

CURRICULUM VITAE

Dr. NIKOLAOS ENGLEZOS

Assistant Professor in Mathematical Finance

Department of Banking and Financial Management

School of Finance and Statistics

University of Piraeus

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EDUCATION

- **Department of Mathematics, Columbia University, New York.**

2007 Ph.D. in Mathematics.

Doctorate Dissertation title: Aspects of Utility Maximization With Habit Formation: Dynamic Programming and Stochastic PDEs.

Supervisor: Professor Ioannis Karatzas.

Defense Committee: Daniel Ocone (Rutgers University), Peter Bank, Panagiota Daskalopoulos, and Jan Vecer (Columbia University).

2004 M.Phil. in Mathematics.

2003 M.Sc. in Mathematics.

- **Department of Mathematics, University of Athens**

2001 Bachelor in Mathematics.

Specializations: Theoretical Mathematics,
Applied Mathematics,
Teaching of Mathematics.

Overall Grade: 9.19 out of 10.

SCHOLARSHIPS - AWARDS

- **Research Scholarship:** Participation in the Research Program THALES “Support of the interdisciplinary and/or inter-institutional research and innovation”, National Strategic Reference Framework (NSRF) 2007-13.
- **Research Scholarship:** Participation in the Research Program IKYDA 2012, State Scholarships Foundation of Greece and German Academic Exchange Service (DAAD).
- **Postdoctoral Research Scholarship** by the State Scholarships Foundation of Greece in the scientific field of Applied Mathematics for the year of 2009.
- **Academic Fellowships and Scholarships** by Columbia University in New York during the graduate studies towards the M.Sc., M.Phil., and Ph.D. degrees.
- **Admission and Academic Excellence Awards** in the form of fellowships by the State Scholarships Foundation of Greece during the undergraduate studies in the Mathematics Department of the University of Athens.
- **Springer Mathematics Prize** as top 2nd year student during the undergraduate studies in the Mathematics Department of the University of Athens.

TEACHING EXPERIENCE

- **Department of Banking and Financial Management, University of Piraeus**

Fall 2008 to Present

Instructor for the doctoral course:
Financial Theory III: Continuous Time Models.

Instructor for the graduate courses:
Financial Derivatives and Hedging Strategies,
Financial Investments,
Portfolio Analysis and Management,
Special Topics In Quantitative Methods In Finance: Computational Finance,
Quantitative Methods - Statistics: Preparatory.

Instructor for the undergraduate courses:
Mathematics I,
Statistics I,
Financial Derivatives and Hedging Strategies,
Computational Finance,
Risk Theory.

- **Department of Informatics, Athens University of Economics and Business**

Instructor P.D. 407 for the undergraduate course:
Applied Probability and Statistics (Spring 2008).

Instructor for the graduate course:
Actuarial Mathematics and Risk Theory (period 2/5/08-6/6/08).

- **Department of Mathematics, University of Athens**

Teaching Assistant for the undergraduate course:
Calculus I (Fall 2006).

- **Department of Mathematics, Columbia University, New York**

Instructor for the undergraduate courses:
College Algebra and Analytic Geometry (Spring 2005),
Calculus IV (Summer 2004).

Teaching Assistant for the undergraduate courses:
Linear Algebra,
Calculus III,
Introduction to Modern Analysis,
Introduction to the Mathematics of Finance,
Discrete Time Models in Finance,
Mathematical Finance Practitioners Seminar.

PROFESSIONAL EXPERIENCE

- **ICRE8 International Center for Research on the Environment and the Economy, Maroussi, Athens.**

Academic Manager of the **Department of Economics & Econometrics: Modelling and Applications.**

Senior Researcher for the european funded research program “H2020-WATER-2014-2015/H2020-WATER-2015-two-stage, *DAFNE: Use of a Decision-Analytic Framework to explore the water-energy-food NExus in complex and trans-boundary water resources systems of fast growing developing countries*, GA No. 690268”, from 1/09/2016 up to 31/12/2018.

RESEARCH INTERESTS

- Mathematical (Environmental) Economics and Finance
- Stochastic Control Theory and Financial Optimization
- Stochastic Differential Game Theory
- Stochastic Differential and Partial Differential Equations

PUBLICATIONS

- X. I. Kartala, N. Englezos, and A. N. Yannacopoulos. Future Expectations Modeling, Random Coefficient Forward-Backward Stochastic Differential Equations, and Stochastic Viscosity Solutions, *Mathematics of Operations Research*, 45(2), 403-433, 2020.
- P. Koundouri, C. Roseta-Palma, and N. Englezos. Out of Sight, Not Out of Mind: Developments in Economic Models of Groundwater Management, *International Review of Environmental and Resource Economics*, 11(1), 55-96, 2017.
- J. Adler, E. Akinsete, N. Englezos, X. I. Kartala, P. Koundouri. Chapter: Economic Instruments, Behavior and Incentives in Groundwater Management. *Book: Advances in Groundwater Governance*. Balkema Editions, 2017.
- 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 their Applications*, 123(8), 3239-3272, 2013.
- N. Englezos and I. Karatzas. Utility Maximization With Habit Formation: Dynamic Programming and Stochastic PDE's. *SIAM Journal on Control and Optimization*, 48, 481- 520, 2009.
- N. Englezos. Optimal Portfolio-Consumption Choices In A Markovian Framework With Habit Formation, *Proceedings of 21st Panhellenic Statistics Conference* (with referees), 349-356, 2008.

WORK IN PROGRESS

- P. Koundouri, N. Pittis, N. Englezos, A. Papandreou, and P. Samartzis. *Classical Vs Modern Bayesianism and Ambiguity Aversion in Small Worlds*. Preprint.
- N. Englezos, X. I. Kartala, P. Koundouri, and M. G. Tsionas. *Stochastic Transboundary WEF Nexus Management: Model and Application in Africa*. Preprint.
- N. Englezos, X. I. Kartala, and A. N. Yannacopoulos. *Controlled Linear Future Expectations Models and Applications to International Finance*. Working Paper.

ACADEMIC ACTIVITY

- **Referee for:** *Systems Science & Control Engineering* - Taylor & Francis, *International Journal of Financial Studies* - MDPI.
- **Co-organizer:** *Workshop on SDEs & SPDEs: Theory, numerics and their interplay with data science*, held in Crete, Greece, 26-30 June 2019, under the auspices of École Polytechnique, Alan Turing Institute, and University of Crete.
- **Supervision of 31 masters thesis** in the M.SC. programs: “*Banking and Financial Management*” and “*Financial Analysis for Executives*”, offered by the Department of Banking and Financial Management of the University of Piraeus.
- **Administration work in the Department of Banking and Financial Management** as:
 - Member of the *Doctoral Program Committee* (2009 - today).
 - Co-organizer of the *Doctoral Seminar* (Fall 2009).
 - Member of the *Supply Committee* for the offer evaluations regarding the hardware equipment of the PC lab (2012, 2020).
 - Member of the *Internal Evaluation Committee* (2014-16).
 - Member of the *EOPPEP Committee* (National Organization for the Certification of Qualification and Vocational Guidance) (2016).
 - Academic Coordinator of the *Erasmus Program* (February 2018-today).

PC SKILLS

- Microsoft Office, Latex, Front Page.
- **Programming:** C++, Matlab, Mathematica, Maple.
- Stochastic Systems Simulation.

LANGUAGES

- **Greek:** Native
- **English:** Certificate of Proficiency in English, University of Michigan
- **French:** Sufficient knowledge for relevant literature

SCIENTIFIC ACTIVITY

Presented (invited) talks in:

- Workshop on SDEs & SPDEs: Theory, numerics and their interplay with data science, held in Crete, Greece (26-30 June 2019) and organized by École Polytechnique, Alan Turing Institute, and University of Crete.
- 7th European Bioremediation Conference (EBC-VII) and the 11th International Society for Environmental Biotechnology conference (ISEB 2018), held in Chania, Greece (25-28 June 2018) and co-organized by the Technical University of Crete, the University of Bologna and the International Society for Environmental Biotechnology.
- Thera Stochastics: A Mathematics Conference in Honor of Ioannis Karatzas, held in Santorini, Greece (31 May - 2 June 2017) and organized by Minerva Research Foundation and Columbia University.
- Methods of Mathematical Finance: A Conference in Honor of Steve Shreve's 65th Birthday, held in Pittsburgh, USA (1-5 June 2015) and organized by Carnegie Mellon University.

- Stochastic Analysis Seminar Series, *as an invited speaker*,
Mathematical Institute, University of Oxford, England, March 2013.
- Stochastics and Financial Mathematics Research Seminar, *as an invited speaker*,
Department of Mathematics, TU Berlin, Germany, October 2012.
- Workshop on Stochastic and PDE Methods in Financial Mathematics,
held in Yerevan, Armenia (7-12 September 2012) and organized by the Yerevan State
University and the American University of Armenia.
- 8th World Congress in Probability and Statistics,
held in Istanbul, Turkey (9-14 July 2012) and organized by the Bernoulli Society for
Mathematical Statistics and Probability and the Institute of Mathematical Statistics.
- Probability, Control and Finance: A Conference in Honor of Ioannis Karatzas,
held in New York, NY (4-8 June 2012) and organized by Columbia University.
- The 10th Annual Conference of the Hellenic Finance and Accounting Association
(H.F.A.A.),
held in Piraeus (16-17 December 2011), under the auspices of the University of Piraeus.
- Nis-Athens-Caserta Mathematical Forum, *as an invited speaker*,
Department of Mathematics, University of Athens, October 2011.
- The 6th international symposium on backward stochastic differential equations,
as an invited speaker, held in Los Angeles, CA (8-10 June 2011) and organized by the
University of Southern California.
- Statistics and Operational Research Seminar, *as an invited speaker*,
Department of Mathematics, University of Athens, May 2011.
- 71st International Atlantic Economic Conference,
held in Athens, Greece (16-19 March 2011).
- North British Probability Seminars, *as an invited speaker*,
School of Mathematics, University of Edinburgh, Scotland, February 2011.
- 34th Conference on Stochastic Processes and Their Applications,
held in Osaka, Japan (6-10 September 2010) and organized by the Bernoulli Society for
Mathematical Statistics and Probability and the Institute of Mathematical Statistics.
- 7th Summer School in Stochastic Finance, *as an invited speaker*,
held in Athens (12-16 July 2010) and organized by Statistics Department of AUEB and
Statistics and Actuarial Financial Mathematics of University of the Aegean.
- 6th World Congress of the Bachelier Finance Society,
held in Toronto, Canada (22-26 June 2010).

- 6th Summer School in Stochastic Finance, *as an invited speaker*, held in Athens (20-23 July 2009) and organized by Statistics Department of AUEB and Statistics and Actuarial Financial Mathematics of University of the Aegean.
- 5th Summer School in Stochastic Finance, *as an invited speaker*, held in Chios (21-25 July 2008) and organized by Statistics Department of AUEB and Statistics and Actuarial Financial Mathematics of University of the Aegean.
- 12th Pan-Hellenic Conference in Mathematical Analysis, held in Athens (15-17 May 2008) and organized by Mathematics Department of the University of Athens.
- 21st Pan-Hellenic Conference in Statistics: Statistics and Actuarial Financial Mathematics, held in Samos (30-4 May 2008) and organized by the University of the Aegean and the Hellenic Statistical Institute.
- Probability Seminar, *as an invited speaker*, Department of Mathematics, Columbia University NY, March 2008.
- Stochastics and Finance Seminar, *as an invited speaker*, Department of Mathematics & Statistics, Boston University MA, February 2008.
- 8th International S.A.E.T. Conference on Economics, held in Kos (18-24 June 2007) and organized by the University of Athens and Purdue University of USA.
- Applied and Numerical Analysis Seminar, *as an invited speaker*, Department of Applied Mathematics, University of Crete, January 2007.
- Statistics and Operational Research Seminar, *as an invited speaker*, Department of Mathematics, University of Athens, December 2006.
- Probability Seminar, *as an invited speaker*, Department of Statistics, AUEB, December 2006.