



Athens Institute for Education and Research

Annual International Conference on Mathematics & Statistics: Education & Applications

29-30 June & 1-2 July 2015, Athens, Greece

Organized by ATINER's [Mathematics & Statistics Research Unit](#)

Conference Venue: [Titania Hotel](#), 52 Panepistimiou Street, 106 78 Athens, Greece

Monday 29 June 2015

(all sessions include 10 minutes break)

08:00-08:30 Registration and Refreshments

08:30-09:00 (ROOM A) Welcome & Opening Remarks

- Dr. Gregory T. Papanikos, President, ATINER & Honorary Professor, University of Stirling, UK.
- Dr. George Poulos, Vice-President of Research, ATINER & Emeritus Professor, University of South Africa, South Africa.

09:00-11:00 Session I (ROOM A): Mathematics and Statistics: Education & Applications I

Chair: George Poulos, Vice-President of Research, ATINER & Emeritus Professor, University of South Africa, South Africa.

1. *[Diarmuid O'Driscoll](#), Head, Department of Mathematics, Mary Immaculate College, Ireland & Donald Ramirez, Professor, University of Virginia, USA. Revising Some Design Criteria. (EMS)
2. [Jianjun Wang](#), Professor, California State University, USA & Xin Ma, University of Kentucky, USA. An Examination of Plausible Score Correlation from the Trend in Mathematics and Science Study. (STA)
3. Marilena Aura Din, Associate Professor, Romanian American University of Bucharest, Romania. ARIMA Method for Estimation and Forecasting of Data from Higher Education. (EMS)
4. Abhinav Mehta, Associate Lecturer, The Australian National University, Australia. Uptake of Mammography Screening: Is Obesity an Impediment? (STA)
5. [Olga Yanushkevichiene](#), Professor, Vilnius University, Lithuania & Romanas Yanushkevichius, Professor, Lithuanian University of Educational Sciences, Lithuania. Statistical Methods in the Educational Researches. (EMS)
6. [Victor Oxman](#), Senior Lecturer, Western Galilee College, Shaanan College, Israel, Moshe Stupel, Professor, Shaanan College, Israel & Ruti Segal, Senior Lecturer, Oranim College, Shaanan College, Israel. Making Use of Dynamic Software and Mathematical Tools in the Solution of Extremum Problems in Triangle Geometry. (EMS)

11:00-12:30 Session II (ROOM A): Statistics I

Chair: *[Diarmuid O'Driscoll](#), Head, Department of Mathematics, Mary Immaculate College, Ireland

1. *[Mohammad Ahsanullah](#), Professor, Rider University, USA. Characterizations of Distributions via Regression Properties of Order Statistics from Extended Sample. (STA)
2. Yousri Slaoui, Associate Professor, University of Poitiers, France. Large and Moderate Deviation Principles for Nonrecursive and Recursive Estimators of a Regression Function. (STA)
3. Cyrille Joutard, Associate Professor, Paul Valery University of Montpellier, France. Applications of Large Deviations to some Nonparametric Tests. (STA)
4. [Zafar Iqbal](#), Ph.D. Student, Massey University, New Zealand, Nigel Grigg & Nicky Campbell-Allen, Massey University, New Zealand. Measuring Impact of Correlations on Final-Weights of Technical Attributes in Quality Function Deployment. (STA)

12:30-13:30 Lunch

13:30-15:30 Session III (ROOM A): Statistics II

Chair: *Mohammad Ahsanullah, Professor, Rider University, USA.

1. *Flavio Ziegelmann, Associate Professor, Federal University of Rio Grande do Sul – UFRGS, Brazil, Paula Tofoli, Professor, Catholic University of Brasilia, Brazil, Osvaldo Candido Silva-Filho, Professor, Catholic University of Brasilia, Brazil & Pedro Valls Pereira, Professor, Fundacao Getulio Vargas Sao Paulo, Brazil. Dynamic D-Vine Copula Model with Applications to Value-at-Risk (VaR). (STA)
2. Zeynep Kalaylioglu, Associate Professor, Middle East Technical University, Turkey & Haydar Demirhan, Hacettepe University, Turkey. Joint Variance Prior for the Analysis of Random Effects Models. (STA)
3. Martina Mincheva, Assistant Professor, Temple University, USA. Two-Sample Hypothesis Testing on Evolutionary Trees. (STA)
4. Takuma Yoshida, Assistant Professor, Kagoshima University, Japan. Variable Selection and Flexible Smoothing in Semiparametric Regression. (STA)
5. Salimeh Yasaei Sekeh, Post Doctoral Fellow, Federal University of Sao Carlos, Brazil & Adriano Polpo de Campos, Associate Professor, Federal University of Sao Carlos, Brazil. Selecting Models via Multivariate Weighted Information Measures. (STA)

15:30-17:30 Session IV (ROOM A): Mathematics and Statistics: Education & Applications II

Chair: *Flavio Ziegelmann, Associate Professor, Federal University of Rio Grande do Sul – UFRGS, Brazil

1. *Santhanam Ramachandran, Secretary, The Association of Mathematics Teachers of India, India. The Pedagogical Aspects of Non-Routine Problem Solving in Mathematics. (EMS)
2. Monelle Gomez, Ph.D. Student, The Ohio State University, USA, Azita Manouchehri, Professor & Ali Fleming, Ph.D. Student, The Ohio State University, USA. Increasing K-12 Mathematics Teachers' Content Knowledge. (EMS)
3. Dvir Kleper, Research Scientist, National Institute for Testing and Evaluation, Israel & Noa Saka, Senior Lecturer, Hebrew University of Jerusalem and National Institute for Testing and Evaluation, Israel. The New Psychometric Entrance Test – A Multi – Faceted Validity Analysis. (EMS)
4. *Praneetha Singh, Assistant Head of Mathematics and Convener, The Hills Grammar School, NSW and Australian Independent School Mathematics Professional Learning, Australia. Cross-curriculum Integration of Mathematics in Secondary Schools. (EMS)

21:00-23:00 Greek Night and Dinner (Details during registration)

Tuesday 30 June 2015

09:00-11:00 Session V (ROOM A): Statistics III

Chair: *Santhanam Ramachandran, Secretary, The Association of Mathematics Teachers of India, India.

1. *Ampalavanar Nanthakumar, Professor, State University of New York at Oswego, USA. On Using Copulas to Test for a Two Component Bivariate Mixture Distribution. (STA)
2. Maroussa Zagoraiou, Assistant Professor, University of Calabria, Italy. Choosing a Covariate-Adaptive Rule. (STA)
3. Chun-Sung Huang, Senior Lecturer, University of Cape Town, South Africa, Natasha Collier, Jenna McWilliams & Benjamin Rath, University of Cape Town, South Africa. An Empirical Analysis of the Permanent Income Hypothesis (PIH) in the Context of BRICS Countries. (STA)
4. Chun-Kai Huang, Lecturer, University of Cape Town, South Africa, Delia North, Associate Professor, University of KwaZulu-Natal, South Africa & Temesgan Zewotir, Associate Professor, University of KwaZulu-Natal, South Africa. Exchangeability and Extreme Value Distributions: Applications to Financial Risk Modelling. (STA)
5. Basad Al-Sarray, Ph.D. Student, University of Franche-Comté, France, Stephane Chretien, Professor, University of Franche-Comté, France, Yacouba Boubacar Maïnassara, Assistant Professor, University of Franche-Comté, France & Bruno Sausseureau, Professor, University of Franche-Comté, France. Aggregation of AR Models for Prediction using Online Optimization. (STA)

11:00-12:30 Session VI (ROOM A): Mathematics and Statistics: Education & Applications III

Chair: *Codruta Stoica, Associate Professor, Aurel Vlaicu University of Arad, Romania.

1. Hossein Behforooz, Professor, Utica College, USA. Some Notes on the Calculations of the Continued Exponents. (EMS)
2. Francesco Rania, Assistant Professor, University Magna Graecia of Catanzaro, Italy & Giovanni Anello, Associate Professor, University of Messina, Italy. Some Existence Results on Competitive Economic Equilibrium by Using Variational Approach. (EMS)
3. Penelope Bidgood, Honorary Fellow, Kingston University, U.K. A Statistical Analysis of Preference of Wall Colour in Long-Term Healthcare Environments. (EMS)
4. Karin Binder, Ph.D. Student, University of Regensburg, Germany, Stefan Krauss, Professor, University of Regensburg, Germany & Georg Bruckmaier, Research Scientist, University of Regensburg, Germany. Visual Representation of Natural Frequencies Improves Bayesian Reasoning. (EMS)
5. Ali Fleming, Ph.D. Student, The Ohio State University, USA, Azita Manouchehri, Professor & Monelle Gomez, Ph.D. Student, The Ohio State University, USA. Children's Mathematical Knowledge: What is being Assessed? (EMS)

12:30-13:30 Lunch

13:30-15:00 Session VII (ROOM A): Formal Sciences

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

1. Ashwini Kumar Mishra, Associate Professor, B.N. Mandal University, India. Semi-Closed Fuzzy Sets and Semi-Continuous Functions in Fuzzy Topological Spaces. (EMS)
2. *Codruta Stoica, Associate Professor, Aurel Vlaicu University of Arad, Romania. Exponential Dichotomy versus Exponential Splitting for Skew-evolution Semiflows in Infinite Dimensional Spaces. (FOR)
3. Fatemeh Esmaealzadeh, Assistant Professor, Department of Mathematics, Bojnourd Branch, Islamic Azad University, Bojnourd, Iran. Wavelet Analysis on Homogenous Spaces. (EMS)

15:00-16:30 Session VII (ROOM A): Mathematics and Statistics: Education & Applications IV

Chair: Olga Gkounta, Researcher, ATINER.

1. Azita Manouchehri, Professor, The Ohio State University, USA, Monelle Gomez, Ph.D. Student, The Ohio State University, USA & Ali Fleming, Ph.D. Student, The Ohio State University, USA. Modelling with Mathematics and Structural Knowledge: Building Capacity among K-12 Teachers. (EMS)
2. Ruti Segal, Senior Lecturer, Oranim College, Shaanan College, Israel, Moshe Stupel, Professor, Shaanan College, Israel & Victor Oxman, Senior Lecturer, Western Galilee College, Shaanan College, Israel. Surprising Investigation of Loci Using Dynamic Software. (EMS)
3. Enzo Bonacci, Teacher, Scientific High School "G.B. Grassi" of Latina, Italy. Mathematical Education in the Italian Project FSTF. (EMS)
4. Layal Saikaly, MSc Student, Lebanese University, Lebanon & Nina Hayfa, Post Doctoral Fellow, Lebanese University, Lebanon. Dimensions of Knowledge and Ways of Thinking of Irrational Numbers. (EMS)

17:30-20:00 Urban Walk (Details during registration)

20:30- 22:00 Dinner (Details during registration)

Wednesday 1 July 2015

Cruise: (Details during registration)

Thursday 2 July 2015

Delphi Visit: (Details during registration)