Curriculum Vitae **Theodoros Nicoleris** Tel: +30 210 89 72 059, +30 6946 769990 E-mail: <u>tnicoleris@econ.uoa.gr</u>, <u>nikthe@aegean.gr</u>

EDUCATION

February 1995	Doctor of Philosophy (Ph.D.), Mathematical Statistics Université de Montréal, Montreal, Canada.
June 1985	Master of Science (M.Sc.), Mathematical Statistics Carleton University, Ottawa, Canada.
June 1983	Bachelor of Science (B.Sc.), Mathematics McGill University, Montreal, Canada.

LANGUAGES

Excellent: English, French, Greek. Basic knowledge: German, Spanish.

WORK EXPERIENCE

02/2013-

1.

Assistant Professor of Statistics, Department of Economics, National and Kapodistrian University of Athens, Athens, GREECE.

01/2003-01/2013

Assistant Professor of Statistics, Department of Statistics and Actuarial-Financial Mathematics, University of the Aegean, Karlovassi, Samos, GREECE.

Teaching of the following courses in both **undergraduate** and **graduate** level: Generalised Linear Models.

- 2. Bayesian Statistics and Modelling.
- 3. Computational Statistics, Simulation methods.
- 4. Probability.
- 5. Stochastic Processes.

01/10/2011-01/08/2012

Assistant Professor. Hellenic Open University. Taught a course with title "Quality Assurance Methods"

08/2000-12/2002

Lecturer in Statistics, Department of Mathematical Sciences, Statistics Group, University of Bath, Bath, United Kingdom. Teaching of the following courses:

- Probability and random processes: Introduction to probability theory including conditional expectations and the limit theorems. Random walks in the integers, Poisson processes. Probability generating functions.
- 2. Statistical Inference: Development and formulation of statistical inference and decision theoretic methods. Comparison of statistical procedures. In depth description of Bayesian methods.

Asymptotic theory of maximum likelihood methods.

- 3. Multivariate Analysis.
- 4. Mathematics for Economists. Basic notions.

Other Duties:

- 1. Member of the Liaison Committee between academic staff and students.
- 2. Responsible for organising seminars in Probability and Statistics.
- 3. Tutor in the student placement programme in the Industry, relevant to Statistics.

09/1998-08/2000

Visiting Assistant Professor, Department of Mathematics, University of Crete, Heraklion, Crete, GREECE.

Teaching of the following courses:

- 1. Probability and Statistics I & II.
- 2. Parametric Statistics. Part of the course was a two hour per week statistics laboratory (use of the MATLAB Statistics Toolbox).
- 3. Applied Statistics: Linear Models, ANOVA, analysis of residuals, robustness of statistical models.
- 4. Introduction to Bayesian procedures (short course given as special topic in Probability and Statistics).

Other duties:

Member of the Departmental Committee for the evaluation of Statistics related matters in the Department, e.g. creation of new courses, purchase of new books, subscription to new statistics and probability journals etc.

05/1997-05/1998

TOPNET COMPUTERS LTD Athens, Greece.

Duties:

- 1. Responsible for organising and giving seminars in statistical applications with extensive use of Microsoft Excel and Statistica software.
- 2. Consulting services.

03/1996-03/1997

Fulfillment of military obligations in the Greek Army.

RESEARCH INTERESTS

Bayesian Nonparametric Statistics.

- 1. Construction of transition densities of random processes or of time series with given stationary distributions using Gibbs sampling type methods. Applications in financial data.
- 2. Application of slice sampling algorithms in simulating nonlinear dynamical systems and dependent mixtures of Dirichlet processes.
- 3. Development of MCMC algorithms for posterior inference in the case of weighted density estimation problems as applied to data from ecological studies and survival analysis.

ARTICLES THAT ARE PUBLISHED IN PEER-REVIEW INTERNATIONAL JOURNALS

- 1. S. J. Hatjispyros, T. Nicoleris and S. G. Walker, "Distributional results relating to the posterior of a Dirichlet process prior" Statistics and Probability Letters 149(2019) 146-152.
- 2. S. J. Hatjispyros, C. Merkatas, T. Nicoleris and S. G. Walker, "Dependent mixtures of geometric weights priors" Computational Statistics and Data Analysis 119(2018) 1-18.
- 3. S. J. Hatjispyros, T. Nicoleris and S. G. Walker, "Bayesian nonparametric density estimation under length bias" Communications in Statistics-Simulation and Computation"46 (2017) 8064-8076.
- 4. S. J. Hatjispyros, T. Nicoleris and S. G. Walker, "Dependent random density functions with common atoms and pairwise dependence" Computational Statistics and Data Analysis 101(2016) 236-249.
- 5. S. J. Hatjispyros, T. Nicoleris and S. G. Walker, "Dependent mixtures of Dirichlet processes" Computational Statistics and Data Analysis 55 (2011) 2011-2025.
- 6. S. J. Hatjispyros, T. Nicoleris and S. G. Walker, "A Bayesian nonparametric study of a dynamic nonlinear model" Computational Statistics and Data Analysis 53 (2009) 3948-3956.
- 7. S. J. Hatjispyros, T. Nicoleris and S. G. Walker, "*Bivariate prior distributions via branching exchangeable sequences*" *Journal of Statistical Planning and Inference* 136 (2008), 1799-1816.
- 8. S. J. Hatjispyros, T. Nicoleris and S. G. Walker, "*Parameter estimation for random dynamical systems using slice sampling*" *Physica A* 381(2007), 71-81.
- 9. S. G. Walker, S. J. Hatjispyros and T. Nicoleris, "*The Fleming-Viot process and Bayesian Nonparametrics*" *Annals of Applied Probability* 17 (2007), no 1, 67-80.
- 10. T. Nicoleris and S. G. Walker, "On a posterior predictive density sample size criterion" Scandinavian Journal of Statistics 33 (2006), no 2, 209-218.
- 11. T. Nicoleris and S. G. Walker, "On Hellinger consistent density estimation" Journal of the Korean Statistical Society 32 (2003), no 3, 261-270.
- 12. T. Nicoleris and A. Sagris, "*Random function prediction and Stein's identity*" *Statistics and Probability Letters* 59 (2002), no 3, 293-30

13. T. Nicoleris and Yannis Yatracos, "*Rates of convergence of estimates, Kolmogorov's entropy and the dimensionality reduction principle in regression*" *Annals of Statistics* 25 (1997), no 6, 2493-2511.

ARTICLES THAT ARE IN PREPARATION

- 1. M.F. Gil Levya, R.H. Mena, T. Nicoleris 'Beta-Binomial Bayesian nonparametric prior'.
- 2. M. Asgharian, T. Nicoleris. "On waiting time for a change".
- 3. E. Marchand, T. Nicoleris, "On Bayes minimax estimators for a normal mean with an uncertain constraint".

PROFICIENCY IN STATISTICAL SOFTWARE

R, Python, MATLAB.

PARTICIPATION IN MAJOR CONFERENCES

- July 2013. Greek Stochastics-ε meeting. Kalamata, Greece.
- June 2013 . 9th Conference on Bayesian nonparametrics. VU Amsterdam, Amsterdam, Netherlands.
- August 2012. Greek Stochastics-δ meeting. Kalamata, Greece.
- June 2009. 7th Workshop on Bayesian nonparametrics. Universita degli studi di Torino, Torino, Italia.
- August 2009. Greek Stochastics-α meeting. Lefcada, Greece.
- June 2007. 6th Workshop on Bayesian nonparametrics. Isaac Newton Institute, University of Cambridge, Cambridge, UK.
- June 2005. 4th workshop on Bayesian inference in stochastic processes (BISP4). Varenna, Lake Como, Italia.

INVITED TALKS & SEMINARS(latest)

- September 2013. Department of Mathematics and Statistics. McGill University, Montreal, Québec, Canada.
- September 2013. Département de Mathématiques. Université de Sherbrooke, Sherbrooke, Québec, Canada .

REVIEWING CONTRIBUTION

Journal of Multivariate Analysis, Communications in Statistics-Simulation and Computation, Statistics and Probability Letters, Mathematical Reviews.

ACADEMIC SUPERVISION

I have supervised numerous undergraduate as well as graduate students projects and theses.

RESEARCH FUNDING

I was part of various research teams, members of which are prominent scientists in Statistics and it involved proposals to request research funding from EU agencies or from the Greek Government in collaboration with several EU institutions.

AFFILIATIONS

Member of the Institute of Mathematical Statistics. Member of the Hellenic Mathematical Society. Member of the Hellenic Statistical Institute.