

## CURRICULUM VITAE

### PERSONAL

**Name:** Maria Kateri ( [mkateri@uoi.gr](mailto:mkateri@uoi.gr) )  
<http://www.math.uoi.gr/EN/staff/faculty/mkateri.html>

**Affiliation:** Assoc. Professor of Statistics  
Department of Mathematics  
University of Ioannina  
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### STUDIES

Diploma in Mathematics (1989)  
Department of Mathematics, University of Ioannina, Greece

M.Phil. in Statistics (1992)  
Department of Statistics and Modelling Science, University of Strathclyde

PhD in Statistics (1996)  
Department of Mathematics, University of Ioannina, Greece  
Thesis Title: *Contribution to the Analysis of Categorical Data.* (in greek)

**Foreign Languages:** English – German – French

#### Scholarships / Distinctions

- Post-doctoral scholarship of the Greek State Scholarship's Foundation (1998).
- Lefkopoulou First Prize for PhD Theses conducted by Greek students in the years 1995-96 (Greek Statistical Institute, 1997).

### ACADEMIC POSITIONS

Department of Mathematics, University of Ioannina, Greece  
(Associate Professor: since June 2010)

Greek Open University (Cooperating Scientific Personnel: since October 2005)

Department of Statistics & Insurance Science, University of Piraeus, Greece  
(Associate Professor: Jan 2010 - June 2010; Assistant Professor: July 2003 – Jan 2010)

Department of Tourist Business, Technological Educational Institute of Epirus, Greece  
(Assist. Prof.: Sept 2000 – June 2003; Visiting Assist. Prof.: Oct 1997 - Feb 1999)

Department of Philosophy – Education – Psychology, University of Ioannina, Greece  
(Visiting Assist. Prof.: March 1999 - Aug 2003)

Department of History, Ionian University, Greece (Visiting Lecturer: Oct 1996 - Febr 1997)

### INVITATIONS / VISITS IN UNIVERSITIES ABROAD

- Department of Mathematics and Statistics, McMaster University, Canada  
(invited by Prof. N. Balakrishnan): visits of one month each in 2005, 2006, 2007.
- Department of Statistics, University of Dortmund, Germany  
(invited by Prof. U. Gather): visits of one week each at March 2007 and Sept. 2007.
- Institute of Statistics, RWTH Aachen University, Germany  
(invited by Prof. U. Kamps): visits of one month each in 2008, 2010 (10 days funded by DAAD) and visits of three months in total during my sabbatical in spring semester of 2008-09.
- Department of Statistics, University of Florida, USA.  
(invited by Prof. A. Agresti): visit of two weeks in April 2009, during my sabbatical.

### Theses

- A. *Contributions to the analysis of categorical data via log-linear and log-nonlinear models.* (M.Phil. Thesis, Department of Statistics and Modelling Science, University of Strathclyde, 1992)
- B. *Contributions to the analysis of Categorical Data* (in Greek) (PhD Thesis, Department of Mathematics, University of Ioannina, 1996).

### Papers Published in International Refereed Journals

#### (a) Theory and Methodology

1. Kateri, M. (1993). Fitting asymmetry and non-independence models with GLIM, *GLIM Newsletter*, **22**, 46-50.
2. Kateri, M. and Papaioannou, T. (1995). f-divergence association models, *International Journal of Mathematical and Statistical Science*, **3**, 179-203.
3. Kateri, M. and Papaioannou, T. (1996). Symmetry and asymmetry models for rectangular tables, *Biometrical Journal*, **38**, 203-220.
4. Kateri, M., Papaioannou, T. and Ahmad, R. (1996). New association models for the analysis of sets of two-way contingency tables, *Statistica Applicata*, **8**, 537-551.
5. Kateri, M. and Papaioannou, T. (1997). Asymmetry models for contingency tables, *Journal of the American Statistical Association*, **92**, 1124-1131.
6. Kateri, M., Ahmad, R. and Papaioannou, T. (1998). New features in the class of association models, *Applied Stochastic Models and Data Analysis*, **14**, 125-136.
7. Kateri, M., Papaioannou, T. and Dellaportas, P. (2001). Bayesian analysis of correlated proportions, *Sankhya B*, **63**, 270 - 285.
8. Kateri, M. and Papaioannou T. (2003). A correspondence between point-symmetric and classical log-linear models, *Metron*, **LXI**, 5-11.
9. Kateri, M. and Iliopoulos, G. (2003). On collapsing categories in two-way contingency tables, *Statistics* **37**, 443-455.
10. Kateri, M., Nicolaou, A. and Ntzoufras, I. (2005). Bayesian Inference for the RC(M) association model, *Journal of Computational and Graphical Statistics*, **14**, 116-138.
11. Iliopoulos, G., Kateri, M. and Ntzoufras, I. (2007). Bayesian estimation of unrestricted and order-restricted association models for a two-way contingency table, *Computational Statistics & Data Analysis*, **51**, 4643-4655.
12. Kateri, M. and Agresti, A. (2007). A class of ordinal quasi symmetry models for square contingency tables, *Statistics & Probability Letters*, **77**, 598-603.
13. Kateri M. and Balakrishnan, N. (2008). Statistical evidence in contingency tables analysis, *Journal of Statistical Planning and Inference*, **138**, 873-887.
14. Balakrishnan, N. and Kateri, M. (2008). On the maximum likelihood estimation of parameters of Weibull distribution based on complete and censored data, *Statistics & Probability Letters*, **78**, 2971-2975.
15. Kateri, M. and Balakrishnan, N. (2008). Inference for a simple step-stress model with type-II censoring and Weibull distributed lifetimes, *IEEE on Reliability*, **57**, 616-626.
16. Balakrishnan, N., Castillo, E., Fernández-Canteli, A. and Kateri, M. (2009). An exponential model for damage accumulation, *Communications in Statistics: Computation & Simulation*, **38**, 215-232.
17. Balakrishnan, N., Beutner, E. and Kateri, M. (2009). Order restricted inference for exponential step-stress models, *IEEE on Reliability*, **58**, 132-142.
18. Eleftheraki, A., Kateri, M. and Ntzoufras, I. (2009). Bayesian analysis of dependent 2x2 contingency tables, *Computational Statistics & Data Analysis*, **53**, 2724-2732.
19. Kateri, M., Kamps, U. and Balakrishnan, N. (2009). A meta-analysis approach for step-stress experiments, *Journal of Statistical Planning and Inference*, **139**, 2907-2919.
20. Iliopoulos, G., Kateri, M. and Ntzoufras, I. (2009). Bayesian model comparison for the order restricted RC association model, *Psychometrika*, **74**, 561-587.
21. Balakrishnan, N, Kamps, U. and Kateri, M. (2009). Minimal repair under step-stress test, *Statistics & Probability Letters*, **79**, 1548-1558.
22. Kateri, M. and Agresti, A. (2010). A generalized regression model for a binary response, *Statistics & Probability Letters*, **80**, 89-95.
23. Kateri, M., Kamps, U. and Balakrishnan, N. (2010). Multi-sample simple step-stress experiment under time constraints, *Statistica Neerlandica*, **64**, 77-96.

24. Burkschat, M., Kamps, U. and Kateri, M. (2010). Sequential order statistics with an order statistics prior, *Journal of Multivariate Analysis*, **101**, 1826-1836.
25. Krampe, A., Kateri, M. and Kuhnt, S. (2011). Asymmetry models for square contingency tables: exact tests via algebraic statistics, *Statistics and Computing*, **21**, 55-67.
26. Kateri, M., Kamps, U. and Balakrishnan, N. (2011). Optimal allocation of change points in simple step-stress experiments under type-II censoring, *Computational Statistics & Data Analysis*, **55**, 236 - 247.
27. Balakrishnan, N., Kamps, U. and Kateri, M. (2010). A sequential order statistics approach to step-stress testing, *Annals of the Institute of Statistical Mathematics (to appear)*.
28. Kateri, M. (2010). On the comparison of two ordinal responses. *Communications in Statistics: Theory & Methods*, (to appear).

#### Contribution to the 'Discussion' of Discussion Papers

1. Kateri, M. (2005). Discussion for the paper by Liu, I. and Agresti, A.: 'The analysis of ordered categorical data: An overview and a survey of recent developments', *Test*, **14**, 1-73, (Comment: p. 36-39).

#### In Edited Volumes

1. Kateri, M., Kamps, U. and Balakrishnan, N. (2011). Step-stress testing with multiple samples: The exponential case. In: *Methods and Applications of Statistics in Engineering, Quality Control and the Physical Sciences* (Eds., N. Balakrishnan et al.), 644-665, Wiley, Hoboken.

#### Encyclopedia Entries

1. Kateri, M. (2008). Categorical data, *Encyclopedia of Statistical Sciences*, Wiley.
2. Kateri, M. and Agresti, A. (2010). Categorical data analysis, *Encyclopedia of Research Design*, Sage.
3. Agresti, A. and Kateri, M. (2010). Categorical data analysis, *International Encyclopedia of Statistical Science*, Springer.

#### Other Publications

1. Kateri, M. (1993), 'Models in Two-Way Contingency Tables', *Biometrics*, **49**, 950-51 (Correspondence Section).
2. Kateri, M. and Papaioannou, T. (2001), 'Quasi Symmetry and Asymmetry Models for Contingency Tables' στο ηλεκτρονικό αφιέρωμα 'projet QS' ([http://www.lsp.upstlse.fr/Project\\_QS](http://www.lsp.upstlse.fr/Project_QS)) του Laboratoire de Statistique et Probabilités, Université Paul Sabatier, Toulouse.

#### Applications

1. Bartzokas, A., Metaxas, D.A., Kateri, M. and Exarchos, N. (1991). Sea surface temperature in the Mediterranean. Statistical properties, *Rivista di Meteorologia Aeronautica*, V.LI-N. 1-2, 47-64.
2. Marselos, M, Boutsouris, K., Liapi, H., Malamas, M., Kateri, M. and Papaioannou, T. (1997). Epidemiological aspects on the use of cannabis among university students in Greece, *European Addiction Research*, **3**, 184-191.
3. Danielides, V., Nousia, C.-S., Bartzokas A., Lolis, C., Kateri M. and Skevas, A. (2002). Weather conditions and sudden sensorineural hearing loss, *BMC Ear, Nose and Throat Disorders*, **2:2**, p.1-8, (<http://www.biomedcentral.com/browse/medicine/>).
4. Tzoufi, M., Mantas, Ch., Pappa, S., Kateri, M. Hyphantis, T., Pavlou, M., Mavreas, V. and Siamopoulou-Mavridou, A. (2005). The impact of childhood chronic neurological diseases on Greek families, *Child: Care, Health and Development*, **31**, 109-115.
5. Makis, A.C., Tzoufi, M., Kateri, M.D., Bourantas, K.L. and Papadopoulou, Z.L. (2005). Valproate-induced eosinophilia in children with epilepsy: role of interleukin-5, *J. Child Neurol.*, **20**, 150-152.
6. Papadopoulos, A. A., Kateri, M., Triantafyllou, K., Ladas, K. D., Tzathas, C., Koutras, M., Ladas, S. (2006). Hospitalisation rates for cholelithiasis and acute cholecystitis doubled for the aged population in Greece over the past 30 years, *Scandinavian Journal of Gastroenterology*, 1-6.
7. Papadopoulos, A.A., Polymeros, D., Ladas, D., Kateri, M., Tzathas, C., Koutras, M. and Ladas, S.D. (2008). Dramatic decline of acute appendicitis in Greece over 30 years. Index of improvement of socioeconomic conditions or diagnostic aids?, *Digestive Diseases*, **26**, 80-84.

8. Gatzonis, S., Triantafyllou, N., Kateri, M., Siatouni, A., Angelopoulos, E. and Kimiskidis, V. (2010). The prognostic value of electroencephalography in epilepsy: a long-term follow-up study. *Neurology International*, **2**, 73-76.

#### International Conferences' Proceedings

1. Mantas, Chr., Kateri, M. and Liakos, A. (1996), 'The practice of co-admitting relatives of patients in an open general hospital unit - effects on the relatives', *European Psychiatry*, Vol. 11/sup. 4, 1996, p. 350s (Abstract of the talk at the 8<sup>th</sup> Congress of Association of European Psychiatrists, London, U.K, 1996).
2. N. Kateri, M. and Balakrishnan, N. (2006), "Statistical Evidence in Two-Way Contingency Tables", International Conference on Mathematical and Statistical Modeling in Honor of Enrique Castillo, June 28-30, 2006, pp. 1-16.

#### Seminars

- "Generalized Association Models for Two-Way Contingency Tables", Kateri, M., *Sixth Summer Mini Conference on Statistics*, McMaster University, Canada, August 2005.
- "Generalized Models for Two-Way Contingency Tables", Kateri, M., University of Dortmund, Germany, March, 2007.
- "Point and Interval Estimation for a Simple Step-Stress Model with Type-II Censoring and Weibull Distributed Lifetimes", Kateri, M., *2007 Mini Conference on Statistics*, McMaster University, Canada, July 2007.
- "Analysis of Ordinal Categorical Data", Kateri, M., University of Dortmund, Germany, September 2007.
- "Mulle-Sample Step-Stress Experiment and Associated Inference", Kateri, M., Università degli Studi di Pavia, Italy, November 2008.
- " $\varphi$ -Divergence Classes of Models for Categorical Data", Kateri, M., University of Florida, USA, April 2009.
- "Analysis of Ordinal Categorical Data", Kateri, M., RWTH Aachen University, Germany, July 2010.

#### Talks in International Conferences / Workshops

- 1 'Data Analytic Aspects of Association Models', Kateri, M. and Papaioannou, T., 2<sup>nd</sup> European Conference of Numerical Analysis HERMIS'94.
- 2 'Bayesian Analysis of Correlated Proportions', Kateri, M. and Papaioannou, T., Royal Statistical Society Conference 1998, University of Strathclyde, Glasgow.
- 3 "Comparison of Distributions for Ordered Categorical Data with Application to Clinical Trials", Kateri, M., *3<sup>rd</sup> EMR-IBS International Conference*, 10-12 May 2005, Corfu.
- 4 "Bayesian Estimation of the Ordered RC Association Model for a Two-Way Contingency Table", Kateri, M., Iliopoulos, G. and Ntzoufras, I. *3rd IASC World Conference on Computational Statistics & Data Analysis*, 28-31 October 2005, Cyprus.
- 5 "Bayesian Analysis of Correlated 2x2 Contingency Tables", Eleftheraki, A., Kateri, M. and Ntzoufras, I., *International Conference on Statistical Models for Biomedical and Technical Systems*, 29-31 May 2006, Cyprus.
- 6 "Statistical Evidence in Two-Way Contingency Tables", Kateri, M. and Balakrishnan, N., *International Conference on Mathematical and Statistical Modeling in Honor of Enrique Castillo (ICMSM 2006)*, 28-30 June 2006, University of Castilla - La Mancha, Ciudad Real, Spain. (*invited*)
- 7 "Maximum Likelihood Estimation of Parameters of Weibull Distribution under Censoring", Kateri, M., XIIth Applied Stochastic Models and Data Analysis International Conference (ASMDA 2007), May 29 - June 1, 2007, Chania, Greece.
- 8 "Point and Interval Estimation for a Simple Step-Stress Model with Type-II Censoring and Weibull Distributed Lifetimes", Kateri, M., *Ordered Statistical Data and Inequalities: Theory & Applications*, 12-14 June 2007, University of Jordan, Amman, Jordan.
- 9 "Multiple Sample Step-Stress Experiment and Associated Inference", Kateri, M., Balakrishnan, N. and Kamps, U., *Conference on Ordered Statistical Data and its Applications (OSDA 2008)*, 7-8 March 2008, RWTH Aachen University, Germany. (*invited*)
- 10 Workshop on Models for Ordered Statistical Data, 10-11 March 2008, RWTH Aachen University, Germany. (*invited*)
- 11 "Generalized Models for Categorical Data based on f-divergence", Kateri, M., 1<sup>st</sup> Athens - Pavia Meeting, Mati Attikis, June 2008.

- 12 “Bayesian Analysis of the Order Restricted RC Association Model”, Kateri, M., Iliopoulos, I. and Ntzoufras, I., *International Meeting of the Psychometrical Society*, 30 June- 2 July 2008, New Hampshire, USA (*invited*).
- 13 “Meta-Analysis of Step-Stress Experiments”, Kateri, M., *International Conference on Mathematical Methods in Reliability (MMR 2009)*, 22-27 June 2009, Moscow.
- 14 “ $\phi$ -Divergence Classes of Models for Categorical Data”, Kateri, M., *16<sup>th</sup> International Meeting of the Psychometrical Society (IMPS 2009)*, 20 - 24 July 2009, St. John’s College, Cambridge, UK.
- 15 “Multiple Samples Step-Stress Experiments”, Kateri, M., *28<sup>th</sup> European Meeting of Statisticians (EMS 2010)*, 17-22 August 2010, University of Piraeus, Greece
- 16 “Conditional Symmetry Models for Three-Way Contingency Tables”, Kateri, M. and Dellaportas, P., *3<sup>d</sup> International Conference of the ERCIM WG on COMPUTING & STATISTICS (ERCIM’10)*, 10-12 December 2010, University of London, UK.

### Contribution to Papers presented at International Conferences

#### (a) On Statistics

1. ‘f-divergence asymmetry models’, Papaioannou, T. and Kateri, M., 21<sup>st</sup> European meeting of Statisticians, University of Aarhus, Denmark, 1995.
2. “Bayesian Analysis of Order-Restricted Association Models for two-Way Contingency Tables” (poster), Iliopoulos, G., Kateri, M. and Ntzoufras, I. *8<sup>th</sup> Valencia/ISBA World Meeting on Bayesian Statistics*, 1-6 June 2006, Bernidorm, Spain.
3. “Order Restricted Inference for Step-Stress Models”, Beutner, E., Balakrishnan, N. and Kateri, M., *Conference on Ordered Statistical Data and its Applications (OSDA 2008)*, 7-8 March 2008, RWTH Aachen, Germany.
4. “Bayesian Model Comparison for the Order Restricted RC Association Model”, Iliopoulos, G., Kateri, M. and Ntzoufras, I., 1<sup>st</sup> Athens - Pavia Meeting, Mati Attikis, June 2008.

#### (b) On Other Fields (Statistical Applications)

5. ‘The practice of co-admitting relatives of patients in an open general hospital unit - effects on the relatives’, Mantas, Chr., Kateri, M. and Liakos, A., 8<sup>th</sup> Congress of Association of European Psychiatrists, London, U.K, 1996.
6. ‘The effects of co-admitting relatives during hospitalization on their attitudes towards their patients and illness’, Chr.Mantas, M. Kateri, S. Yannitsi, A. Liakos, 5th World Congress on “INNOVATIONS IN PSYCHIATRY-1998”.

### Organizing Committees of Conferences

Member of the local organizing committee of the conferences:

- 3<sup>rd</sup> EMR-IBS *International Conference*, 10-12 May 2005, Corfu.
- 11<sup>th</sup> *International Congress on INSURANCE: MATHEMATICS & ECONOMICS (IME2007)*, 10-12 July 2007, Piraeus.
- 28<sup>th</sup> *European Meeting of Statisticians (EMS 2010)*, 17-21 August 2010, Piraeus

Member of the scientific committee of the annual Greek Conferences of Statistics since 2006.

### Editorial Boards

- *Communications in Statistics: Theory & Methods* (since 2007).
- *Communications in Statistics: Simulation & Computation* (since 2007).

### Refereeing

*Advances in Statistical Analysis - Applied Mathematical Modelling - Australian & New Zealand Journal of Statistics - Biometrical Journal - Biometrics - Brazilian Journal of Probability and Statistics - Communications in Statistics: Theory & Methods - Communications in Statistics: Simulation & Computation - Computational Statistics and Data Analysis (4) - IEEE Transactions on Reliability - Information Sciences - Journal of Appl. Math & Decision Sci. - Journal of Applied Statistics - Journal of Classification - Journal of Multivariate Analysis (2) - Journal of Probability and Statistics - Journal of Statistical Planning and Inference (3) - Lifetime Data Analysis - Psychometrika - Statistica Sinica - Statistical Methodology - Statistical Modeling - Statistical Papers - Statistics - Statistics & Probability Letters - Statistics Education Research Journal - TEST (4)*

### Reviewing

- Reviewer of the book ‘Ordinal Categorical Data Analysis’ by Alan Agresti (Wiley, 2009).
- Reviewer of book proposals for Chapman & Hall (2009) and Wiley (2009, 2011).
- Reviewer of MATH REVIEWS.