

# Curriculum Vitae

*Athanasios N. Yannacopoulos*

## Personal

Name: Athanasios N. Yannacopoulos  
Nationality : Hellenic  
Work Address: Department of Statistics  
Athens University Economics and Business  
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Athens, 10434 Greece  
email: ayannaco@aueb.gr  
Date of Birth: 4 March 1968  
National Service: 5/2000-1/2002 (National Meteorological Office)

## Current Occupation.

Professor, Department of Statistics, AUEB.

## Research interests.

Stochastic analysis and modelling with applications in economics and modern technologies,  
Mathematical Finance,  
(Random) dynamical systems,  
Mathematical economics, game theory and decision making.

### Academic Record.

2011-	Professor	Department of Statistics, Athens University of Economics and Business
2007-2011	Associate Professor	Department of Statistics, Athens University of Economics and Business
2003-2007	Associate Professor	Department of Statistics, and Actuarial- Financial Mathematics Univ. Aegean
2002- 2003	Assistant Professor	Department of Statistics, and Actuarial- Financial Mathematics Univ. Aegean
Feb. 2002-Jul. 2002	Associate Professor (Adj. fac.)	Department of Applied, Mathematics University of Crete
1997- 2000	Lecturer	School of Mathematics and Statistics, University of Birmingham, UK
1995 - 97	Research Fellow	Mathematics Institute and Physics Department, University of Warwick, UK
1993 - 95	Research Fellow	Department of Applied Mathematics and School of Chemistry University of Leeds, UK

### Administration

2014- Deputy Chair of the Department of Statistics, AUEB.

2007-2013 Scientific Director of the Full Time MSC Program in Statistics, Department of Statistics, AUEB.

2008-2010 Deputy Chair of the Department of Statistics, AUEB.

3/2004 - 4/2007 Acting Chair, Department of Statistics and Actuarial-Financial Mathematics, Univ. of the Aegean.

9/2004 - 4/2007 Director of Postgraduate Studies Program, Department of Statistics and Actuarial-Financial Mathematics, Univ. of the Aegean.

1/1/2005 - 4/2007 Director of the Research Laboratory of Finance and Actuarial Studies, Department of Statistics and Actuarial-Financial Mathematics, Univ. of the Aegean.

3/2004 - 12/2004 Member of the Central Research Committee, University of the Aegean.

### Studies.

- 1989 - 93    Ph.D.            University of Warwick, UK  
Statistical Theory of Dynamical Systems  
Thesis Title: Diffusion in strongly chaotic  
Hamiltonian systems.  
Advisor: Prof. G. Rowlands
- 1985-89      Ptycheion        University of Athens  
Physics, Distinction (85/100)

### Grants

PhD Scholarship from the Hellenic Scholarship Foundation (IKY).

### PROJECTS (Selected)

1. MULTI-INSULARITY 2013 (University of the Aegean) Establishing a migration database: Migration on Greek islands, PI. Assist. Prof. E. V. Petracou
2. ARISTEIA 2012 (European Union and National Hellenic sources) Spatio-temporal dynamics in Economics, Coordinator for the AUEB Research Team, PI: Prof. A. Xepapadeas
3. THALES 2011 (European Union and National Hellenic sources) Optimal control of dynamical systems in the economy and the environment, Coordinator for the AUEB Research Team, PI: Prof. A. Xepapadeas
4. THALES 2011 (European Union and National Hellenic sources) Analysis, Modeling and Simulations of Complex and Stochastic Systems, Coordinator of the AUEB Research Team, PI: Prof. M. Katsoulakis
5. Fundamental Research Grants (AUEB): FBSDEs With Random Coefficients, Connections With SPDEs And Applications To Stochastic Control (PI).
6. Hellenic Scholarship Foundation: Supervision of postdoctoral research fellow Dr. N. Englezos, on backward SPDEs.
7. EPEAEK Pythagoras I: Stochastic integrodifferential equations and applications (PI).
8. Gulbenkian Foundation, Portugal: Contingent claims pricing in incomplete markets. Supervision of Postdoctoral Fellow Dr. D. Pinheiro in collaboration with Prof. A. A. Pinto
9. Karatheodory (NTUA): Nonlinear PDEs and applications in games theory. (PI: Prof. Kravvaritis) member of research team.
10. 2001-2002 Postdoctoral grant in the Department of Mathematics on the Mathematical Modelling of Complex Media (Hellenic Scholarship Foundation) (Supervised by Prof. I. G. Stratis)
11. 'Mixing with chaos' University of Warwick EPSERC 1995-1997
12. 'Dynamical systems techniques in the simplification of complex chemical schemes' University of Leeds SERC 1993-1995

### Supervision of Postdoctoral fellows

1. Dr. I. Baltas (in progress). With Dr. Baltas we are working on viscosity solutions for robust control problems and stochastic differential games.

2. Dr. A. Ioannidis (completed) (ARISTEIA supported research fellow, co-supervised with Prof. A. Xepapadeas). With Dr. Ioannidis we are working on spatial optimal control problems in economics.
3. Dr. E. Kalpinelli (completed) (THALES supported research fellow). With Dr. Kalpinelli we are working on the implementation of Wiener chaos for the solution of stochastic partial differential equations with particular focus on the wave equation and the Heath-Jarrow-Morton equation.
4. Dr. D. Pinheiro (completed) (Gulbenkian fellow, co-supervised with Prof. A. A. Pinto). With Dr Pinheiro we have worked on a dynamical systems approach on bargaining and asset pricing in incomplete markets. He is currently Associate Professor at Brooklin College, New York City University.
5. Dr. N. Englezos (completed) (National Scholarship Foundation - IKY). With Dr Englezos we have worked on forward and backward stochastic partial differential equations with random coefficients. He is currently Lecturer in the Department of Banking and Finance, University of Peiraias.

#### **Supervision of PhD Theses**

1. G. Papagiannis, Department of Statistics, AUEB Topic: Convex analysis in robust statistics and risk measurement (submitted awaiting oral exam)
2. M. Loizides, Department of Statistics, AUEB Topic: Stochastic Models in Credit Risk (PhD awarded)
3. X. Kartala, Department of Statistics, AUEB Topic: Forward backward stochastic differential equations with random coefficients and applications (Submitted awaiting oral exam)
4. I. Baltas, Department of Statistics, AUEB Topic: Stochastic control and stochastic differential games: Applications in insurance (PhD awarded)

#### **Participation in Advisory Phd Committees (selected)**

1. K. Vasiliadis, Department of Accounting and Finance, AUEB Topic: Multiscale volatility and homogenization theory, Supervisor: Assist. Prof. A. Tsekrekos (in progress)
2. J-A Petrocheilos, Department of International and European Economic Studies, AUEB, Topic: Evolutionary game theory and taxation, Supervisor Prof. A. Xepapadeas (completed, awaiting oral exam)
3. K. Liaskos, Department of Mathematics, University of Athens Topic: Deterministic and Stochastic Sobolev Type equations, Supervisor: Prof. I. G. Stratis (PhD awarded)
4. E. Kalpineli, Department of Statistics, AUEB Topic: Stochastic partial differential equations and applications, Supervisor: Prof. N. E. Frangos (PhD awarded)
5. F. Xanthos, School of Mathematics and Physical Sciences, National Technical University of Athens, Topic: Ordered spaces and Economics, Supervisor: Prof. I. Polyrakis (PhD awarded)
6. E. Argyropoulou, Department of Mathematics, University of Athens Topic: Homogenization theory, Supervisor: Prof. I. G. Stratis (PhD awarded)

#### **Participation in PhD Examination boards (selected)**

1. Jia Shao, School of Mathematical Science, University of Liverpool, UK, Topic: Modelling of catastrophe bonds, Supervisor Dr. A. Pantelous, (External Examiner)
2. A. Doumas, School of Mathematics and Physical Sciences, National Technical University of Athens, Topic: The coupon collector problem, Supervisor Prof. V. Papanicolaou
3. E. Kyriakopoulou, Department of International and European Economic Studies, AUEB, Topic: Environmental Policy and the Spatial Structure of Economic Activity in New Economic Geography , Supervisor Prof. A. Xepapadeas

4. A. Damialis, Department of Mathematics, University of Athens, Topic: Mathematical modeling of phase transitions, Supervisor Prof. N. Alikakos
5. I Kamarianakis, Department of Economics, University of Crete, Topic: Stochastic optimal control in economics, Supervisor Prof. A. Xepapadeas
6. B. Oliveira, Department of Pure Mathematics, University of Porto, Portugal, Topic: Game theory, Supervisor Prof. A. A. Pinto
7. F. Ferreira, Department of Applied Mathematics, University of Porto, Portugal, Topic: Game theory, Supervisor Prof. A. A. Pinto

### **MSc Theses supervised**

Over 30 MSc theses supervised at AUEB and at the University of Athens, or the National Technical University of Athens.

### **Teaching**

A large variety of undergraduate and postgraduate courses on Analysis, Measure and Probability, Stochastic Analysis, Partial Differential Equations, Stochastic Processes, Mathematical Finance, Numerical Methods in Mathematical Finance.

### **Undergraduate Courses**

1. Introduction to Mathematical Analysis, Department of Statistics AUEB, 2007–
2. Introduction to Measure Theory and Applications, Department of Statistics AUEB, 2007–
3. Calculus II, Department of Statistics AUEB, 2007–
4. Stochastic Finance (Short Course) Department of Statistics AUEB, 2009–
5. Stochastic Processes, Department of Statistics AUEB, 2008
6. Calculus III, Department of Statistics AUEB, 2008
7. • Stochastic Processes II, • Financial Mathematics I, • Financial Mathematics III, Department of Statistics and Actuarial-Financial Mathematics, University of the Aegean, 2001-2007.
8. • Linear Algebra II, Department of Applied Mathematics and Department of Mathematics 2001-2002 University of Crete.
9. • Stochastic differential equations and partial differential equations, • The Mathematics of Finance, • Vector Calculus, • Boundary value problems in Physics and Chemistry, University of Birmingham, School of Mathematics and Statistics, 1997-2000

### **Postgraduate Courses**

1. Measure theory and Integration, MSC in Statistics, Department of Statistics, AUEB, 2009–
2. Financial Mathematics, MSC in Quantitative methods in Decision Making, Department of Statistics, AUEB, 2005–
3. Numerical Methods in Financial Mathematics, MSC in Quantitative methods in Decision Making, Department of Statistics, AUEB, 2007–
4. Stochastic Differential Equations and Applications, MSC Course, Department of Mathematics, University of Athens, 2002-2003, 2004-2005, 2006-2007, 2008-2009, 2014-2015 (by invitation by the Section of Mathematical Analysis).

5. Partial Differential Equations I, MSC Course, Department of Mathematics, University of Athens, 2010-2011 (by invitation by the Section of Mathematical Analysis) (with G. Barbatis).
6. Partial Differential Equations II (Nonlinear Theory), MSC Course, Department of Mathematics, University of Athens, 2011-2012 (with I. G. Stratis), 2015-2016 (with C. Athanasiadis), (by invitation by the Section of Mathematical Analysis)
7. Asset pricing and portfolio optimization in incomplete markets, MSC Course, in MSC in Mathematical modelling, School of Applied Mathematics and Physical Sciences, National Technical University of Athens, 2008, (by invitation).
8. Mathematical Models in Economics, MSC Course, Department of Mathematics, University of the Aegean, 2001-2004, (by invitation).
9. • Financial Mathematics, • Derivatives, • Dynamics Programming and Stochastic Control Theory, MSC Courses, Department of Statistics and Actuarial-Financial Mathematics, University of the Aegean 2004-2007.

### **Editorial - Refereeing activities and Memberships**

1. Associate editor in Journal of Dynamics and Games, American Institute of Mathematical Sciences.
2. Associate editor of International Journal of Partial Differential equations, Hindawi.
3. Member of the **London Mathematical Society**.
4. Member of the **American Mathematical Society**.
5. Reviewer for **Mathematical Reviews** since 1993.
6. Reviewer for **Zentralblatt Mathematik** since 2007.
7. Referee for **Physica D**, **Physics of Fluids**, **Journal of Mathematical Modelling and Algorithms**, **International Journal of Theoretical and Applied Finance**, **Asian Pacific Journal of Operations Research**, **Carpathian Journal of Mathematics**, **Scandinavian Actuarial Journal**, **Extremes**, **Statistics**, **Mathematical Methods in the Applied Sciences**, **Journal of Physics A**, **Bulletin of the Greek Mathematical Society**, **Journal of Physics A.**, **IMA J. Math. Control and Automation**, **Journal of Economic Asymmetries**, **Zeit. fur Angew. Math. und Phys.**, **Journal of Games and Dynamics (AIMS)**, **Discrete Dynamics in Nature and Society**, **Insurance Mathematics and Economics**, **Abstract and Applied Analysis**, **Journal of Applied Mathematics**, **SIAM Journal on Control and Optimization**, **Transactions of the American Mathematical Society**, **Journal of Mathematical Economics**, **Annals of Operation Research**, **European Journal of Operations Research**, **IMA Journal of Management Mathematics**, **Dynamic Games and their Applications**, **Journal of Economic Theory**

### **Publications**

#### **Monographs**

Mathematical analysis of deterministic and stochastic electromagnetic fields in complex media, (with I. G. Stratis and G. Roach) 2012 Series in Applied Mathematics, Princeton University Press

#### **(a) Journals**

77 publications in international peer reviewed journals

### Selected recent publications

1. Cano J., Moguerza J. M, Psarakis S and A. N. Yannacopoulos, “Using statistical shape theory for the monitoring of nonlinear profiles” *Applied Stochastic Models in Business and Industry*, Vol . 31, 160–177, 2015
2. Barbatis, G. Stratis I. G. and A. N. Yannacopoulos, “Homogenization of random elliptic systems with an application to Maxwell’s equations” *Mathematical Models and Methods in the Applied Sciences*, Vol. 25, 1365–1388, 2015
3. Brock, W. A., A. Xepapadeas and A. N. Yannacopoulos, “Optimal agglomerations in dynamic economics” *Journal of Mathematical Economics*, Vol. 53, pp. 1-15, 2014.
4. Brock, W. A., A. Xepapadeas and A. N. Yannacopoulos, “Spatial Externalities and Agglomeration in a Competitive Industry” *Journal of Economic Dynamics and Control*, Vol. 43, pp. 143-174, 2014.
5. Brock, W. A., A. Xepapadeas and A. N. Yannacopoulos, “Robust control and hot spot formation in spatiotemporal economic systems” *Dynamic Games and Applications*, Vol 4, 257–289, 2014
6. Brock, W. A., A. Xepapadeas and A. N. Yannacopoulos, “Optimal Control in Space and Time and the Management of Environmental Resource” *Annual Review in Resource Economics*, Vol. 6, 33–68, 2014
7. Stratis I. G. and A. N. Yannacopoulos, “Some remarks on a class of inverse problems related to the parabolic approximation to the Maxwell equations: a controllability approach” *Mathematical Methods in the Applied Sciences*, 2014
8. Kalpinelli, E, N. E. Frangos and A. N. Yannacopoulos, “Numerical methods for hyperbolic SPDEs: a Wiener chaos approach” *Stochastic Partial Differential Equations: Analysis and Computations*, Volume 1, Issue 4, pp 606-633, 2013
9. Azevedo, N and Pinheiro, D and Xanthopoulos, SZ and Yannacopoulos, AN, “On a variational sequential bargaining pricing scheme”, *Optimization*, 2013, (in press) DOI: 10.1080/02331934.2013.801475
10. M . Anthropolos, N. E. Frangos, s. Z. Xanthopoulos and A. N. Yannacopoulos, “Contract pricing and utility sharing”, *IMA Journal of Management Mathematics*, (in press) doi: 10.1093/imaman/dpt011
11. N. Englezos, N. E. Frangos, X. I. Kartala, and A. N. Yannacopoulos, ‘Stochastic Burgers Equation and a Generalization of the Cole-Hopf Transformation’, *Stochastic Processes and Applications*, **123**, No. 8, pp. 3239–3272, 2013
12. D. Pinheiro, A. A. Pinto, S. Z. Xanthopoulos and A. N. Yannacopoulos, ‘A projected gradient dynamical system modeling the dynamics of bargaining’, *Journal of Difference Equations and Applications*, **19**, no. 1, pp. 59–95, 2013.
13. I.G. Stratis and A.N. Yannacopoulos, ‘Homogenisation theory for deterministic and random bianisotropic media’, *Composites B*, **43**, 2513–2520, 2012
14. M. I. Loizides and A. N. Yannacopoulos, ‘Lumpable Markov chains in risk management’, *Optimization Letters*, DOI: 10.1007/s11590-010-0275-x, 2011.
15. I. D. Baltas, N. E. Frangos and A. N. Yannacopoulos, ‘Optimal investment and reinsurance policies in insurance markets under the effect of inside information’ *Applied Stochastic Models in Business and Industry*, **28**, no. 6, pp. 506•528, 2012
16. A. A. Pinto, M. Ferreira, B. F. Finkenstddt, B. Oliveira and A. N. Yannacopoulos, ‘On the convergence to Walrasian prices in random matching Edgeworthian economies’, *Central European Journal of Operations Research*, **20**, no. 3, pp. 485•495, 2012.
17. E. Panas and A. N. Yannacopoulos, ‘Itô meets Laibson meets Ramsey: Effects of hyperbolic discounting on stochastic growth’ *Journal of Economic Asymmetries*, **9**, No. 1, 52-66, 2012.

18. A. N. Yannacopoulos, N. E. Frangos and I. Karatzas, 'Wiener chaos solutions for linear backward stochastic evolution equations', *SIAM Math. Analysis*, **43** 68-113, 2011.
19. E. Kalpineli, N. E. Frangos and A. N. Yannacopoulos, 'Wiener chaos solutions for stochastic hyperbolic equations and applications', *Stoch. Anal. and Applications*, **29**, no. 2, pp. 237-258, 2011.
20. L. Boukas, D. Pinheiro, A. A. Pinto, S. Z. Xanthopoulos and A. N. Yannacopoulos, 'Behavioural and Dynamical Scenarios for Contingent Claims Valuation in Incomplete Markets' *J. of Difference Eq. and Appl.* Vol. 17, (2011) 1065-1084.
21. D. Kravvaritis, V. Papanikolaou, A. Xepapadeas and A. N. Yannacopoulos, 'On a class of operator equations arising in infinite dimensional replicator dynamics' *Nonlinear Analysis, Real World Applications*, (2010) Vol. 11, 2537-2556
22. T. Horsin, I. G. Stratis and A.N. Yannacopoulos, 'On the approximate controllability of the stochastic Maxwell equations' *IMA Journal of Mathematical Control and Information*, (2010) Vol 27, 103-118
23. K. B. Liaskos, I. Stratis and A. N. Yannacopoulos, 'Stochastic integrodifferential equations and applications in electromagnetics' *Journal of Integral Equations and Applications*, **22**, 559-590, (2010) (accepted 2008).
24. C. Nikolopoulos and A. N. Yannacopoulos, 'A model for optimal stopping in advertisement' *Nonlinear Analysis: Real World Applications*, (2010), Vol. 11 1129-1242.
25. K. B. Liaskos, I. Stratis and A. N. Yannacopoulos, 'A priori estimates for a singular limit approximation of the constitutive laws for chiral media in the time domain' *J. Math. Anal. Appl.* (2009) Vol 35, 288-305.
26. I. E. Nikolaou and A. N. Yannacopoulos, 'The effect of environmental accounting on financial risk management of firms via insurance' *International Journal of Monetary Economics and Finance* (2009) **2**, 1-15
27. A. N. Yannacopoulos, C. Lambrinouidakis, S. Gritzalis, S. Z. Xanthopoulos and S. N. Katsikas, 'Modelling privacy insurance contracts and their utilization in the risk management of ICT firms' *ESORICS 2008, Lecture Notes in Computer Science 5283*, 207-222, (2008)
28. S. Xanthopoulos and A. N. Yannacopoulos, 'Scenarios for price determination in incomplete markets' *International Journal of Theoretical and Applied Finance*, **11**, 415-445, (2008)
29. K. B. Liaskos, I. Stratis and A. N. Yannacopoulos, 'Pseudoparabolic equations with additive noise and applications' *Mathematical Methods in the Applied Sciences*, **32**, 963-985 (2008)
30. D. Kravvaritis, V. Papanicolaou and A. N. Yannacopoulos, 'Similarity solutions for a replicator dynamics equation' *Indiana University Mathematics Journal*, **57**, 1929-1946, (2008)
31. A. Katsis, S. Martzoukos and A. N. Yannacopoulos, 'Expert opinion elicitation in option pricing: A bayesian approach' (2008), *Journal of Statistical Theory and Applications*, **7**, 33-50
32. A. N. Yannacopoulos, 'Rational expectations models, An approach using forward backward stochastic differential equations' *Journal of Mathematical Economics*, (2008), **44**, 251-276
33. S. Gritzalis, A. N. Yannacopoulos, C. Lambrinouidakis, P. Hatzopoulos and S. K. Katsikas, 'A probabilistic model for optimal insurance contracts against security risks and privacy violation in IT outsourcing environments' *Int. Journal of Information Security*, **6**, 197-211, (2007)
34. N. E. Frangos, S. D. Vrontos and A. N. Yannacopoulos, 'Reinsurance control in a model with liabilities of the fractional Brownian motion type" *Applied Stochastic Models in Business and Industry*, **23**, 403-428, (2007)
35. N. I. Karachalios and A. N. Yannacopoulos, 'Global existence and global attractors or the discrete nonlinear Schrodinger equation II' *Proc. Roy. Soc. Edin. A. Mathematics*, (2007), **137**, 63-76



36. D. Tsitakis, S. Xanthopoulos and A. N. Yannacopoulos, 'A closed form solution for the price of cross commodity electricity derivatives' *Physica A: Econophysics Section* **371** (2006) 543-551
37. E. Akylas, A. D. Koussis and A. N. Yannacopoulos, 'Analytical solution of transient flow in a sloping soil layer with recharge' *Hydrological Sciences Journal* , **51**, (2006) 626-641
38. N. I. Karachalios, H. E. Nistazakis and A. N. Yannacopoulos, 'Asymptotic behavior of solutions of complex discrete evolution equations; the discrete Ginzburg-Landau equation' *Discrete and Continuous Dynamical Systems*, **19**, 711–736 (2007)
39. N. I. Karachalios and A. N. Yannacopoulos, 'Global existence and global attractors of the discrete nonlinear Schrödinger equation' *Journal of Differential Equations*, **217**, 88–123 (2005)
40. A. N. Yannacopoulos, 'A novel approach to exchange rate control using controlled backward stochastic differential equations' *Ekonomia* **8** (2005)
41. N. Frangos, S. Vrontos and A. N. Yannacopoulos, 'Ruin probability for a model with liabilities of the fractional Brownian motion type: A partial differential equation approach' *Scandinavian Actuarial Journal*, **4** 285–308, (2005)
42. N. Karachalios, H. E. Nistazakis and A. N. Yannacopoulos, 'Remarks on the asymptotic behaviour of solutions of complex discrete Ginzburg-Landau equations' *Discrete and continuous dynamical systems, Suppl.* 476–486 (2005)
43. C. Lambrinouidakis, S. Gritzalis, P. Hatzopoulos, A. N. Yannacopoulos and S. Katsikas, 'A formal model for pricing information systems insurance contracts' *Computers Standards and Interfaces*, **27**, 521–532 (2005)
44. S. Hatzispyros and A. N. Yannacopoulos, 'A random dynamical systems model for a stylized equity market', *Physica A: Econophysics Section* **347** (2005) 583-612
45. G. Kossioris, M. Plexousakis and A. N. Yannacopoulos, 'A Hamilton-Jacobi-Belman approach to the control of trapping time of a soliton in an external potential', *Quarterly of Applied Mathematics* **63** (2005), no. 2, 309–324.

#### **(b) Book chapters and conference proceedings**

1. W. A. Brock, A. Xepapadeas and A. N. Yannacopoulos, Robust control of a spatially distributed commercial fishery, in V. Veliov, *Dynamic optimization in environmental economics*, Springer, 2013 (in press) (also appears as Enrico Mattei Nota di Lavoro 11.2013)
2. E. V. Petracou, A. Xepapadeas and A. N. Yannacopoulos, The bioeconomics of migration: A selective review towards a modelling perspective, in A. A. Pinto and D. Zilberman, *Modeling, Optimization, Dynamics and Bioeconomy*, Springer, 2013 (in press)
3. E. V. Petracou and A. N. Yannacopoulos, Decision theory under risk and applications in the social sciences I: Individual decision making, in *Mathematical Modeling with Interdisciplinary Applications*, X. S. Yang (ed) Wiley and Sons 2013
4. E. V. Petracou and A. N. Yannacopoulos, Decision theory under risk and applications in the social sciences II: Game Theory, in *Mathematical Modeling with Interdisciplinary Applications*, X. S. Yang (ed) Wiley and Sons 2013
5. L. A. Boukas, K. I. Vasileiadis, S. Xanthopoulos and A. N. Yannacopoulos, Linear and Nonlinear Parabolic Partial Differential Equations in Financial Engineering in *Mathematical Modeling with Interdisciplinary Applications*, X. S. Yang (ed) Wiley and Sons 2013
6. A. N. Yannacopoulos, 'Stochastic saddle points and the modeling of expectations in economic dynamics' *Dynamics, Games and Science II*, A. A. Pinto, M. Peixoto and D. Rand (eds) Springer 2011

7. C. Kountzakis, S. Z. Xanthopoulos and A. N. Yannacopoulos, ‘Minimum Regret Pricing of Contingent Claims in Incomplete Markets’ Dynamics, Games and Science I, A. A. Pinto, M. Peixoto and D. Rand (eds) Springer 2011
8. M. Ferreira, B. Finkenstädt, B. M. P. M. Oliveira, Alberto A. Pinto and A. N. Yannacopoulos, ‘Bargaining Skills in an Edgeworthian Economy’, Dynamics, Games and Science I, A. A. Pinto, M. Peixoto and D. Rand (eds) Springer 2011
9. D. Kravvaritis, V. Papanicolaou, T. Xepapadeas and A. N. Yannacopoulos, ‘A Class of Infinite Dimensional Replicator Dynamics’, Dynamics, Games and Science I, A. A. Pinto, M. Peixoto and D. Rand (eds) Springer 2011
10. Boukas, L. and Pinheiro, D. and Pinto, AA and Xanthopoulos, SZ and Yannacopoulos, AN, ‘Three Behavioural Scenarios for Contingent Claims Valuation in Incomplete Markets’, in Nonlinear Science and Complexity, J.A.T. Machado et al (eds) Springer 2010
11. G. Demopoulos, N. A. Yannacopoulos, A. N. Yannacopoulos and S. A. Warren, (2009), ‘Neo-Wicksellian Monetary Policy and Monetary Unions’ The Global Economics of a Changing Environment, edited by J. A. Brox and N. C. Baltas, North Waterloo Academic Press, The Athenian Policy Forum.
12. A. N. Yannacopoulos, S. Katsikas, C. Labrinoudakis, S. Gritzalis and S. Z. Xanthopoulos, “A risk model for privacy insurance”, in Digital Privacy: Theory, Technologies and Practices, Edited by A. Acquisti, S. Gritzalis, C. Lambrinoudakis and S. De Capitani di Vimercati, Auerbach Publications, Taylor and Francis, New York, London, 2008
13. D. Pinheiro, A. A. Pinto, S. Z. Xanthopoulos, and A. N. Yannacopoulos, ‘A short overview of some behavioural scenarios for derivative pricing in incomplete markets’ Proceedings in Applied Mathematics and Mechanics, **7**, 1060309•1060310, 2007, Wiley.
14. Liaskos, K. B.; Stratis, I. G.; Yannacopoulos, A. N. A time domain analysis for chiral deterministic and random media in electromagnetics. Advanced topics in scattering and biomedical engineering, 171–179, World Sci. Publ., Hackensack, NJ, 2008.
15. Liaskos, K. B.; Stratis, I. G.; Yannacopoulos, A. N. Well posedness of the stochastic Drude-Born-Fedorov model in electromagnetics. Bull. Greek Math. Soc. 54 (2007), 207–220. (special issue)
16. S. Katsikas, A. N. Yannacopoulos, S. Gritzalis, C. Lambrinoudakis and P. Hatzopoulos, “How much should we pay for security?” in Security Management, Integrity, and Internal Control in Information Systems, Springer, Boston, 2006
17. Liaskos, K. B.; Stratis, I. G.; Yannacopoulos, A. N. Stochastic differential equations of Sobolev type in infinite dimensional Hilbert spaces. Mathematical methods in scattering theory and biomedical engineering, 191–199, World Sci. Publ., Hackensack, NJ, 2006.

**(c) Lecture notes.**

1. A. N. Yannacopoulos, *Stochastic Finance*, AUEB (in Greek).
2. A. N. Yannacopoulos, *Introduction to mathematical analysis – with applications in probability and statistics*, AUEB.
3. A. N. Yannacopoulos, *Introduction to Measure and Integration – with applicatins in probability and statistics*, AUEB, (in Greek)
4. A. N. Yannacopoulos *Introduction to Mathematical Finance* Univ. Aegean (in Greek)
5. A. N. Yannacopoulos *Introduction to Stochastic Analysis* Univ. Aegean (in Greek)
6. A. N. Yannacopoulos, *Fourier series and linear boundary value problems*. Lecture notes Birmingham 1997

7. A. N. Yannacopoulos, *Vector Analysis*. Lecture notes Birmingham 1998
8. A. N. Yannacopoulos, *Stochastic differential equations and partial differential equations*. Lecture notes Birmingham 1998
9. A. N. Yannacopoulos, *Stochastic differential equations and selected applications in mathematical finance*. Lecture notes Birmingham 1999

#### Conferences (Selected)

1. A. N. Yannacopoulos, 2013, Interest rate models and stochastic PDEs, (4 hour invited short course) 2nd Winter School in Stochastic Dynamics and Control in Finance and Economics, ISEG, Lisbon.
2. A. N. Yannacopoulos, 2012, Risk Measures - Subjectivity, Robustness and Decision Making, (invited), 1st European Society of Actuaries Conference, Brussels.
3. A. N. Yannacopoulos, 2012, Aspects of Stochastic Control in Finance and Economics, (6 hour invited short course) 1st Winter School in Stochastic Dynamics and Control in Finance and Economics, ISEG, Lisbon.
4. A. N. Yannacopoulos, 2011, Backward stochastic evolution equations - A Wiener chaos approach, (invited) ACMAC Workshop on Stochastic PDEs, Crete.
5. A. N. Yannacopoulos, 2010, Stochastic saddle paths, backward stochastic differential equations and economic dynamics, 2010, (invited), Dynamics 2010, Samos, Greece.
6. A. N. Yannacopoulos, 2010, Convex risk measures: The return of the subjective. (invited) Summer school of the Group Consultatif, Samos.
7. A. N. Yannacopoulos, 2008, On the effect of expectations in economic dynamics, (invited) Dynamics and Applications, in honour of M. Peixoto and D. Rand, Braga, Portugal.
8. A. N. Yannacopoulos, 2008, Utility pricing in incomplete markets, International Workshop in Applied Probability, Compeigne, 2008, (with N. E. Frangos, M. Anthropolos and S. Xanthopoulos)
9. A. N. Yannacopoulos 'Wiener chaos solutions for linear forward backward stochastic differential equations' International Congress of Mathematicians, Madrid 2006, (with N. E. Frangos).
10. A. N. Yannacopoulos, 'Currency Areas, Economic Asymmetries, and the Dynamics of Economic Integration', "Asymmetries in Trade and Currency Arrangements in the 21st Century", Athenian Policy Forum, Deutches Bundensbank, Frankfurt, July 28-31, 2004. (with G. D. Demopoulos and N. A. Yannacopoulos)

#### Conferences organized.

1. Applied Nonlinear Dynamics, University of Leeds, 16th December 1994 with A. Fordy and M. Nelson)
2. Low dimensional dynamics of complex systems, University of Leeds, 15 May 1995 with J. Brindley and A. Fordy)
3. Mixing with Chaos, Mathematics Institute, University of Warwick, 8 March 1999 (with G. P.King)
4. 2nd International Conference on Modern Mathematical Methods in Science and Technology, (M3ST 2009), Poros 2009, Member of organizing committee.
5. Dynamics and Applications 2008 (in honour of M. Peixoto and D. Rand), Braga, Portugal, Member of Scientific Committee.
6. 3rd International Conference on Modern Mathematical Methods in Science and Technology, (M3ST 2012), Kalamata 2012, Member of scientific committee.
7. 4rth International Conference on Modern Mathematical Methods in Science and Technology, (M3ST 2012), Kalamata 2012, Member of scientific committee.

### **SummerSchools.**

Founder and member of the organizing committee of the 1st - 12th Summer Schools in Stochastic Finance; an international event jointly organized by AUEB and the Univ. of the Aegean, July 2003-today.

### **Seminars organized.**

Since 2007 I have organized and run a weekly seminar on Stochastic Analysis and Applied Probability in the Department of Statistics, AUEB. The seminar is open to staff, post-docs and PhD students and concentrates on thematics that change every semester. The theme this semester is Reproducing Kernel Hilbert Spaces and the applications of functional analysis in infinite dimensional statistics. Previous thematics included Malliavin Calculus and Applications, Infinite Dimensional Stochastic Analysis, Semigroup Theory and Markov Processes etc.