vanderbilt University, USA.

- 9. Juan Barrios, Associate Professor, Universidad ORT Uruguay, Uruguay.
- 10. Armine Shahoyan, Business Department Chair, University of Holy Cross and Professor, Tulane University, USA.
- 11. Sujay Datta, Associate Professor, University of Akron, USA.
- 12. Michael Aristidou, Academic Member, ATINER & Associate Professor, American University of Kuwait, Kuwait.
- 13. Samer Elhajjar, Assistant Professor, University of Balamand, Lebanon.
- 14. Mehmet Mendes, Academic Member, ATINER & Professor of Biometry/Biostatistics, Canakkale Onsekiz Mart University, Turkey.
- 15. Elizabeth Stojanovski, Academic Member, ATINER & Lecturer, University of Newcastle, Australia.
- 16. Tim Lueger, Research Assistant, Darmstadt University of Technology, Germany.

#### The Organizing Committee of the conference was:

- 1. Zoe Charalampous, Researcher, ATINER.
- 2. Olga Gkounta, Researcher, ATINER.
- 3. Despina Katzoli, Researcher, ATINER.
- 4. Eirini Lentzou, Administrative Assistant, ATINER.
- 5. Konstantinos Manolidis, Administrator, ATINER.
- 6. Kostas Spyropoulos, Administrator, ATINER.