MICHAIL ANTHROPELOS

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This update in April 2024

CURRENT ACADEMIC POSITION

Associate Professor in Mathematical Finance, Since June 2023
University of Piraeus, Department of Banking and Financial Management, Piraeus, Greece.

PREVIOUS ACADEMIC POSITIONS

- ***Assistant Professor in Mathematical Finance***, Dec 2017-May 2023
  University of Piraeus, Department of Banking and Financial Management, Piraeus, Greece.
- ***Visiting Assistant Professor***, Sept 2019-Dec 2019
  Questrom School of Business, Boston University, USA.
- ***Lecturer in Mathematical Finance***, Jan 2012-Dec 2017
  University of Piraeus, Department of Banking and Financial Management, Piraeus, Greece.
- ***Visiting Scholar***, Jun 2017
  London School of Economics, Department of Statistics, UK.
- ***Instructor in Graduate Programs***, Jan 2010-Dec 2011
  University of Piraeus, Department of Banking and Financial Management, Piraeus, Greece.

EDUCATION

- ***Doctor of Philosophy***, in Financial Mathematics Dec 2008
  University of Texas at Austin, TX, USA.
  Thesis: *Agents' Agreement and Partial Equilibrium Pricing in Incomplete Markets.*
- ***Master's of Arts***, in Mathematics with Specialization in the Mathematics of Finance May 2003
  Columbia University, NY, USA.
- ***Bachelor of Science***, in Statistics and Actuarial Science Jul 2002
  University of Piraeus, Piraeus, Greece.
  Graduating first in a class of 220 students.

CURRENT INDUSTRY POSITIONS

- *Petrochemical Companies Occupational Pension Fund* (ΕΤΕΑΠΕΠ) Since Aug 2022
  Head of Annual Asset-Liability Study
- *Occupational Pension Fund for Employees of Food Commerce* (TEAYET) Since Feb 2024
  Member of the Investment Committee
- *Occupational Pension Fund of Intrum Hellas* Since Jun 2021
  Chairman of the Investment Committee

- *United Press Organization of Supplementary Insurance and Medicare* (ΕΔΟΕΑΠ) Since Dec 2020
  Chairman of the Investment Committee
- *Occupational Insurance Fund of Air Traffic Controllers of Greece* (ΤΕΑΕΚΕΕ) Since Jul 2019
  Chairman of the Investment Committee
- *Petrochemical Companies Occupational Pension Fund* (ΕΤΕΑΠΕΠ) Since Mar 2018
  Chairman of the Investment Committee
- *Occupational Pension Fund of the Medical Chamber of Thessaloniki* (ΤΕΑΙΣΘ) Since Dec 2017
  Chairman of the Investment Committee

PREVIOUS INDUSTRY POSITIONS

- *Occupational Pension Fund of BETA CAE Systems* Oct 2021-Sept 2023
  Member of the Investment Committee
- *Petrochemical Companies Occupational Pension Fund* (ΕΤΕΑΠΕΠ) Sept 2015-Feb 2018
  Consultant for Investment and Financial Analysis
- *Prudential Co Ltd* Dec 2015-Aug 2021
  Models on Asset-Liability Management

CERTIFICATION(S)

Certification of Professional Suitability of type Γ – Investment Portfolio Management, issued by the **Hellenic Capital Market Commission**. Since Oct 2021

MILITARY SERVICE

Mandatory military service in the Greek army accomplished. Feb 2009-Oct 2009

HONORS AND AWARDS

- ***Hellenic Foundation for Research and Innovation Grant*** – **ΕΛΙΔΕΚ** ***(Sole PI)***
  Valuation and Optimal Investment of Pension Plans, 159,370 Euros Mar 2022- Mar 2025.
- Invited participant to the ***Workshop in Stochastic Analysis and its Applications***, Oaxaca, Mexico. May 2018
- **Visiting Scholarship**, London School of Economics in Department of Statistics, UK. Jun 2017
- Invited participant to the ***Conference: Methods of Mathematical Finance – a conference in honor of Steve Shreve's 65th birthday***, Pittsburgh, USA. Jun 2015
- Invited participant to the ***Workshop in Mathematical Finance: Arbitrage and Portfolio Optimization***, Banff, Canada. Jul 2014
- ***IKYDA Scholarship Program*** Sept 2012-Jun 2014
  Member of the team project "*Stochastic Analysis in Finance and Physics*".
- ***US National Science Foundation***: Research Assistance Fellowship. Aug 2007-Jan 2009
- ***University of Texas at Austin*** Jul 2008
  Development Award by the School of Graduate Studies.
- ***Lilian Voundouri Foundation Scholarship*** Aug 2002-May 2006
- ***University of Texas at Austin*** Jun 2005-Aug 2005
  Regents Presidential Fellowship.
- ***University of Texas at Austin*** May 2005
  Development Award by the School of Graduate Studies.

- ***University of Texas at Austin*** Jan 2005
  Dean's Excellence Fellowship.
- ***University of Texas at Austin*** Aug 2004
  Dean's Excellence Fellowship.
- ***Greek State Scholarship Foundation*** Oct 1998-Jul 2002
  Financial Awards for finishing first in academic years 98/99, 99/00, 00/01 and 01/02.
- ***University of Piraeus*** Oct 1998-Jul 2002
  Financial Awards for finishing first in academic years 98/99, 99/00, 00/01 and 01/02.

TEACHING

University courses

For doctoral program:

Quantitative Methods, Special Topics of Quantitative Finance

For graduate programs:

Financial Derivatives, Capital Markets, Portfolio Management, Corporate Finance, Economics for Lawyers, Quantitative Methods in Finance, Credit Risk (in Boston University), Introduction to Statistics (preparatory course), Asset and Liability Management (elective).

For undergraduate programs:

Investment Banking, Quantitative Analysis of Managerial Decisions, Corporate Finance, Statistics I, Mathematics II, Special Topics in Finance (elective), Stochastic Finance (elective), Market Microstructure Theory (elective).

Executive Training Courses

- Asset Liability Management for Pension Funds
- Liability Driven Investment Strategies
- Principles of Investment Strategies for Occupational Pension Funds
- Risk Management of Equity Portfolios using Derivatives

OTHER ACADEMIC ACTIVITIES

Editorial Boards

- Guest editor for the **Journal of Risk and Financial Management** Nov 2023 - June 2024
- Editorial assistant for the **Risk Sciences** Since April 2024

Referee for

- American Mathematical Society, Annals of Applied Probability, Finance and Stochastics, Mathematical Finance, SIAM Journal on Financial Mathematics, SIAM Journal on Control and Optimization, European Journal of Operational Research, Financial Analysts Journal, Journal of Banking and Finance, Mathematics and Financial Economics, Mathematics of Operations Research, Journal of Economic and Behavior & Organization, Insurance: Mathematics and Economics, Journal of Commodity Markets, Risks, Quantitative Finance, Journal of Optimization Theory and Applications, Journal of Risk and Financial Management, Journal of Behavioral and Experimental Finance, Applied Stochastic Models in Business and Industry, IMA Journal of Management Mathematics, Annals of Finance, Journal of Computational Optimization in Economics and Finance, Economic Modelling, Theoretical Economics Letters, North American Journal of Economics and Finance, International Review of Applied Economics, Journal of International Financial Studies, International Journal of Portfolio Analysis and Management, Journal of Computational and Applied Mathematics.

Co-organization of Conferences

- Workshop entitled "*Developments in Pension Design and Investment Modelling*", Piraeus (September 2024).
- Session on Mathematical Finance at the "*10th International Workshop on Applied Probability*", Thessaloniki (June 2023).
- Scientific committee of "*11th General AMaMeF Conference*", Bielefeld, Germany (June 2023).
- "*11th Conference in Actuarial Science & Finance*", Samos (May 2022).
- Conferences on "*Recent Developments in Dependence Modelling with Applications in Finance and Insurance – 5th, 6th and 7th Editions*", Aegina and Agkistri (Septembers 2018, 2019 and 2022).
- "*IFFR Conference on Understanding Challenges for the Greek Economy*", Athens (September 2019).
- Session on Mathematical Finance at the "*First Congress of Greek Mathematicians*", of the Hellenic Mathematical Society, Athens (June 2018).
- Conference "*Thera Stochastics*", a conference in Honor of Professor Ioannis Karatzas, Santorini (May 2017).

Supervising

- Main supervisor of (ongoing) Ph.D. student: Mr. C. Stefanakis — Since Sep 2022.
  Thesis title: "*Issues on Optimal Investment Strategies in Continuous-time Models*".
- Main supervisor of (ongoing) Ph.D. student: Ms. E. Blontzou — Since Sep 2019.
  Thesis title: "*Issues on Investment Strategies for Pension Funds*".
- Supervisor in more than 90 MSc dissertations in University of Piraeus for (Departments of Banking & Financial Management and Statistics & Actuarial Science) and National & Technical University of Athens; and 2 BSc dissertations in National & Technical University of Athens.
- Member of the Ph.D. commitee of Dr. G. Samartzis — Graduation in 2023.
- Member of the Ph.D. commitee of Dr. L. Zarmpala — Graduation in 2021.
- Member of the Ph.D. commitee of Dr. V. Malafouris — Graduation in 2014.

Fellowship(s)

- *Fellow of the Institute of Finance and Financial Regulation* https://iffr.gr/

Services for the Department of Banking and Financial Management

- **Director** of the *Departmental Doctoral Program* — Since Feb 2018
- Member of the *Departmental Doctoral Program Committee* — Oct 2015- Jan 2018
- Co-organizer of the *Weekly Academic Seminar Series* — Since Sept 2014
- Co-organizer of the *Doctoral Seminar* — Several semesters
- Academic coordinator of the departmental *Erasmus program* — Sept 2015- Feb 2018

Services for the University of Piraeus

- Member of the *Supply Committee* — Feb 2015-Dec 2015

Academic textbooks/notes (in Greek)

- Textbook "*Statistics for Economic and Managerial Studies*", together with P. Kiochos and V. Karagianni. Athens, 2023.
- Notes for the course "*Stochastic Finance*". Available at https://bankfin.unipi.gr/faculty/anthropelos/wp-content/uploads/2019/09/Stochastic-Finance.pdf.

SKILLS

- ***Computer Skills***: Eviews, Matlab, Latex, Microsoft Office.
- ***Languages***: Greek, English.

PUBLICATIONS

- "*Partial Equilibria with Convex Capital Requirements: Existence, Uniqueness and Stability*", joint work with Gordan Žitković. **Annals of Finance**, 6, p.107-135, (2010).
- "*On Agents' Agreement and Partial Equilibrium Pricing in Incomplete Markets*", joint work with Gordan Žitković. **Mathematical Finance**, 20(3), p.411-446, (2010).
- "*Contract Pricing and Utility Sharing*", joint work with Nikolaos E. Frangos, Stylianos Z. Xanthopoulos and Athanasios N. Yannacopoulos. **IMA Journal of Management Mathematics**, 25 (3), 329-352 (2014).
- "*Forward Exponential Performance Criteria: Pricing and Optimal Risk Sharing*". **SIAM Journal of Financial Mathematics**, 5 (1), 626-655 (2014).
- "*The Effect of Market Power on Risk-Sharing*". **Mathematics and Financial Economics**, 11 (3), 323-368 (2017).
- "*The Pricing of Contingent Claims and Optimal Positions in Asymptotically Complete Markets*", joint work with Scott Robertson and Konstantinos Spiliopoulos. **Annals of Applied Probability**, 27 (3), 1778-1830 (2017).
- "*Equilibrium in Risk-Sharing Games*", joint work with Constantinos Kardaras. **Finance and Stochastics**, 21, 815-865 (2017).
- "*An Equilibrium Model for Spot and Forward Commodity Prices*", joint work with Michael Kupper and Antonis Papapantoleon. **Mathematics of Operations Research**, 43 (1), 152-180 (2018).
- "*The Effective Risk Aversion in Thin Risk-Sharing Markets*", joint work with Constantinos Kardaras and George Vichos. **Mathematical Finance**, 30, 1565-1590 (2020).
- "*Nash Equilibria in Optimal Reinsurance Bargaining*", joint work with Tim J. Boonen. **Insurance: Mathematics and Economics**, 93, 196-205 (2020).
- "*Optimal Investment and Derivative Demand under Price Impact*", joint work with Scott Robertson and Konstantinos Spiliopoulos. **Mathematical Finance**, 31, 3-35 (2021).
- "*Competition in Fund Management and Forward Relative Performance Criteria*", joint work with Tiaran Geng and Thaleia Zariphopoulou. **SIAM Journal of Financial Mathematics**, 13(4), 1271-1301 (2022).
- "*On Valuation and Investments of Pension Plans in Discrete Incomplete Markets*", joint work with Evmorfia Blontzou. **Risks**, 11(6):103 (2023), in the special issue: Frontiers in Quantitative Finance and Risk Management.
- "*Price Impact under Heterogeneous Beliefs and Restricted Participation*", joint work with Constantinos Kardaras. **Journal of Economic Theory**, 215, 105774 (2024).
- "*Optimal Investment and Equilibrium Pricing Under Ambiguity*", joint work with Paul Schneider. Accepted for publication in **Review of Finance**. Available at http://dx.doi.org/10.2139/ssrn.3970575.
- "*Linear Risk Sharing in Intergenerational Pension*", joint work with Ann Chen, Steve Vanduffel and Morten Wilke. Submitted for publication. Available at http://dx.doi.org/10.2139/ssrn.4488123.
- "*Strategic Informed Trading and the Value of Private Information*", joint work with Scott Robertson. Submitted for publication. Available at http://dx.doi.org/10.2139/ssrn.4791504.
- "*On the Expansion of Risk Pooling*", joint work with Runhuan Feng and Seongyoon Kim. Working paper.
- "*Equilibrium Returns in Continuous-Time Markets with Price Impact and Frictions*", joint work with Constantinos Stefanakis. Working paper.

- "*Strategic Trading Against Risk Averse Market Makers*", joint work with Harrison Waldon. Working paper.

ACADEMIC PRESENTATIONS/TALKS

- Foundations and Applications of Decentralized Risk Sharing (***invited***), Ulm, 2024.
- 8^{th} Conference on Recent Developments in Dependence Modelling with Applications in Finance, Insurance and Pensions (***plenary speaker***), Agkistri, 2023.
- University of Illinois Urbana-Champaign, Financial and Actuarial Mathematics, webinar (***invited***), Urbana, USA, 2022.
- 10^{th} General AMaMeF Conference (***plenary speaker***), web-conference, 2021.
- University of Crete, Research Seminars of Department of Economics (***invited***), webinar, 2021.
- One World Actuarial Research Seminar (***invited***), international webinar, 2020.
- Workshop in Stochastic Analysis, Mathematical Finance and Economics (***invited***), Banff, Canada, 2020 (postponed).
- Actuarial and Financial Mathematics Conference (***plenary speaker***), Brussels, 2020.
- University of Amsterdam, Seminar of the Actuarial Science & Mathematical Finance Group (***invited***), Amsterdam, 2020.
- University of Texas, Seminar in Mathematical Finance (***invited***), Austin, 2019.
- University of Southern California, Mathematical Finance Colloquium (***invited***), Los Angeles, 2019.
- Columbia University, Mathematical Finance Seminar (***invited***), New York, 2019.
- IIT Mathematical Finance and Stochastic Analysis Seminar (***invited***), Chicago, 2019.
- University of Illinois Urbana-Champaign, ISE Graduate Seminar (***invited***), Urbana, 2019.
- Symposium: Mathematics in the Age of the 4th Industrial Revolution (***invited***), Athens, 2019.
- Workshop in Stochastic Analysis and its Applications (***invited***), Oaxaca, Mexico, 2018.
- 3^{rd} Workshop in Stochastic Methods in Finance and Physics (***invited***), Crete, 2018.
- University of Amsterdam, Seminar of the Actuarial Science & Mathematical Finance Group (***invited***), Amsterdam, 2018.
- Paris Bachelier Seminar (***invited***), Paris, 2018.
- Seminar Series in National Technical University of Athens (***invited***), 2018.
- Université d'Evrý, Seminar Series in Mathematical Finance (***invited***), Paris, 2018.
- Stochastic Finance Seminar at University of Warwick (***invited***), Warwick, UK, 2017.
- Workshop in Stochastics & Finance (***invited***), Irakleion, Crete, 2017.
- 16^{th} Conference on Research on Economic Theory and Econometrics, Milos, 2017.
- Financial/Actuarial Mathematics Seminar, University of Michigan (***invited***), Ann Arbor, 2017.
- Seminar of Questrom School of Business (***invited***), Boston, 2017.
- Mathematical Finance Seminar (***invited***), Dublin City University, Ireland, 2016.
- Probability Seminar (***invited***), NYU-Shanghai, Shanghai, China, 2015.
- Seminar Series in National Technical University of Athens (***invited***), 2015.
- Conference on Stochastic & Computational Finance, Lisbon, Portugal, 2015.
- 14^{th} Conference on Research on Economic Theory and Econometrics, Chania, Crete, 2015.
- 2^{nd} Workshop in Stochastic Methods in Finance and Physics (***invited***), Irakleion, Crete, 2015.
- Seminar in Mathematical Finance (***invited***), Hannover, Germany, 2014.

- SIAM Conference on Financial Mathematics and Engineering, Chicago, 2014.
- University of Texas, Seminar in Mathematical Finance (***invited***), Austin, 2014.
- Conference on Stochastics of Environmental and Financial Economics (***invited***), Oslo, Norway, 2014.
- Workshop in Mathematical Finance: Arbitrage and Portfolio Optimization (***invited***), Banff, Canada, 2014.
- 8^{th} World Congress of Bachelier Finance Society, Brussels, 2014.
- Seminar in Stochastic Analysis and Stochastic Finance (***invited***), Humboldt Universität, Berlin, 2013.
- Workshop in Stochastic Methods in Finance and Physics (***invited***), Crete, 2013.
- International Conference "Advanced Finance and Stochastics", Moscow, 2013.
- Frontiers in Financial Mathematics, Dublin (poster presentation), 2013.
- Weekly Academic Seminar Series (***invited***), University of Piraeus, Department of Banking and Financial Management, 2013.
- The London Mathematical Finance Seminar Series (***invited***), London, 2013.
- Research Mathematical Finance Seminar (***invited***), Quantitative Finance Laboratory, Berlin, 2012.
- Probability, Control and Finance, a Conference in Honor of Ioannis Karatzas (***funded by the organizers***), New York (poster presentation), 2012.
- 8^{th} World Congress in Probability and Statistics, Istanbul, 2012.
- 71^{st} International Atlantic Economic Conference, Athens, 2011.
- 10^{th} Conference of the Hellenic Finance & Accounting Association, Athens, 2011.
- Seminars/Colloquia (***invited***), University of Cyprus, Department of Mathematics & Statistics, 2010.
- Weekly Academic Seminar Series (***invited***), University of Piraeus, Department of Banking and Financial Management, 2009.
- 3^{rd} Summer School in Mathematical Modelling (***invited***), National Technical University of Athens, 2008.
- 5^{th} World Congress of Bachelier Finance Society, London, 2008.
- 5^{th} Summer School in Stochastic Finance (***invited***), Athens University of Economics and Business and University of the Aegean, Chios, Greece, 2008.
- Finance and Stochastic Seminar (***invited***), Boston University, 2008.
- Mathematical Finance Seminar (***invited***), University of Texas at Austin, 2008.
- 1^{st} Conference on Mathematical and Statistics, Athens Institute for Education and Research, Athens, 2007.
- 11^{th} International Conference in Insurance: Mathematics and Economics, Piraeus, 2007.
- Seminar in Mathematical Modelling (***invited***), National Technical University of Athens, 2007.
- 4^{th} Summer School in Stochastic Finance (***invited***), Athens University of Economics and Business and University of the Aegean, Chios, Greece, 2007.
- Analysis Seminar, University of Texas at Austin, 2006.