

Konstantinos Kalogeropoulos

PERSONAL DETAILS **Year of Birth:** 1978
Nationality: Greek
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APPOINTMENTS **London School of Economics, Department of Statistics**

Lecturer in Statistics (September 2008 - today).

University of Cambridge, Department of Engineering, Signal Processing Lab

Research Associate (June 2006 - August 2008).

- Project: Bayesian methods for diffusion-driven models in ultra high frequency data
- Supervisor: Prof. Simon Godsill
- Collaboration with Citigroup - Systematic Proprietary Trading desk.

University of Lancaster, Department of Mathematics and Statistics

Research Associate (March 2006 - May 2006).

- Research Topic: Bayesian Inference for partially observed diffusions.
- Supervisor: Prof. Gareth O. Roberts

EDUCATION

Athens University of Economics and Business

PhD in Statistics (Awarded June 2007).

- Dissertation Topic: Bayesian Inference for Multidimensional Diffusion Processes
- Supervisor: P. Dellaportas
- Co-Supervisor: G. O. Roberts - University of Warwick.
- Winner of the Savage award 2007 - Theory and Methods.
- Ranked Excellent by the following committee
External Reviewers: Y. Ait-Sahalia - Princeton University, M. Sørensen - University of Copenhagen, A. Stuart - University of Warwick,
Internal Reviewers: M. Zazanis, T. Giannakopoulos.

Brown University, Providence, RI USA.

MSc, Biostatistics, May 2003

- Dissertation Topic: Defining and testing diagnostic equivalence.
- Advisor: Constantine Gatsonis

Athens University of Economics and Business

B.S., Statistics, July, 2001

**AWARDS -
SCHOLARSHIPS**

Winner of the Savage award 2007 - Theory and Methods section.

Travel expenses and registration fees to participate in SemStat summer school 2007: Statistics for Stochastic Differential Equations models.

Marie Curie PhD Fellowships - Lancaster University.

Irakleitos - Fellowships for Phd in the Athens University of Economics and Business.

Research Assistantship - Brown University.

- JOURNAL PAPERS Dureau J., Kalogeropoulos K., Vickerman P., Pickles M. and Boily M.C. (2012). A Bayesian approach to estimate changes in condom use from limited HIV prevalence data. *Submitted*
- Demiris N., Kalogeropoulos K. and Kominakis A. (2012). Flexible stochastic modelling of growth processes with applications. *To be submitted.*
- Beskos A., Kalogeropoulos K. and Pazos E. (2012). Advanced Markov Chain Monte Carlo Methods for Sampling on Diffusion Pathspace. *Stochastic Processes and their Applications. To appear.*
- Dureau J., Kalogeropoulos K. and Baguelin M. (2012). Capturing the time-varying drivers of an epidemic via stochastic dynamical systems. *Biostatistics. To appear.*
- Kalogeropoulos K., Dellaportas P. and Roberts G.O. (2011). Likelihood based inference for correlated diffusions. *Canadian Journal of Statistics*, 39(1): 52-72.
- Kalogeropoulos K., Roberts G.O. and Dellaportas P. (2010). Inference for stochastic volatility models using time change transformations. *Annals of Statistics*, 38(2): 784-807.
- Kalogeropoulos K. (2007). Likelihood-Based inference for a class of multivariate diffusions with unobserved paths. *Journal of Statistical Planning and Inference*, 137: 3092-3102.
- CONTRIBUTIONS TO DISCUSSION PAPERS Kalogeropoulos K. and Papaspiliopoulos O. (2008). Discussion on Goubar et al (2008 Journal of Royal Statistical Society Series A 171(3):1-27).
- Kalogeropoulos K. (2006). Discussion on Beskos et al (2006 Journal of Royal Statistical Society Series B 68(3):333-382).
- REFEREED CONFERENCE PAPERS Kalogeropoulos K., Demiris N. and Papaspiliopoulos O. (2008). Diffusion-driven models for physiological processes. *International Workshop on Applied Probability (IWAP) 2008.*
- Kalogeropoulos K., Roberts G.O. and Dellaportas P. (2006). Irreducible MCMC schemes for diffusion driven stochastic volatility models. *Nonlinear Statistical Signal Processing Workshop (NSSPW) 2006.*
- Petrakos G, Kalogeropoulos K., Farmakis G. and Stavropoulos P. (2001). A Classification Scheme of Validation Rules Applied to Statistical Data Bases. *NTTS 2001.*
- RESEARCH INTERESTS Exploring ODE model uncertainty via diffusion processes.
- Diffusion models in Econometric and Financial applications.
- Inference on epidemic models with time-varying parameters
- Advanced MCMC methods for diffusion processes.
- TEACHING EXPERIENCE Since I joined LSE, I have taught the courses
- ST202: Probability Distribution Theory and Inference (undergraduate). Taught from 2008 onwards
- ST212: Applied Statistics Project (undergraduate). Taught from 2009 onwards.
- ST402: Principles and Methods of Statistical practice. Taught from 2008 until 2010.
- I have also initiated the undergraduate course ST308: Bayesian Inference which I am teaching from 2010/11 onwards.

I have also been involved as an examiner and marker in the University of London External Degree programme for the courses Statistics 1, Advanced Statistics: Distribution Theory, and Advanced Statistics: Statistical Inference.

SUPERVISION

I am supervising the Phd student Joseph Dureau from April 2010. Dissertation title: Epidemic models with time-varying parameters and optimal experimental design for public health policies.

I supervised the MSc student Karolos Korkas in the summer of 2009. Dissertation title: Markov Chain Monte Carlo methods in Asset Pricing: Algorithms and an Application from 49 US Industry Portfolios.

ACADEMIC ACTIVITIES

Member of the organizing committee of the workshop/summer school "Greek Stochastics" held from 2009 to 2011

Organiser of the Joint Econometrics and Statistics Workshop (LSE Lent term 2009 to 2011)

Referee for Annals of Statistics, Journal of Royal Statistical Society (Series B), Biometrika, Statistics and Computing, Methodology and Computing in Applied Probability, Biostatistics, Biometrical Journal, Computational Statistics and Data Analysis and the conference AISTATS.

Member of Royal Statistical Society(RSS), International Society for Bayesian Analysis (ISBA), Institute of Mathematical Statistics (IMS).

SELECTED PRESENTATIONS

Diffusion driven models for physiological processes. *Invited seminar, University of Kent, Department of Statistics, 2009*

Inference for stochastic volatility models using time change transformations. *7th world Congress in Probability and Statistics, IMS / Bernoulli, Singapore 2008 and 9th ISBA World Meeting, Hamilton Island, Australia 2008.*

Diffusion-driven models for physiological processes. *International Workshop on Applied Probability, Compiègne, France 2008.*

Likelihood-based inference for stochastic volatility models using stock and option prices. *2nd International Workshop on Computational and Financial Econometrics. Neuchatel, Switzerland 2008.*

Likelihood based Inference for diffusion processes via data augmentation *London School of Economics, Department of Statistics, 2008*

Irreducible MCMC schemes for diffusion driven stochastic volatility models. *Nonlinear Statistical Signal Processing Workshop (NSSPW), University of Cambridge, 2006.*

COMPUTING

Languages: C, MATLAB. Statistical Packages: R, WinBUGS, SAS, SPSS.