Xanthi Pedeli

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Ca' Foscari University of Venice
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EDUCATION		
PhD in Statistics, Athens University of Economics and Business		Mar 2011
Thesis title: *Modelling Multivariate Time Series for Count Data*		
Master degree in Biostatistics, National and Kapodistrian University of Athens		July 2006
Bachelor degree in Statistics, Athens University of Economics and Business		Sep 2003

RESEARCH POSITIONS

Research Fellow, Ca' Foscari University of Venice June 2016 - present
Department of Environmental Sciences, Informatics and Statistics
Marie Sklodowska-Curie Individual Fellowship
Project title: *Sparse Composite Likelihood Inference in Count Time Series*
Supervisors: C. Varin, R. Fried

Senior Statistician, Frontier Science Foundation Hellas Oct 2013 - May 2016
http://www.frontier-science.gr/

Postdoctoral Research Associate, Athens University of Economics and Business Oct 2013 - Sep 2014
Department of Statistics
Supervisor: D. Karlis

Postdoctoral Research Associate, University of Cyprus Oct 2011 - Sep 2013
Department of Mathematics and Statistics
Supervisor: K. Fokianos

PhD Student in Statistics, Athens University of Economics and Business July 2007 - Mar 2011
Department of Statistics
Supervisor: D. Karlis

	Research Assistant, National and Kapodistrian University of Athens	Apr 2006 - Sep 2011

Medical School, Department of Hygiene, Epidemiology and Medical Statistics
Participation in several European research projects

TEACHING	**National and Kapodistrian University of Athens Master Program in Biostatistics**	2014 (fall semester)

Instructor in *Biostatistics*

Athens University of Economics and Business Department of Statistics — 2008 - 2010 (summer semesters)
Instructor in *Elements of Computing and Computer Programming with S-PLUS and R*

National and Kapodistrian University of Athens Master Program in Biostatistics — 2007, 2008, 2010 (fall semesters)
Instructor in *Statistical Methods in Epidemiology*

FELLOWSHIPS AND AWARDS

Marie Sklodowska-Curie Individual Fellowship — June 2016 - May 2018
European Union's Horizon 2020 research and innovation programme

Student award in honor of Prof. Lagakos — May 2011
6th EMR-IBS Conference

PARTICIPATION IN RESEARCH PROJECTS

Programme for the promotion of the exchange and scientific cooperation between Greece and Germany — Jan 2014 - Dec 2015
Project title: *Bayesian analysis and model selection for discrete high-dimensional data*
Partners: RWTH Aachen University, Institute of Statistics
Athens University of Economics and Business, Department of Statistics
Principal Investigators: M. Kateri, I. Ntzoufras

European study of cohorts for air pollution effects (ESCAPE) — June 2008 - June 2012
Project funded under the European Union's Seventh Framework Programme Theme

Integrated assessment of health risks of environmental stressors in Europe (INTARESE) — Nov 2005 - Jan 2011
Project funded under the European Union's Seventh Framework Programme Theme

SHORT-TERM RESEARCH STAYS

Technical University of Dortmund, Faculty of Statistics — Oct-Nov 2016
Visiting R. Freid

RWTH Aachen University, Institute of Statistics — Apr & Dec 2015, Feb 2014
Visiting M. Kateri

	Texas A&M University, Department of Statistics Visiting M. Pourahmadi	Oct 2012
INVITED RESEARCH SEMINARS	*The saddlepoint approximation for the estimation of higher order integer-valued autoregressive processes* University of Padova, Department of Statistical Sciences	Oct 2016
	Likelihood estimation for the INAR(p) model by saddlepoint approximation Athens University of Economics and Business, Department of Statistics	Dec 2014
	On some multivariate time series models for count data Technical University of Dortmund, Faculty of Statistics	Nov 2014
CONTRIBUTED CONFERENCE TALKS	*Adjusting for Selective Crossover in Randomized Clinical Trials: the HERA trial example* (joint with U. Dafni, D. Karlis, R.D. Gelber and M.M. Regan) 8th EMR-IBS Conference, Nevsehir-Cappadocia, Turkey	May 2015
	Integer–valued autoregressive models: reliable and practical multivariate perspectives (joint with D. Karlis) Statistische Woche, Hannover, Germany	Sep 2014
	Time Series Models for Syndromic Surveillance and Outbreak Detection (joint with D. Karlis) XXVII International Biometric Conference, Florence, Italy	July 2014
	Cholesky decomposition for multivariate volatilities (joint with K. Fokianos and M. Pourahmadi) 28th IWSM, Palermo, Italy	July 2013
	On a multivariate integer-valued autoregressive model with Poisson innovations (joint with D. Karlis) 26th Panhellenic Statistics Conference, Piraeus, Greece	May 2013
	Saddlepoint approximation for INAR(p) processes (joint with A.C. Davison and K. Fokianos, poster presentation) NBER-NSF Time Series Conference, College Station, Texas	Oct 2012
	Saddlepoint approximation for INAR(p) processes (joint with A.C. Davison and K. Fokianos) 20th International Conference on Computational Statistics, Limassol, Cyprus	Aug 2012
	Saddlepoint approximation for INAR(p) processes (joint with A.C. Davison and K. Fokianos, poster presentation) International Workshop on Recent Advances in Time Series Analysis, Protaras, Cyprus	June 2012
	Joint Modeling of Daily Crash Counts and the Risk Impact of traffic exposure and and weather conditions in the Netherlands (joint with K. Katsouyanni and D. Karlis) 23rd ISEE Conference, Barcelona, Spain	Sep 2011

On some multivariate time series models for count data Sep 2011
(joint with D. Karlis)
17th EYSM, Lisbon, Portugal

On a Modified Bivariate INAR(1) Process June 2011
(joint with D. Karlis)
2nd International Workshop on Integer-Valued Time Series, Protaras, Cyprus

Modelling Health Surveillance Data via a Bivariate INAR(1) May 2011
Process (joint with D. Karlis)
6th EMR-IBS Conference, Crete, Greece

Multivariate Integer-Valued Autoregressive Models with Aug 2010
Explanatory Variables (joint with D. Karlis)
Greek Stochastics β, Lefkada, Greece

On Some Multivariate Integer-Valued Autoregressive Models Aug 2010
(joint with D. Karlis)
28th European Meeting of Statisticians, Piraeus, Greece

On composite likelihood estimation of a multivariate Poisson July 2010
INAR(1) model (joint with D. Karlis, poster presentation)
25th IWSM, Glasgow, Scotland

Uncertainty in Bias Estimation: Implication for Health Impact Aug 2009
Assessment: An Analysis within the INTARESE Project
(joint with K. Katsouyanni)
21st ISEE Conference, Dublin, Ireland

A Bivariate Integer Autoregressive Model (joint with D. Karlis) May 2009
5th EMR-IBS Conference, Istanbul, Turkey

REFEREEING Communications for Statistical Applications and Methods, Communications in Statistics -
Simulation and Computation, Communications in Statistics - Theory and Methods,
Computational Statistics and Data Analysis, FILOMAT, Journal of the Korean Statistical
Society, Journal of Applied Statistics, Journal of Statistical Planning and Inference,
Journal of Statistical Software, Journal of Time Series Analysis, Pakistan Journal of Statistics,
Statistics and Probability Letters, Statistical Papers

PUBLICATIONS

ONLINE BIBLIOGRAPHY

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Google Scholar: `https://scholar.google.com/citations?user=xGuRkNQAAAAJ&hl=en`

PEER-REVIEWED ARTICLES

X. Pedeli, A.C. Davison and K. Fokianos (2015). Likelihood estimation for the INAR(p) model by saddlepoint approximation. *Journal of the American Statistical Association*, 110: 1229 - 1238.

X. Pedeli, K. Fokianos and M. Pourahmadi (2015). Two Cholesky-log-GARCH models for multivariate volatilities. *Statistical Modelling*, 15: 345–365.

K. Dimakopoulou, E. Samoli E, R. Beelen, M. Stafoggia, Z.J. Andersen, B. Hoffmann, P. Fischer, M. Nieuwenhuijsen, P. Vineis, W. Xun, G. Hoek, O. Raaschou-Nielsen, A. Oudin, B. Forsberg, L. Modig, P. Jousilahti, T. Lanki, A. Turunen, B. Oftedal, P. Nafstad, P.E. Schwarze, J. Penell, L. Fratiglioni, N. Andersson, N. Pedersen, M. Korek, U. De Faire, K.T. Eriksen, A. Tjønneland, T. Becker, M. Wang, B. Bueno-de-Mesquita, M.Y. Tsai, M. Eeftens, P.H. Peeters, K. Meliefste, A. Marcon, U. Krämer, T.A. Kuhlbusch, M. Vossoughi, T. Key, K. de Hoogh, R. Hampel, A. Peters, J. Heinrich, G. Weinmayr, H. Concin, G. Nagel, S. Ineichen, B. Jacquemin, M. Stempfelet, A. Vilier, F. Ricceri, C. Sacerdote, **X. Pedeli**, M. Katsoulis, A. Trichopoulou, B. Brunekreef, K. Katsouyanni (2014). Air Pollution and Nonmalignant Respiratory Mortality in 16 Cohorts within the ESCAPE Project. *American Journal of Respiratory and Critical Care Medicine*, 189: 684–696.

M. Katsoulis, K. Dimakopoulou, **X. Pedeli**, D. Trichopoulos, A. Gryparis, A. Trichopoulou, K. Katsouyanni (2014). Long-term exposure to traffic-related air pollution and cardiovascular health in a Greek cohort study. *Science of the Total Environment*, 490: 934–940.

A. Gryparis, K. Dimakopoulou, **X. Pedeli**, K. Katsouyanni (2014). Spatio-temporal semiparametric models for NO2 and PM10 concentration levels in Athens, Greece. *Science of the Total Environment*, 479-480: 21–30.

R. Beelen, G. Hoek, D. Vienneau, M. Eeftens, K. Dimakopoulou, **X. Pedeli**, M.Y. Tsai, N. Künzli, T. Schikowski, A. Marcon, K.T. Eriksen, O. Raaschou-Nielsen, E. Stephanou, E. Patelarou, T. Lanki, T. Yli-Tuomi, C. Declercq, G. Falq, M. Stempfelet, M. Birk, J. Cyrys, S. von Klot, G. Nádor, M.J. Varró, A. Dèdelé, R. Gražlevičienė, A. Mölter, S. Lindley, C. Madsen, G. Cesaroni, A. Ranzi, C. Badaloni, B. Hoffmann, M. Nonnemacher, U. Krämer, T. Kuhlbusch, M. Cirach, A. de Nazelle, M. Nieuwenhuijsen, T. Bellander, M. Korek, D. Olsson, M. Strömgren, E. Dons, M. Jerrett, P. Fischer, M.Wang, B. Brunekreef, K. de Hoogh (2013). Development of NO2 and NOx land use regression models for estimating air pollution exposure in 36 study areas in Europe – The ESCAPE project. *Atmospheric Environment*, 72:10–23.

X. Pedeli and D. Karlis (2013). Some properties of multivariate INAR(1) processes. *Computational Statistics & Data Analysis*, 67: 213-225.

X. Pedeli and D. Karlis (2013). On composite likelihood estimation of a multivariate INAR(1) model. *Journal of Time Series Analysis*, 34: 206–220.

X. Pedeli and D. Karlis (2013). On estimation of the bivariate Poisson INAR process. Communication in Statistics - Simulation and Computation, 42: 514–533.

D. Karlis and **X. Pedeli** (2013). Flexible bivariate INAR(1) processes using copulas. *Communications in Statistics - Theory and Methods* 42: 723–740.

M. Wang, R. Beelen, X. Basagana, T. Becker, G. Cesaroni, K. de Hoogh, A. Dedele, C. Declercq, K. Dimakopoulou, M. Eeftens, F. Forastiere, C. Galassi, R. Grazuleviciene, B. Hoffmann, J. Heinrich, M. Iakovides, N. Kunzli, M. Korek, S. Lindley, A. Molter, G. Mosler, C. Madsen, M.J. Nieuwenhuijsen, H. Phuleria, **X. Pedeli**, O. Raaschou- Nielsen, A. Ranzi, D. Sugiri, M. Stempfelet, M.Y. Tsai, T. Lanki, O. Udvardy, M.J. Varro, K. Wolf, G. Weinmayr, T. Yli-Tuomi, G. Hoek, B. Brunekreef (2013). Evaluation of land use regression models for NO2 and particulate matter in 20 European study areas: the ESCAPE project. *Environmental Science & Technology*, 47: 4357-4364.

M. Eeftens, R. Beelen, K. de Hoogh, T. Bellander, G. Cesaroni, M. Cirach, C. Declercq, A. Dedele, E. Dons, A. de Nazelle, K. Dimakopoulou, K. Eriksen, G. Falq, P. Fischer, C. Galassi, R. Gražlevičiené, J. Heinrich, B. Hoffmann, M. Jerrett, D. Keidel, M. Korek, T. Lanki, S. Lindley, C. Madsen, A. Mölter, G. G Nádor, M. Nieuwenhuijsen, M. Nonnemacher, **X. Pedeli**, O. Raaschou-Nielsen, E. Patelarou, U. Quass, A. Ranzi, C. Schindler, M. Stempfelet, E. Stephanou, D. Sugiri, M.Y. Tsai, T. Yli-Tuomi, M.J. Varró, D. Vienneau, S.von Klot, K. Wolf, B. Brunekreef, G. Hoek (2012). Development of Land Use Regression Models for PM(2.5), PM(2.5) Absorbance, PM(10) and PM(coarse) in 20 European Study Areas; Results of the ESCAPE Project. *Environmental Science & Technology*, 46: 11195–205.

N. Papathanasiou, P. Rondogianni, P. Chroni, M. Themistocleous, E. Boviatsis, **X. Pedeli**, D. Sakas and I. Datseris (2012). Interobserver variability, and visual and quantitative parameters of (123)I-FP-CIT SPECT (DaTSCAN) studies. *Annals of Nuclear Medicine*, 26: 234–240.

X. Pedeli, G. Hoek and K. Katsouyanni (2011). Risk assessment of diesel exhaust and lung cancer: combining human and animal studies after adjustment for bias in epidemiological studies. *Environmental Health*, 10:30.

X. Pedeli and D. Karlis (2011). A bivariate INAR(1) process with application. *Statistical Modelling*, 11: 325–349.

E. Pikoulis, E.D. Avgerinos, **X. Pedeli**, I. Karavokyros, N. Bassios and S. Anagnostopoulou (2010). Medical students' perceptions on factors influencing a surgical career: The fate of general surgery in Greece. *Surgery*, 148: 510-515.

G. Giannakopoulos, C. Dimitrakaki, **X. Pedeli**, G. Kolaitis, V. Rotsika, U. Ravens-Sieberer and Y. Tountas (2009). Adolescents' wellbeing and functioning: relationships with parents' subjective general physical and mental health. *Health and Quality of Life Outcomes*, 7: 100.

A. Kyrka, A. Tragiannidis, D. Cassimos, K. Pantelaki, M. Tzoufi, M. Mavrokosta, **X. Pedeli**, F. Athanassiadou, A. Hatzimichael, A. Konstantopoulos, D. Kafetzis and V. Papaevangelou (2009). Seroepidemiology of hepatitis A among Greek children indicates that the virus is still prevalent: Implications for universal vaccination. *Journal of medical virology*, 81: 582-587.

TECHNICAL REPORTS	**X. Pedeli** and D. Karlis (2009). Bivariate INAR(1) Models. Technical Report No. 247, Athens University of Economics and Business.
CONFERENCE PROCEEDINGS	**X. Pedeli**, K. Fokianos and M. Pourahmadi (2013). Cholesky decomposition of multivariate volatilities. *Proceedings of the 28th International Workshop on Statistical Modelling (IWSM)*, Eds. V.M.R. Muggeo, V. Capursi, G. Boscaino, G. Lovison, 325–331, Palermo, Italy
	X. Pedeli, A.C. Davison and K. Fokianos (2012). Saddlepoint approximation for INAR(p) processes. *Proceedings of the 20th International Conference on Computational Statistics (COMPSTAT)*, Eds. A. Colubi et al, 725–733, Limassol, Cyprus
	X. Pedeli and D. Karlis (2010). On composite likelihood estimation of a multivariate Poisson INAR(1) model. *Proceedings of the 25th International Workshop on Statistical Modelling (IWSM)*, 429-432, Glasgow, Scotland