



13th Annual International Conference on Mathematics & Statistics: Teaching, Theory & Applications, 1-4 July 2019, Athens, Greece

Organized by the [Mathematics & Statistics Unit](#) and the [Education Unit](#)

Sponsored by the [Athens Journal of Sciences](#)

Conference Venue: University of Athens (Kapodistriako), 48 Akadimias Street, Athens, Greece ([map](#), close to metro station *Panepistimio*)

Monday 1 July 2019

08:10-08:40 Registration

08:40-09:00 (Room A): [Welcome and Opening Address](#) by Gregory T. Papanikos, President, ATINER.

09:00-10:30 Session I (Room B): Statistics

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

1. Ampalavanar Nanthakumar, Professor, State University of New York at Oswego, USA. A Comparison of Hierarchical and Vine Copulas.
2. [Wei-ming Luh](#), Professor, National Cheng Kung University, Taiwan & Jiin-huang Guo, Professor, National Pingtung University, Taiwan. Sample Size Calculation with Cost Constraints for Testing the Superiority/Non-inferiority and the Equivalence of Two Poisson Means.
3. Alan Ker, Professor, University of Guelph, Canada. A Generalized KS-Test.
4. Stelios Georgiou, Associate Professor, RMIT University, Australia. Combining Robust Parameter Designs (RPDs) and Supersaturated Designs (SSDs).
5. Stella Stylianou, Senior Lecturer, RMIT University, Australia. Screening Designs under Model Uncertainty.

10:30-11:45 Session II (Room B): Mathematics: Education & Teaching

Chair: Kakoma Luneta, Associate Professor, University of Johannesburg, South Africa.

1. [Nimer Baya'a](#), Senior Lecturer A, Pedagogic Supervisor, Head of ICT Center, Al-Qasemi Academic College of Education, Israel, [Otman Jaber](#), Lecturer, Pedagogic Supervisor, Al-Qasemi Academic College of Education, Israel, Wajeeh Daher, Head of M.Teach Program in Graduate Studies, Al-Qasemi Academic College of Education, Israel & Ahlam Anabousy, Teaching and Research Assistant, Al-Qasemi Academic College of Education, Israel. Educating Mathematics Pre-service Teachers in Metacognitive Skills.
2. [Pei-Wan Liu](#), PhD Student, National Changhua University of Education, Taiwan & Erh-Tsung Chin, Associate Professor, National Changhua University of Education, Taiwan. How Taiwanese Junior High School Mathematics Teachers Learn Inquiry-Based Teaching via a Teacher Professional Learning Community.
3. [Chien Minfeng](#), Graduate Student, National Changhua University of Education, Taiwan & Erh-Tsung Chin, Associate Professor, National Changhua University of Education, Taiwan. The Study of Vee Map Tactics Integrated into Mathematics Teaching and It's Influence on the Eight Graders' Mathematical Proficiencies.
4. [Chia-Hao Tsai](#), Graduate Student, National Changhua University of Education, Taiwan & Erh-Tsung Chin, Associate Professor, National Changhua University of Education, Taiwan. How Do Pupils Manipulate Teaching Aids to Solve Problems? An Example of Solving Fraction Problems.

11:45-13:30 Session III (Room B): Special Topics in Statistics and Economics

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

1. Wojciech Drozd, Vice-President for Innovations and Logistics, University of Szczecin, Poland. Poland in the Way to Electromobility.
2. Isaias Chairez Hernandez, Professor, Instituto Politécnico Nacional, CIIDIR Durango, Mexico. White-tailed Deer Sex Identification by Faecal DNA and Pellet Morphometry.
3. Panagiotis Ch. Anastasopoulos, Associate Professor, University at Buffalo, The State University of New York, USA, Ugur Eker, Graduate Research Assistant, University at Buffalo, The State University of New York, USA, Sheikh Shahriar Ahmed, Graduate Research Assistant, University at Buffalo, The State University of New York, USA, Grigorios Fountas, Lecturer, Edinburgh Napier University, UK & Stephen E. Still, Professor, University at Buffalo, The State University of New York, USA. Will Flying Cars Be Safe and Secure: An Exploratory Empirical Analysis of Public Perceptions.
4. Mihir Bhattacharya, Assistant Professor, Ashoka University, India, Saptarshi Mukherjee, Associate Professor, Indian Institute of Technology, India & Ruhi Sonal, PhD Student, Indian Institute of Technology, India. Attention and Framing.
5. Sheikh Shahriar Ahmed, Graduate Research Assistant, University at Buffalo, The State University of New York, USA, Grigorios Fountas, Lecturer, Edinburgh Napier University, UK & Panagiotis Ch. Anastasopoulos, Associate Professor, University at Buffalo, The State University of New York, USA. Accounting for Cross-Equation Error Correlation and Unobserved Heterogeneity in a Bivariate Hazard-Based duration Modeling Framework.

13:30-14:30 Lunch

14:30-16:00 Session IV (Room B): Applied Studies

Chair: Olga Gkounta, Researcher, ATINER.

1. Rainer Przywara, President, Baden-Wuerttemberg Cooperative State University Heidenheim, Germany. Economic Prosperity under Varieties of Capitalism 1970-2010.
2. Thanos Athanasopoulos, Senior Lecturer, De Montfort University - Leicester, UK. Dynamic Pricing and Compatibility in Durable Goods Markets with Network Effects.
3. Estelle Sommeiller, Researcher, Institut de Recherches Economiques et Sociales (IRES), France. Employment & Poverty in Southern Europe: When Measurement Matters.

21:00-23:00 Greek Night and Dinner

07:45-10:45 Session V: An Educational Urban Walk in Modern and Ancient Athens

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)

11:15-13:00 Session VI (Room B): Mathematics

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

1. Codruta Simona Stoica, Professor, Aurel Vlaicu University of Arad, Romania. Current Trends in the Approach of Evolution Equation.
2. Peter Vranas, Professor, University of Wisconsin–Madison, USA. Natural Deduction for Sentential Pure Imperative Logic.
3. Chang-Yun Lin, Professor, National Chung Hsing University, Taiwan. Data-Driven Multistratum Designs with the Generalized Bayesian D-D Criterion for Highly Uncertain Models.
4. Stefan Veldsman, Professor, Nelson Mandela University, South Africa. Where to Look for the Zeros of a Polynomial.

13:00-14:00 Session VII (Room B): Teaching & Learning

Chair: Otman Jaber, Lecturer, Pedagogic Supervisor, Al-Qasemi Academic College of Education, Israel.

1. Kakoma Luneta, Associate Professor, University of Johannesburg, South Africa & Apostolos (Paul) Giannakopoulos, Lecturer, University of Johannesburg, South Africa. Problem Solving in Mathematics: Use of Teaching and Learning Theories versus the Psychology of Teaching and Learning Mathematics.
2. Stefan Britz, Lecturer, University of Cape Town, South Africa & Leanne Scott, Associate Professor, University of Cape Town, South Africa. Blended Learning Introductory Statistics – Lessons from Five Years of Application at the University of Cape Town in Context of a Socioeconomically Diverse Student Body.

14:00-15:00 Lunch

15:00-16:15 Session VIII (Room B): Statistical and Quantitative Methods

Chair: Nimer Baya'a, Senior Lecturer A, Pedagogic Supervisor, Head of ICT Center, Al-Qasemi Academic College of Education, Israel.

1. Timothy Young, Professor, The University of Tennessee, USA. Improved Predictive Modeling using Bayesian Additive Regression Trees (BART).
2. Diarmuid O'Driscoll, Head of Department of Mathematics and Computer Studies, Mary Immaculate College, Ireland. Comparing Different Methodologies in Polynomial Data Fitting.
3. Maroussa Zagoraiou, Associate Professor, University of Bologna, Italy, Alessandro Baldi Antognini, Professor, University of Bologna, Italy & Marco Novelli, Adjunct Professor, University of Bologna, Italy. Limitations of Likelihood-based Asymptotic Inference in Response-Adaptive Clinical Trials for Treatment Comparisons.
4. Hanitra Rakotoarison, Economist, Office National des Forêts (ONF), France & Martin Delsart, Student, Office National des Forêts (ONF), France. Understanding and Forecasting Wood Price Fluctuation? A Study Case in French Public Forest.
5. Augustus Panton, PhD Candidate, Australian National University, Australia. Leaning Against the Wind via Finance-Neutral Output Gaps: Inflation Targeting and Financial Stability in an Open Economy.

20:30-22:00 Dinner (Titania Hotel)

**Wednesday 3 July 2019
Mycenae and Island of Poros Visit
Educational Island Tour**

**Thursday 4 July 2019
Delphi Visit**

**Friday 5 July 2019
Ancient Corinth and Cape Sounion**

All ATINER's conferences are organized by the [Academic Council](#). This conference has been organized with the assistance of the following academics, who contributed by a) setting up the program b) chairing the conference sessions, and/or c) reviewing the submitted abstracts and papers:

1. Gregory T. Papanikos, President, ATINER & Honorary Professor, University of Stirling, UK.
2. Codruta Simona Stoica, Head, Mathematics & Statistics Unit & Professor and Vice-Rector, Aurel Vlaicu University of Arad, Romania.
3. Timothy Young, Director, Center for Business & Manufacturing Excellence (CBME), ATINER & Professor and Graduate Director, Center for Renewable Carbon, The University of Tennessee, USA.
4. Theodore Trafalis, Professor of Industrial & Systems Engineering and Director, Optimization & Intelligent Systems Laboratory, The University of Oklahoma, USA.
5. Ampalavanar Nanthakumar, Academic Member, ATINER & Professor, State University of New York at Oswego, USA.
6. Diarmuid O'Driscoll, Head of Department of Mathematics and Computer Studies, Mary Immaculate College, Ireland.
7. Peter Vranas, Academic Member, ATINER & Professor, University of Wisconsin–Madison, USA.
8. Alessandro Baldi Antognini, Academic Member, ATINER & Professor, University of Bologna, Italy.
9. Kakoma Luneta, Associate Professor, University of Johannesburg, South Africa.
10. Nimer Baya'a, Senior Lecturer A, Pedagogic Supervisor, Head of ICT Center, Al-Qasemi Academic College of Education, Israel.
11. Otman Jaber, Lecturer, Pedagogic Supervisor, Al-Qasemi Academic College of Education, Israel.
12. Olga Gkounta, Researcher, ATINER.