Antonis Economou

Curriculum Vitae – Version November 16, 2022

A. General Information.

Birth date : March 13, 1972 Birth place : Athens, Greece

Address (office) : National & Kapodistrian University of Athens

Department of Mathematics Section of Statistics and OR

Panepistemioupolis Athens 15784

Greece

Telephone : 0030-210-7276351 e-mail : aeconom@math.uoa.gr

Website : http://scholar.uoa.gr/aeconom/home

Fax : 0030-210-7276381 Family status : Married, 2 children

B. Studies.

• B.Sc. in Mathematics (1989-1993).

National & Kapodistrian University of Athens, Department of Mathematics, July 1993.

Grade: Excellent, 9.33/10.

• M.A. in Mathematics (1993-1994).

University of California, Los Angeles (UCLA), Department of Mathematics, Pure program, June 1994.

Grade (GPA): 3.975/4. Qualifying exams: Real Analysis, Algebra.

• M.Sc. in Statistics and Operations Research (1994-1997).

University of Athens, Department of Mathematics, June 1997.

Grade: Excellent, 9.56/10. Master thesis: *Stochastic Orders and Applications*.

• Ph.D. in Mathematics (1994-1998).

University of Athens, Department of Mathematics, July 1998.

Grade: Excellent. PhD dissertation: Study of Product-Form Queueing Systems.

C. Research Interests.

Operations Research – Quantitative Methods in Business – Operations Management – Applied Probability – Game Theory – Social and Economic Networks – Mathematical Biology – Mathematical Economics.

In particular:

- Markov Chains, Renewal Processes, Semi-Markov Processes and Markov Renewal Processes
- Generating Function Methods in Stochastic Models
- Matrix-Analytic Methods in Stochastic Models
- Stochastic Orders and Applications
- Markov Decision Processes and Applications
- Decision/Game Theoretic Analysis and Pricing Problems in Stochastic Models
- Queueing Theory
- Stochastic Networks
- Stochastic Population Models
- Stochastic Epidemic Models

D. Academic positions.

- 1999 2000: Visiting Lecturer at the Department of Applied Mathematics, University of Crete
- 2000 2001: Visiting Assistant Professor at the Department of Applied Mathematics, University of Crete
- 2001 2005 : Lecturer at the Department of Mathematics, National & Kapodistrian University of Athens.
- 2005 2009: Assistant Professor (without tenure) at the Department of Mathematics, National & Kapodistrian University of Athens.
- 2009 2011: Assistant Professor (tenured) at the Department of Mathematics, National & Kapodistrian University of Athens.
- 2011 2016: Associate Professor at the Department of Mathematics, National & Kapodistrian University of Athens.
- 2016 Professor at the Department of Mathematics, National & Kapodistrian University of Athens.
- 2017- : Affiliated Teaching Lecturer, Hellenic Open University.

E. Research (papers, research reports, theses).

1. Papers published in journals with a reviewing process.

1. Logothetis, D., Manou, A. and Economou, A. (2022) The impact of reneging on a fluid on-off queue with strategic customers. *Annals of Operations Research* – Accepted Manuscipt.

DOI: 10.1007/s10479-022-04807-z

2. Economou, A. and Manou, A. (2022) A probabilistic approach for the analysis of the Mn/G/1 queue. *Annals of Operations Research* **317**, 19-27.

DOI: 10.1007/s10479-015-1943-0

3. Baron, O., Economou, A. and Manou, A. (2022) Increasing social welfare with delays: Strategic customers in the M/G/1 orbit queue. *Production and Operations Management* **31**, 2907-2924.

DOI: 10.1111/poms.13728

4. Economou, A., Logothetis, D. and Manou, A. (2022) The value of reneging for strategic customers in queueing systems with server vacations/failures. *European Journal of Operational Research* **299** (3), 960-976.

DOI: 10.1016/j.ejor.2022.01.010

5. Economou, A. (2022) How much information should be given to the customers of a queueing system? *Queueing Systems* **100** (3-4), 421-423.

DOI: 10.1007/s11134-022-09741-2

6. Dimitrakopoulos, Y., Economou, A. and Leonardos, S. (2021) Strategic customer behavior in a queueing system with alternating information structure. *European Journal of Operational Research* **291** (3), 1024-1040.

DOI: 10.1016/j.ejor.2020.10.054

7. Bountali, O. and Economou, A. (2019) Strategic customers behavior in a two-stage batch processing system. *Queueing Systems* **93** (1-2), 3-29.

DOI: 10.1007/s11134-019-09615-0

8. Bountali, O. and Economou, A. (2019) Equilibrium threshold joining strategies in partially observable batch service queueing systems. *Annals of Operations Research* **277** (2), 231-253.

DOI: 10.1007/s10479-017-2630-0

9. Baron, O., Economou, A. and Manou, A. (2018) The state-dependent *M/G/1* queue with orbit. *Queueing Systems* **90** (1-2), 89-123.

DOI: 10.1007/s11134-018-9582-1

10. Burnetas, A., Economou, A. and Vasiliadis, G. (2017) Strategic customer behavior in a queueing system with delayed observations. *Queueing Systems* **86**, 389-418.

DOI: 10.1007/s11134-017-9522-5

11. Economou, A. and Bountali, O. (2017) Equilibrium joining strategies in batch service queueing systems. *European Journal of Operational Research* **260**, 1142-1151.

DOI: 10.1016/j.ejor.2017.01.024

12. Economou, A. and Manou, A. (2016) Strategic behavior in an observable fluid queue with an alternating service process. *European Journal of Operational Research* **254**, 148-160.

DOI: 10.1016/j.ejor.2016.03.046

13. Economou, A. and Lopez-Herrero, M.J. (2016) The deterministic SIS epidemic model in a Markovian random environment. *Journal of Mathematical Biology* **73**, 91-121.

DOI: 10.1007/s00285-015-0943-7

14. Economou, A., Gomez-Corral, A. and Lopez-Garcia, M. (2015) A stochastic SIS epidemic model with heterogeneous contacts. *Physica A* **421**, 78-97.

DOI: 10.1016/j.physa.2014.10.054

- 15. Artalejo, J.R., Economou, A. and Lopez-Herrero, M.J. (2015) The stochastic SEIR model before extinction: Computational approaches. *Applied Mathematics and Computation* **265**, 1026-1043.
- 16. Manou, A., Economou, A. and Karaesmen, F. (2014) Strategic customers in a transportation station: When is it optimal to wait? *Operations Research* **62** (4), 910-925.

DOI:10.1287/opre2014.1280

17. Artalejo, J.R., Economou, A. and Lopez-Herrero, M.J. (2013) Stochastic epidemic models in random environment: Quasi-stationarity, extinction and final size. *Journal of Mathematical Biology* **67** (4), 799-831.

DOI: 10.1007/s00285-012-0570-5

18. Boudali, O. and Economou, A. (2013) The effect of catastrophes on the strategic customer behavior in queueing systems. *Naval Research Logistics* **60** (7), 571-587.

DOI: 10.1002/nav.21553

19. Economou, A. and Manou, A. (2013) Equilibrium balking strategies for a clearing queueing system in alternating environment. *Annals of Operations Research* **208** (1), 489-514.

DOI: 10.1007/s10479-011-1025-x

20. Dimou, S. and Economou, A. (2013) The single server queue with catastrophes and geometric reneging. *Methodology and Computing in Applied Probability* **15** (3), 595-621.

DOI: 10.1007/s11009-011-9271-6

21. Boudali, O. and Economou, A. (2012) Optimal and equilibrium balking strategies in the single server Markovian queue with catastrophes. *European Journal of Operational Research* **218** (3), 708-715.

DOI: 10.1016/j.ejor.2011.11.043

22. Artalejo, J.R., Economou, A. and Lopez-Herrero, M.J. (2012) Stochastic epidemic models revisited: Analysis of some continuous performance measures. *Journal of Biological Dynamics* **6** (2), 189-211.

DOI: 10.1080/17513758.2011.552737

23. Economou, A., Gomez-Corral, A. and Kanta, S. (2011) Optimal balking strategies in single-server queues with general service and vacation times. *Performance Evaluation* **68** (10), 967-982.

DOI: 10.1016/j.peva.2011.07.001

24. Dimou, S., Economou, A. and Fakinos, D. (2011) The single server vacation queueing model with geometric abandonments. *Journal of Statistical Planning and Inference* **141** (8), 2863-2877.

DOI: 10.1016/j.jspi.2011.03.010

25. Economou, A. and Kanta, S. (2011) Equilibrium customer strategies and social-profit maximization in the single-server constant retrial queue. *Naval Research Logistics* **58** (2), 107-122.

DOI: 10.1002/nav.20444

26. Artalejo, J.R., Economou, A. and Lopez-Herrero, M.J. (2010) On the number of recovered individuals in the SIS and SIR stochastic epidemic models. *Mathematical Biosciences* **228** (1), 45-55.

DOI: 10.1016/j.mbs.2010.08.006

27. Economou, A., Kapodistria, S. and Resing, J. (2010) The single server queue with synchronized services. *Stochastic Models* **26** (4), 617-648.

DOI: 10.1080/15326349.2010.519670

28. Economou, A. and Kapodistria, S. (2010) Synchronized abandonments in a single server unreliable queue. *European Journal of Operational Research* **203** (1), 143-155.

DOI:10.1016/j.ejor.2009.07.014

29. Artalejo, J.R., Economou, A. and Lopez-Herrero, M.J. (2010) The maximum number of infected individuals in SIS epidemic models: Computational techniques and quasi-stationary distributions. *Journal of Computational and Applied Mathematics* **233** (10), 2563-2574.

DOI: 10.1016/j.cam.2009.11.003

30. Economou, A. and Lopez-Herrero, M.J. (2009) Performance analysis of a cellular mobile network with retrials and guard channels using waiting and first passage time measures. *European Transactions on Telecommunications* **20** (4), 389-401.

DOI: 10.1002/ett.1294

31. Adan, I., Economou, A. and Kapodistria, S. (2009) Synchronized reneging in queueing systems with vacations. *Queueing Systems* **62** (1-2), 1-33.

DOI: 10.1007/s11134-009-9112-2

- 32. Economou, A. and Kapodistria, S. (2009) q-series in Markov chains with binomial transitions: Studying a queue with synchronization. *Probability in the Engineering and Informational Sciences* **23** (1), 75-99. DOI: 10.1017/S0269964809000084
- 33. Economou, A. and Kanta, S. (2008) Equilibrium balking strategies in the observable single server queue with breakdowns and repairs. *Operations Research Letters* **36** (6), 696-699.

DOI: 10.1016/j.orl.2008.06.006

34. Artalejo, J.R., Economou, A. and Gómez-Corral, A. (2008) Algorithmic analysis of the *Geo/Geo/c* retrial queue. *European Journal of Operational Research* **189** (3), 1042-1056.

DOI: 10.1016/j.ejor.2007.01.060

35. Economou, A. and Kanta, S. (2008) Optimal balking strategies and pricing for the single server Markovian queue with compartmented waiting space. *Queueing Systems* **59** (3-4), 237-269.

DOI: 10.1007/s11134-008-9083-8

36. Economou, A. and Fakinos, D. (2008) Alternative approaches for the transient analysis of Markov chains with catastrophes. *Journal of Statistical Theory and Practice* **2** (2), 183-197.

DOI: 10.1080/15598608.2008.10411870

37. Artalejo, J.R., Economou, A. and Lopez-Herrero, M.J. (2007) Algorithmic analysis of the maximum queue length in a busy period for the *M/M/c* retrial queue. *INFORMS Journal of Computing* **19** (1), 121-126.

DOI: 10.1287/ijoc.1050.0156

- 38. Artalejo, J.R., Economou, A. and López-Herrero, M.J. (2007) Evaluating growth measures in an immigration process subject to binomial and geometric catastrophes. *Mathematical Biosciences and Engineering* **4** (4), 573-594.
- 39. Burnetas, A. and Economou, A. (2007) Equilibrium customer strategies in a single server Markovian queue with setup times. *Queueing Systems* **56** (3-4), 213-228.

DOI: 10.1007/s11134-007-9036-7

40. Artalejo, J. R., Economou, A. and Gómez-Corral, A. (2007) Applications of maximum queue length to call center management. *Computers and Operations Research* **34** (4), 983-996.

DOI: 10.1016/j.cor.2005.05.020

41. Economou, A. and Gómez-Corral, A. (2007) The batch Markovian arrival process subject to renewal generated geometric catastrophes. *Stochastic Models* **23** (2), 211-233.

DOI: 10.1080/15326340701300761

42. Artalejo, J.R., Economou, A. and López-Herrero, M.J. (2007) Algorithmic approximations for the busy period of the *M/M/c* retrial queue. *European Journal of Operational Research* **176** (3), 1687-1702.

DOI: 10.1016/j.ejor.2005.10.034

43. Artalejo, J. R., Economou, A. and Lopez-Herrero, M.J. (2005) Analysis of a multiserver queue with setup times. *Queueing Systems* **51** (1-2), 53-76.

DOI: 10.1007/s11134-005-1740-6

44. Artalejo, J. R. and Economou, A. (2005) Markovian controllable queueing systems with hysteretic policies. Busy period and waiting time analysis. *Methodology and Computing in Applied Probability* **7** (3), 353-378.

DOI: 10.1007/s11009-005-4522-z

45. Economou, A. (2005) Generalized product-form stationary distributions for Markov chains in random environments with queueing applications. *Advances in Applied Probability* **37** (1), 185-211.

DOI: 10.1239/aap/1113402405

- 46. Artalejo, J. R. and Economou, A. (2005) On the non-existence of product-form solutions for queueing networks with retrials. *Electronic Modeling Journal of Simulation Engineering* **27** (1), 13-19.
- 47. Economou, A. (2004) The compound Poisson immigration process subject to binomial catastrophes. *Journal of Applied Probability* **41** (2), 508-523.

DOI: 10.1239/jap/1082999082

- 48. Economou, A. (2004) Stationary distributions of discrete-time Markov chains in random environment: Exact computations and bounds. *Stochastic Models* **20** (1), 103-127.
- 49. Artalejo, J. R. and Economou, A. (2004) Optimal control and performance analysis of an $M^X/M/I$ queue with batches of negative customers. *RAIRO Operations Research* **38** (2), 121-151.

DOI: 10.1051/ro:2004016

50. Economou, A. (2003) On the stochastic domination for batch-arrival batch-service and assemble-transfer queueing networks. *Journal of Applied Probability* **40** (4), 1103-1120.

DOI: 10.1239/jap/1067436103

51. Economou, A. and Fakinos, D. (2003) A continuous-time Markov chain under the influence of a regulating point process and applications in stochastic models with catastrophes. *European Journal of Operational Research* **149** (3), 625-640.

DOI: 10.1016/S0377-2217(02)00465-4

52. Economou, A. (2003) On the control of a compound immigration process through total catastrophes. *European Journal of Operational Research* **147** (3), 522-529.

DOI: 10.1016/S0377-2217(02)00355-7

53. Economou, A. and Fakinos, D. (2003) On the stationary distribution of the $GI^X/M^Y/I$ queueing system. *Stochastic Analysis and Applications* **21** (3), 559-565.

DOI: 10.1081/SAP-120020426

54. Economou, A. (2003) Necessary and sufficient conditions for the stochastic comparison of Jackson networks. *Probability in the Engineering and Informational Sciences* **17** (1), 143-151.

DOI: 10.1017/S0269964803171094

55. Economou, A. (2003) A characterization of product-form stationary distributions for queueing systems in random environment. *International Journal of Simulation* **4** (5-6), 4-11.

56. Economou, A. (2002) An alternative model for queueing systems with single arrivals, batch services and customer coalescence. *Queueing Systems* **40** (4), 407-432.

DOI: 10.1023/A:1015089518876

57. Fakinos, D. and Economou, A. (2001) A new approach for the study of the $M^X/G/I$ queue using renewal arguments. Stochastic Analysis and Applications 19 (1), 151-156.

DOI: 10.1081/SAP-100000754

- 58. Economou, A. (2000) A stochastic lower bound for assemble-transfer batch service queueing networks. *Journal of Applied Probability* **37** (3), 881-889.
- 59. Economou, A. and Fakinos, D. (1999) The infinite server queue with arrivals generated by a non-homogeneous compound Poisson process and heterogeneous customers. *Communication in Statistics Stochastic Models* **15** (5), 993-1002.
- 60. Economou, A. (1999) Geometric-form bounds for the $GI^X/M/I$ queueing system. *Probability in the Engineering and Informational Sciences* **13** (4), 509-520.
- 61. Economou, A. and Fakinos, D. (1999) Product form stationary distributions for the *M/G/k* group-arrival group-departure loss system under a general acceptance policy. *European Journal of Operational Research* **112** (1), 196-206.
- 62. Economou, A. and Fakinos, D. (1998) Product form stationary distributions for queueing networks with blocking and rerouting. *Queueing Systems* **30** (3-4), 251-260.
- 63. Fakinos, D. and Economou, A. (1998) Overall station balance and decomposability for non-Markovian queueing networks. *Advances in Applied Probability* **30** (3), 870-887.

2. Papers in collective volumes with a refereeing process.

64. Economou, A. (2021) The impact of information structure on strategic behaviour in queueing systems. *In Anisimov, V. and Limnios, N. eds. Queueing Theory 2 Advanced Trends.* Wiley/ISTE.

DOI: 10.1002/9781119755234.ch4

65. Logothetis, D. and Economou, A. (2021) Routing of strategic passengers in a transportation station. *In Ballarini et al. eds. Performance Engineering and Stochastic Modeling, EPEW 2021/ASMTA2021*. Lecture Notes in Computer Science 13104, Springer.

DOI: 10.1007/978-3-030-91825-5_19

3. Papers submitted or under revision in journals.

66. -

4. Papers published in conference proceedings with a reviewing process.

- 67. Economou, A. and Grigoriou, M. (2015) Strategic balking behavior in a queueing system with a mixed observation structure. *Proceedings of the 10th Conference on Stochastic Models of Manufacturing and Service Operations (SMMSO 2015), Volos, Greece, June 1-6, 2015.*
- 68. Phung-Duc, T., Resing, J., Kapodistria, S. and Economou, A. (2012) The $M^X/M/\infty$ queue with synchronized abandonments. Abstracts of the 2012 Spring National Conference of Operations Research Society of Japan, 27-28 March 2012, Kanagawa Prefecture, Japan, pp 80-81.
- 69. Economou, A. (2009) The maximum number of infectives in SIS epidemic models: Computational techniques and quasi-stationary distributions. *Proceedings of the 6th St. Petersburg Workshop on Simulation, Vol.II,* S.M.Ermakov, V.B. Melas and A.N. Pepelyshev eds, VVM com. Ltd., St. Petersburg, pp 804-810.
- 70. Artalejo J.R., Economou A. and López-Herrero M.J. (2005). Algorithmic analysis for the number of customers served in a busy period of the *M/M/c* retrial queue. *Proceedings of the 3rd International Conference on Mathematical and Computational Models*, Arumuganathan R. and Nadarajan R. eds., Allied Publishers, pp 3-15.
- 71. Economou, A. (2005) Applications of stochastic orders in queueing theory: Comparisons and approximations of queueing networks. *Proceedings XIII Congresso Anual da SPE*, 28 Sept. 1 Oct. 2005. Ericeira, Portugal.
- 72. Economou, A. (2003) A characterization of product-form stationary distributions for queueing systems in random environment. *Proceedings* 17th European Simulation Multiconference SCS Europe BVBA (10th International Conference on Analytical and Stochastic Modelling Techniques and Applications (ASMTA 2003)), pp. 193-198. Nottingham, United Kingdom.
- 73. Economou, A. and Fakinos, D. (2002) A model for the influence of a point process on a continuous time Markov chain and applications. *Proceedings* 10th Pan-Hellenic Statistics Conference (ESI 2002), Ioannina.
- 74. Economou, A. and Fakinos, D. (1997) Product form stationary distributions for queueing networks with blocking and rerouting. *Proceedings 10th Pan-Hellenic Statistics Conference (ESI 1997)*, Athens.

5. Research reports.

- 75. Economou, A. and Fakinos, D. (1997) Queueing networks with multilevel signals.
- 76. Economou, A. and Fakinos, D. (1996) A group-arrival service system with blocking and retrials.
- 77. Economou, A. and Fakinos, D. (1996) Dual station balance in queueing networks.

6. Theses and dissertations.

- 78. Economou, A. 1998) *Study of product-form queueing systems*. Doctoral dissertation for the PhD in Mathematics, Department of Mathematics, National & Kapodistrian University of Athens.
- 79. Economou, A. (1997) *Stochastic Orders and Applications*. Master Thesis for the MSc in Statistics and OR, Department of Mathematics, National & Kapodistrian University of Athens.

Classification of papers according journals (63):

European Journal of Operational Research (11), Queueing Systems (10), Journal of Applied Probability (3), Probability in the Engineering and Informational Sciences (3), Stochastic Models (3), Advances in Applied Probability (2), Naval Research Logistics (2), Annals of Operations Research (4), Methodology and Computing in Applied Probability (2), Stochastic Analysis and Applications (2), Journal of Mathematical Biology (2), Operations Research (1), Production and Operations Management (1), OR Letters (1), Performance Evaluation (1), Journal of Statistical Planning and Inference (1), Computers and Operations Research (1), INFORMS Journal on Computing (1), Physica A (1), Mathematical Biosciences (1), Mathematics and Computation (1), Journal of Biological Dynamics (1), Mathematical Biosciences and Engineering (1), Journal of Computational and Applied Mathematics (1), RAIRO – Operations Research (1), European Transactions on Telecommunications (1), Communications in Statistics – Stochastic Models (1), Journal of Statistical Theory and Practice (1), *International Journal of Simulation* (1), *Electronic Modeling* (1).

Classification of papers according field of study (63):

Performance Evaluation of Queueing Systems (20), Strategic Behavior in Queueing Systems (19), Performance Evaluation of Queueing Networks (8), Stochastic Population Processes (5), Stochastic Epidemic Processes (7), General Applied Probability (2), Dynamic Control of Queueing Systems (2).

F. Teaching

1. Courses

- 1. 1995 1997 : National & Kapodistrian University of Athens, Department of Mathematics Undergraduate courses –Teaching assistant
 - Introduction to Operations Research (2h/w: 1995Winter, 1996Winter, 1997Winter).
- 2. 1999 2001: University of Crete, Department of Applied Mathematics Undergraduate courses
 - Linear Algebra I (6h/w: 1999Winter)
 - Linear and Non-Linear Programming (6h/w: 2000Spring)
 - Statistics I (6h/w: 2000Winter)

- Stochastic Processes (6h/w: 2001Spring)
- 3. 2001 : National & Kapodistrian University of Athens, Department of Mathematics Undergraduate courses
 - Introduction to Operations Research (4h/w–Winter 2001, 2002)
 - Combinatorics I (3h/w: 2001Winter, 2002Winter, 4h/w: 2003Winter, 2004Winter, 2005Winter, 2006Winter, 2007Winter, 2008Winter, 2009Winter, 2010Winter, 2011Winter, 2012Winter)
 - Stochastic Processes (4h/w: 2019Winter, 2020Winter)
 - Stochastic Methods in Operations Research I (4h/w: 2012Spring, 2013Spring, 2016Spring, 2017Spring, 2018Spring, 2019Spring)
 - Operations Research: Stochastic Models (4h/w: 2020Spring, 2021Spring)
 - Theory of Probability I (5h/w: 2010Spring, 6h/w: 2013Spring, 2017Winter)
 - Theory of Probability II (4h/w: 2002Spring, 2003Spring, 2004Spring)
 - Queueing Theory (3h/w: 2003Spring, 2004Spring, 2004Winter, 2005Winter, 2006Winter, 2008Spring, 2008Winter, 2009Winter, 2017Spring, 2018Winter, 2022Winter)
 - Probability and Statistics for the Department of Informatics and Telecommunications (4h/w: 2014Winter)
 - Computational Methods in Decision Theory (4h/w: 2016Spring)
 - Calculus II (for the Department of Physics) (4h/w: 2023Spring)
- 4. 2001- : National & Kapodistrian University of Athens, Department of Mathematics, Program in Statistics and Operations Research Graduate courses
 - Theory of Reliability (4h/w: 2002Spring)
 - Stochastic Models in Operations Research (4h/w: 2003Winter, 2004Winter, 2005Winter, 2007Winter, 2008Winter, 2010Winter, 2014Winter, 2016Winter, 2017Winter, 2018Winter, 2022Winter)
 - Algorithmic and Computational Techniques in Stochastic Models (4h/w: 2005Spring, 2007Spring)
 - Stochastic Dynamic Programming (4h/w: 2006Spring, 2015Winter)
 - Stochastic Processes (4h/w: 2006Winter, 2009Spring, 2012Spring)
 - Nonlinear Programming (4h/w: 2019Winter)
- 5. 2003- : National & Kapodistrian University of Athens and Athens University of Economics and Business, Program in the Mathematics of Market and Production Graduate courses
 - Mathematical Models for Production Planning I (3h/w 2003, 2004)
 - Mathematical Models for Production Planning III (3h/w 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018)
 - Risk Theory Actuarial Mathematics (3h/w 2009)

- Mathematical Models in Marketing (3h/w 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017 in cooperation with Prof. Mageirou and Prof. Burnetas)
- Operations Research Mathematical Programming (3h/w 2018, 2019)

6. 2017-: Hellenic Open University

- Quantitative Methods Business Administration (5*4h/year 2017-2018, 2018-2019, 2019-2020, 2021-2022, 2022-2023)
- Quantitative Methods Public Administration (3*4h/semester 2020Winter, 2021Spring)
- 7. 1997 1999, 2007-2008, 2010-2011: Hellenic Mathematical Society: Preparations of students for the international mathematical competitions.
 - Combinatorics.

2. Books

- 1. Fakinos, D. and Economou, A. (2003) *Introduction to Operations Research*. Symmetria Publishers, Athens. (In Greek, 496p.) ISBN: 978-9602661444.
- 2. Fakinos, D. and Economou, A. (2022) *Introduction to Operations Research: Theory and Exercises*. Papazisi Publishers, Athens (In Greek, 592p.) ISBN: 978-9600338839.
- 3. Economou, A. (2023) *Queueing Theory*. Kallipos Open Academic Publishers (289p.) To be published.
- 4. Burnetas, A. and Economou, A. (2023) *Stochastic Models in Operations Research*. Kallipos Academic Publishers (260p.) To be published.

3. Theses supervision

Advisor for Master theses:

- 1. Georgiadis, S. (2001) Applications of the Theory of Linear Difference Equations in Queueing Theory. Master Thesis for the MSc in Statistics and OR, Department of Mathematics, National & Kapodistrian University of Athens (In Greek).
- 2. Pavitsos, A. (2002) Analysis and Control of Stochastic Population Models with Catastrophes. Master Thesis for the MSc in Statistics and OR, Department of Mathematics, National & Kapodistrian University of Athens (In Greek).
- 3. Vasilaki, A. (2003) *QBD Processes and Applications to Queueing Theory*. Master Thesis for the MSc in Statistics and OR, Department of Mathematics, National & Kapodistrian University of Athens (In Greek).
- 4. Haros, I. (2003) *Introduction to Integer Programming I: Modeling Techniques and Applications*. Master Thesis for the MSc in Statistics and OR, Department of Mathematics, National & Kapodistrian University of Athens (In Greek).

- 5. Kagioulis, D. (2003) *Introduction to Integer Programming II: Solution Techniques and Applications*. Master Thesis for the MSc in Statistics and OR, Department of Mathematics, National & Kapodistrian University of Athens (In Greek).
- 6. Vardikou, L. (2004) *Markov Renewal Processes and Applications in Queueing Theory*. Master Thesis for the MSc in Statistics and OR, Department of Mathematics, National & Kapodistrian University of Athens (In Greek).
- 7. Fotopoulos, K. (2005) *Matrix-Analytic Methods in Markov Chains with Applications in Queueing Theory*. Master Thesis for the MSc in Statistics and OR, Department of Mathematics, National & Kapodistrian University of Athens (In Greek).
- 8. Kanta, S. (2006) Algorithmic Techniques in Markov Chains: Probability Generating Function Methods and Applications. Master Thesis for the MSc in Statistics and OR, Department of Mathematics, National & Kapodistrian University of Athens (In Greek).
- 9. Kapodistria, S. (2006) Algorithmic Techniques in Markov Chains: Matirx-Analytic Methods and Applications. Master Thesis for the MSc in Statistics and OR, Department of Mathematics, National & Kapodistrian University of Athens (In Greek).
- 10. Kriezis, S. (2007) *Pricing Problems in Observable Queues*. Master Thesis for the MSc in Statistics and OR, Department of Mathematics, National & Kapodistrian University of Athens (In Greek).
- 11. Boudali, O. (2009) *Markovian Queueing Systems with Linear Transition Rates and Extensions to Systems with General Times.* Master Thesis for the MSc in Statistics and OR, Department of Mathematics, National & Kapodistrian University of Athens (In Greek).
- 12. Manou, A. (2009) *Queueing Systems in Discrete Time*. Master Thesis for the MSc in Statistics and OR, Department of Mathematics, National & Kapodistrian University of Athens (In Greek).
- 13. Markos, E. (2012) Equilibrium Strategies and Social Optimization in Queueing Systems with Alternative Forms of Service. Master Thesis for the MSc in Statistics and OR, Department of Mathematics, National & Kapodistrian University of Athens (In Greek).
- 14. Grigoriou, M. (2013) *The Influence of Information on the Strategic Behavior of Customers in Queueins Systems*. Master Thesis for the MSc in Statistics and OR, Department of Mathematics, National & Kapodistrian University of Athens (In Greek).
- 15. Tsouparopoulos, N. (2015) *Mean Value Analysis in Queueing Systems*. Master Thesis for the MSc in Statistics and OR, Department of Mathematics, National & Kapodistrian University of Athens (In Greek).
- 16. Stergiou, I. (2015) Strategic customer behavior in series networks of queueing systems. Master Thesis for the MSc in Statistics and OR, Department of Mathematics, National & Kapodistrian University of Athens (In Greek).

- 17. Gkoumas, N. (2016) Strategic behavior in queueing systems subject to breakdowns. Master Thesis for the MSc in Statistics and OR, Department of Mathematics, National & Kapodistrian University of Athens (In Greek).
- 18. Baci, A. (2018) *The influence of information time on the strategic customer behavior*. Master Thesis for the MSc in Statistics and OR, Department of Mathematics, National & Kapodistrian University of Athens (In English).
- 19. Galanis, D. (2018) *Strategic behavior in queueing systems in alternating environment*. Master Thesis for the MSc in Statistics and OR, Department of Mathematics, National & Kapodistrian University of Athens (In English).
- 20. Kasimatis, V. (2019) *Strategic customer behavior in queueing systems with general service times*. Master Thesis for the MSc in Statistics and OR, Department of Mathematics, National & Kapodistrian University of Athens (In English).
- 21. Palamida, M. (2020) *Ticket queues: Modeling, analysis and customer behavior*. Master Thesis for the MSc in Statistics and OR, Department of Mathematics, National & Kapodistrian University of Athens (In English).
- 22. Barbayiannis, I. (2022) *Strategic behavior in queueing systems with bounded customer rationality*. Master Thesis for the MSc in Statistics and OR, Department of Mathematics, National & Kapodistrian University of Athens (In Greek).

Advisor for the Doctoral Dissertations:

- 1. Kanta, S. (2009) Equilibrium Balking Problems, Pricing and Performance Evaluation in Queueing Theory. Doctoral Dissertation for the PhD in Mathematics, Department of Mathematics, National & Kapodistrian University of Athens.
- 2. Kapodistria, S. (2009) Stationary Performance Evaluation Measures in Multidimensional Markov Chains and Applications. Doctoral Dissertation for the PhD in Mathematics, Department of Mathematics, National & Kapodistrian University of Athens.
- 3. Dimou, S. (2012) *The Insensitivity Property in Queueing and a Study of Models with Geometric Abandonments in Queues with Server Vacations.*Doctoral Dissertation for the PhD in Mathematics, Department of Mathematics, National & Kapodistrian University of Athens.
- 4. Boudali, O. (2014) Strategic Customers in Queueing Systems with Batch Departures. Doctoral Dissertation for the PhD in Mathematics, Department of Mathematics, National & Kapodistrian University of Athens.
- 5. Manou, A. (2014) Queueing Systems with Varying Parameters Computational Techniques and Control Problems. Doctoral Dissertation

- for the PhD in Mathematics, Department of Mathematics, National & Kapodistrian University of Athens.
- 6. Logothetis, D. (2017) *Strategic Behavior in Queueing Systems*. Doctoral Dissertation for the PhD in Mathematics, Department of Mathematics, National & Kapodistrian University of Athens.

Member of the Evaluation Committee/ External Examiner-Evaluator for the Doctoral Dissertations:

- 1. Ferreira, F. (2007) *Embedding, Uniformization and Stochastic Ordering in the Analysis of Level-Crossing Times and GI*^x /M(n)//c Systems. Doctoral Dissertation for the PhD in Mathematics, Department of Mathematics, Technical University of Lisbon, Instituto Superior Tecnico, Portugal (In English). Member of the Evaluation Committee.
- 2. Escribano-Martos, M.D. (2007) *Queueing Networks with Blocking: Stationary Analysis and Sojourn Times.* Doctoral Dissertation for the PhD in Mathematical Sciences, Department of Statistics and OR, Faculty of Mathematics, University Complutense of Madrid, Spain (In Spanish). Member of the Evaluation Committee.
- 3. Amador-Pacheco, J. (2009) Queueing Systems with Retrials: Analysis of the Blocking and Successful Events. Doctoral Dissertation for the PhD in Mathematical Sciences, Department of Statistics and OR, Faculty of Mathematics, University Complutense of Madrid, Spain (In Spanish). Member of the Evaluation Committee.
- 4. Karamatsoukis, K. (2010) Applications of the Dynamic Programming Method on Problems of Maintenance and Distribution. Doctoral Dissertation for the PhD in Operations Research, Department of Economic and Business Administration Engineering, University of the Aegean, Greece (In Greek). Member of the Evaluation Committee.
- 5. Freedman, G.G. (2012) Strategic Behavior in a Queue and a Model of Network Evolution. Doctoral Dissertation for the PhD degree in Mathematical Sciences, School of Mathematical Sciences, Tel-Aviv University, Israel (In English). External Examiner.
- 6. Seenivasan, M. (2012) Contribution to the Study of some Retrial Queueing Models. Doctoral Dissertation for the PhD degree in Mathematics, Department of Mathematics, Annamalai University, India (In English). External Examiner.
- 7. Lopez-Garcia, M. (2013) Stochastic Models for Two Interacting Populations: Competition and Host-Parasite Interactions. Doctoral Dissertation for the PhD in Mathematical Sciences, Department of Statistics and OR, Faculty of Mathematics, University Complutense of Madrid, Spain (In English). Member of the Evaluation Committee.
- 8. Palpandi, B. (2014) System Performance Measures for Fuzzy Queuing Models. Doctoral Dissertation for the PhD, Faculty of Science and

- Humanities, Anna University, Chennai, India (In English). External Examiner.
- 9. Roet-Green, R. (2014) *Information in Queueing Systems with Strategic Customers*. Doctoral Dissertation for the PhD in Mathematical Sciences, School of Mathematical Sciences, Tel-Aviv University, Israel (In English). External Examiner.
- 10. Perel, E. (2014) *Queues with Customers Acting as Servers and Polling Systems with a Threshold-Based Switching Policy*. Doctoral Dissertation for the PhD in Mathematical Sciences, School of Mathematical Sciences, Tel-Aviv University, Israel (In English). External Examiner.
- 11. Kanavetas, O. (2014) *Optimization of Stochastic Systems and Applications*. Doctoral Dissertation for the PhD degree in Mathematics, Department of Mathematics, National & Kapodistrian University of Athens, Greece (In Greek). Member of the Evaluation Committee.
- 12. Oz, B. (2016) *Strategic Behavior in Queues*. Doctoral Dissertation for the PhD degree, the Hebrew University, Israel (In English). External Examiner.
- 13. Panda, G. (2016) Equilibrium Analysis of Markovian/Renewal Input Queues with or without Impatient Customers. Doctoral Dissertation for the PhD degree, Indian Institute of Technology, Bhubaneswar, India (In English). External Examiner.
- 14. Sherzer, E. (2016) *Customer's Abandonments Strategy in Queueing Systems*. Doctoral Dissertation for the PhD degree, Ben-Gurion University of the Negev, Beer-Sheva, Israel (In English). External Examiner.
- 15. Srinivasan, A. (2016) A Study of Perfectly Normal Interval Type-2 Fuzzy Linear Programming Models. Doctoral Dissertation for the PhD degree, Faculty of Science and Humanities, Anna University, Chennai, India (In English). External Examiner.
- 16. Arun Kumar, S. (2016) A New Prospectus on Fuzzy Credibility Measurement. Doctoral Dissertation for the PhD degree, Faculty of Science and Humanities, Anna University, Chennai, India (In English). External Examiner.
- 17. Ramadevi, P. (2017) *Encryption Algorithms in Wireless Network*. Doctoral Dissertation for the PhD degree, Faculty of Information and Communication Engineering, Anna University, Chennai, India (In English). External Examiner.
- 18. Malligadevi, V. (2017) *Studies on Some Fixed Point Results Related to Various Fuzzy Metric Spaces*. Doctoral Dissertation for the PhD degree, Faculty of Information and Communication Engineering, Anna University, Chennai, India (In English). External Examiner.
- 19. Shahanaz Begum, I. (2017) Detection and Prevention of SQL Injection, XSS and DDoS Attacks in Web Application and Mitigation of Web Service Attacks. Doctoral Dissertation for the PhD degree, Faculty of

- Information and Communication Engineering, Anna University, Chennai, India (In English). External Examiner.
- 20. Shen Yichi (2017) *Performance Evaluation for Production Systems through Queueing Models*. Doctoral Dissertation for the PhD degree, School of Mechanical and Aerospace Engineering, Nanyang Technological University, Singapore (In English). External Examiner.
- 21. Sivasankaran Janaki (2017) *Studies in Stochastic Models for Human Resource Management Problems*. Doctoral Dissertation for the PhD degree, Chennai, India (In English). External Examiner.
- 22. Rakesh Kumar T (2018) *Some characterization of L-fuzzy l-HX group*. Doctoral Dissertation for the PhD degree, Bharathidasn University, Tiruchirappalli, India (In English). External Examiner.
- 23. Shenbagavalli R (2018) Soft fuzzy sets and neutrosophic fuzzy sets for MAGDM problems with variety of weight deterministic methods. Periyar University, Krishnagiri, Tamilnadu, India (In English). External Examiner.
- 24. Sevinantham E (2018) Based neighbor recovering technique for wireless networks using directional antennas. Doctoral Dissertation for the PhD degree, Faculty of Information and Communication Engineering, Anna University, Chennai, India (In English). External Examiner.
- 25. Yuvaraj N (2018) A study and development of approaches for handling asymmetry links in heterogeneous wireless mesh networks to improve QoS. Doctoral Dissertation for the PhD degree, Faculty of Information and Communication Engineering, Anna University, Chennai, India (In English). External Examiner.
- 26. Ezhilarasi S (2019) Optimization of wavelengths and wavelength converters in all optical WDM networks using integer linear programming formulation. Doctoral Dissertation for the PhD degree, Anna University, Chennai, India (In English). External Examiner.
- 27. Raajananthini K (2019) Studies on robust stabilization and disturbance rejection for dynamical control systems. Doctoral Dissertation for the PhD degree, Anna University, Chennai, India (In English). External Examiner.
- 28. Snitkovsky Ran (2020) *Notes on rational queueing*. Doctoral Dissertation for the PhD degree, Raymond & Beverly Faculty of Exact Sciences, Department of Statistics and Operations Research, Tel-Aviv University, Israel (In English). External Examiner.
- 29. Yeger Yaron (2022) General Asymmetric Simple Inclusion Process (ASIP) with Non-Markovian Gate-Opening Times and Feedback to the First Node. Doctoral Dissertation for the PhD degree, Raymond & Beverly Faculty of Exact Sciences, Department of Statistics and Operations Research, Tel-Aviv University, Israel (In English). External Examiner.

- 30. Poovaragavan D. (2022) *Investigations on Fixed Point Theorems in Fuzzy Metric Spaces*. Doctoral Dissertation for the PhD degree, PG and Research Department of Mathematics, Alagappa University, India (In English). External Examiner.
- 31. Gamboa-Perez M. (2022) Studying the effect of vaccination in epidemic models with stochastic transmission. Doctoral Dissertation for the PhD in Statistics, Faculty of Statistics, University Complutense of Madrid, Spain (In English). External Examiner and Member of the Evaluation Committee.
- 32. Rajasudha, R. (2022) Analysis of discrete-time retrial queues with variant arrivals, unreliable server and different vacations policies.. Doctoral Dissertation for the PhD degree, Anna University, Chennai, India (In English). External Examiner.

Member of the Evaluation Committee/ External Examiner-Evaluator for the Habilitations:

1. Joao Morais, M. (2023) On the pivotal role of ARL-unbiased charts in SPC/Curricular Unit: Introduction to Stochastic Processes. Habilitation in Mathematics, Instituto Superior Tecnico, University of Lisbon, Portugal (In English). External Examiner and Member of the Evaluation Committee.

G. Scholarships and distinctions.

- 1. Awards in International and National Student Competitions in Mathematics:
 - Honorable mention in the 29th International Mathematical Olympiad (Canberra, Australia 1988).
 - Bronze medal in the 6th Balkan Mathematical Olympiad (Split, Yugoslavia 1989).
 - Honorable mention in the 30th International Mathematical Olympiad (Braunschweig, Germany 1989).
 - Honorable mention in the 3rd Greek Mathematical Olympiad (Athens, Greece 1986).
 - Bronze medal in the 4th Greek Mathematical Olympiad (Athens, Greece 1987).
 - Silver medal in the 5th Greek Mathematical Olympiad (Athens, Greece 1988).
- 2. 2nd among the students in the Department of Mathematics, University of Athens in the Greek national examinations for entering in the Higher Education Institutions.
- 3. Scholarship from the National Scholarship Foundation of Greece (IKY) for my undergraduate studies during 1989-1993.

- 4. Research assistantship from the Department of Mathematics, University of California, Los Angeles during 1993-1994.
- 5. Scholarship from the National Scholarship Foundation of Greece (IKY) for my PhD studies during 1995-1998.
- 6. Scholarship from the National Scholarship Foundation of Greece (IKY) for my postdoctoral research in "Stochastic Models in Operations Research with focus in Queueing Network Theory" during 1999-2000.
- 7. Leader of the Greek Student Team of the 2nd Junior Balkan Mathematical Olympiad (Athens, Greece 1998).

H. Talks and participations in conferences.

- 1. **10**th **Pan-Hellenic (ESI) Statistics Conference,** Piraeus 28-31/5/1997. Economou, A. and Fakinos, D. (1997) Product-form stationary distributions for queueing networks with blocking and rerouting.
- 2. 11th Pan-Hellenic (ESI) Statistics Conference, Chania 5-8/6/1998. Economou, A. and Fakinos, D. (1998) Product-form stationary distributions for single-server queueing networks and multilevel signals.
- 3. **10th INFORMS Applied Probability Conference**, Ulm, Germany 26-28/7/1999. Economou A. (1999) Product-form networks with multilevel signals.
- 4. **1**st Conference in Actuarial Science and Finance at Samos, Samos 26-27/5/2000.
- 5. Conference and Workshop on Stochastic Networks, University of Wisconsin Madison, 19-30/6/2000. Economou A. (2000) An alternative model for queueing systems with single arrivals, batch services and customer coalescence.
- 6. Numerical Modeling in Finance, University Paris-Dauphine, 4-5/12/2000.
- 7. **14**th **Pan-Hellenic** (**ESI**) **Statistics Conference**, Skiathos 19-22/4/2001. Economou, A. and Fakinos, D. (2001) Bounds and asymptotics for the stationary distributions of the $GI^X/M/1$ and $GI^X/M^Y/1$ queues.
- 8. **11**th **INFORMS Applied Probability Conference**, New York, USA 25-27/7/2001. Economou A. (1999) Product-form bounds and approximations for the stationary distribution of a queueing network with batch services and customer coalescence.
- 9. **15**th **Pan-Hellenic (ESI) Statistics Conference**, Ioannina 8-11/5/2002. Economou, A. and Fakinos, D. (2002) A stochastic model for the influence of a point process on a continuous time Markov chain and applications.

- 10. **5**th Lattice Path Combinatorics and Discrete Distributions Conference, Athens, Greece 5-7/6/2002. Economou A. (2002) On the transient and equilibrium distributions of queueing and population growth models with catastrophes.
- 11. **1**st **Madrid Conference on Queueing Theory**, Madrid, Spain 2-5/7/2002. Economou A. and Fakinos D. (2002) Algorithmic computations for the transient and the stationary distributions of queueing systems with catastrophes.
- 12. 17th European Simulation Multiconference SCS Europe BVBA (10th International Conference on Analytical and Stochastic Modelling Techniques and Applications (ASMTA 2003)), Nottingham, United Kingdom 9-11/6/2003. Economou, A.(2003) A characterization of product-form stationary distributions for queueing systems in random environment.
- 13. **2**nd **International Workshop in Applied Probability,** Athens, Greece 22-25/5/2004. Economou, A. (2004) On the stationary distributions of continuous-time Markov chains in random environment: Product-from approximations and stochastic comparisons.
- 14. 5th International Conference in Matrix Analytic Methods in Stochastic Models, Pisa, Italy 21-24/6/2005.
- 15. 13th Annual Congress of the Sociedade Portuguesa de Estatística (SPE), Ericeira, Portugal 28-1/10/2005. Economou, A. (2005) Applications of stochastic orders in queueing theory: Comparisons and approximations of queueing networks.
- 16. **2nd Madrid Conference on Queueing Theory (MCQT),** Madrid, Spain 3-7/7/2006. Burnetas, A. and Economou, A. (2006) Pricing and equilibrium behavior for a Markovian queue with setup times.
- 17. **6th International Workshop on Retrial Queues (WRQ),** Miraflores de la Sierra, Spain 8-10/7/2006. Economou, A. (2006) Algorithmic analysis for the busy period of the *M/M/c* queue.
- 18. **12th International Conference on Applied Stochastic Models and Data Analysis (ASMDA)**, Chania, Greece 29/5-1/6/2007. Economou (2007) Pricing and equilibrium behavior for a Markovian queue with server vacations.
- 19. **14**th **INFORMS Applied Probability Conference**, Eindhoven, Holland 9-11/7/2007. Economou, A. (2007) Equilibrium customer strategies under various levels of information for the single server queue with unreliable server.
- 20. **2**nd **Meeting of the EURO Stochastic Working Group on Stochastic Modeling**, Istanbul, Turkey 23-25/6/2008. Economou, A. (2008) Queueing systems with binomial transitions: Modeling and analysis of synchronized events.
- 21. **7**th **International Workshop on Retrial Queues (WRQ),** Athens, Greece 17-19/7/2008.

- 22. 3rd International Workshop on Tools for Solving Structured Markov Chains (SMCTools), Athens, Greece 20/10/2008. Economou, A. (2008) Continuous-time Markov chains with binomial transitions: Modeling, analysis and applications to queueing systems with synchronized events.
- 23. 3rd Meeting of the EURO Working Group on Stochastic Modelling (StochMod10), Nafplion, Greece 7-9/6/2010.
- 24. **3rd Madrid Conference on Queueing Theory (MCQT'10),** Toledo, Spain 28/6-1/7/2010. Economou, A. (2010) The single server queue with synchronized repeated services.
- 25. **16th INFORMS Applied Probability Conference**, Stockholm, Sweden 6-8/7/2011. Economou, A. (2011) Stochastic epidemic models revisited: Computation of main epidemic descriptors by associated Markov chains.
- 26. Markov and Semi-Markov Processes and Related Fields 2011, Porto Carras, Sithonia-Chalkidiki, Greece 20-23/9/2011. Economou, A. (2011) Stochastic epidemic models revisited: Computation of main epidemic descriptors by associated Markov chains.
- 27. 4th Meeting of the EURO Working Group on Stochastic Modelling (StochMod12), Paris, France 30/5-1/6/2012. Economou, A. (2012) Strategic customers in a transportation station: When is it optimal to wait?
- 28. Mathematical Modeling and Computational Topics in Biosciences BIOCOMP 2012, Vietri sul Mare, Italy 4-8/6/2012. Economou, A. (2012) Stochastic epidemic models in random environment: Computation of the main epidemic descriptors.
- 29. **26**th European Conference on Operational Research XXVI EURO-INFORMS, Rome, Italy 1-4/7/2013. Economou, A. (2013) Equilibrium customer behavior in a queueing system with batch services.
- 30. **Epidemics on Networks Advanced School (EpiNet)**, Girona, Spain 30/9-3/10/2013. Economou, A. (2013) A stochastic SIS epidemic model for small networks with heterogeneous contacts.
- 31. **7**th **International Workshop in Applied Probability (IWAP2014),** Antalya, Turkey 16-19/6/2014. Economou, A. (2014) Game Theory meets Queueing: Strategic behavior in service systems. Plenary talk.
- 32. 1st European Conference in Queueing Theory (ECQT 2014), Ghent, Belgium, 20-22/8/2014. Economou, A. (2014) Strategic passengers in an observable transportation station: When is it optimal to join?
- 33. Models in Polulation Dynamics and Ecology 2014 (MPDE 2014), Torino, Italy, 25-29/8/2014. Economou, A. (2014) A stochastic SIS epidemic model for small populations with heterogeneous contacts.
- 34. 10th Conference on Stochastic Models of Manufacturing and Service Operations (SMMSO 2015), Volos, Greece, 1-6/6/2015.

- Economou, A. and Grigoriou, M. (2015) Strategic behavior in a queueing system with a mixed observation structure.
- 35. **2nd European Conference on Queueing Theory (ECQT 2016)**, Toulouse, France, 18-20/7/2016. Economou, A. (2016) The use of appropriate information structures for the control of queues with strategic customers.
- 36. **11**th **Workshop on Retrial Queues (WRQ11),** Amsterdam, The Netherlands, 31/8-2/9/2016. Economou, A. .(2016) The M/G/1 constant retrial queue with state-dependent arrivals and services.
- 37. **3rd European Conference on Queueing Theory (ECQT 2018),** Jerusalem, Israel, 1-4/7/2018. Economou, A. (2018) Strategic customers in queueing systems with batch services.
- 38. Online Workshop organized by Koc University "Recent Work on Stochastic Service Systems with Strategic Customers", 7/6/2021. Economou, A. (2021) What level of information should be provided to strategic customers in a transportation station? A review and new results.
- 39. **31**st European Conference on Operational Research (EURO 2021), Athens, Greece, 11-14/7/2021. Economou, A. (2021) The impact of information on a transportation station with strategic customers.
- 40. **INFORMS Annual Meeting 2021,** Anaheim, California, USA, 24-27/10/2021. Economou, A. (2021) The impact of information on strategic customer behavior in a transportation station.
- 41. **13**th International Workshop on Retrial Queues and Related Topics (WRQ2021), CMS College Kottayam, Kerala, India, 6-8/12/2021. Economou, A. (2021) Strategic customer behavior in retrial queues. Plenary talk.
- 42. **26**th International Conference on Analytical and Stochastic Modelling Techniques and Applications (ASMTA2021), Online, Japan, 13-14/12/2021. Economou, A. (2021) The impact of information on strategic customer behavior in queueing systems. Plenary talk.
- 43. Operations Research Society of Israel Annual Meeting 2022 (ORSIS 2022), Jerusalem, Israel, 30-31/5/2022. Economou, A. (2022) Strategic customer behavior in queues with batch services. Plenary talk.
- 44. Special Edition of the Queueing Colloquium, EURANDOM, on the occasion of the 60th birthday of Ivo Adan and Jacques Resing, Eindhoven, The Netherlands, 8/6/2022. Economou, A. (2022) The impact of information on strategic customers behavior in queueing systems. Invited talk.

I. Participation in funded research projects.

1. Research program "Kapodistrias", ELKE University of Athens, 2002-2003.

Research proposal: Computation of performance measures and stochastic comparison of queueing systems and networks.

Role: Scientific coordinator (PI).

Scientific coordinator (PI): Antonis Economou.

Reference number: Grant 70/4/6415, University of Athens.

Financing: €1700.

2. Research program "Pythagoras", EPEAEK II European social fund and Greek national resources, 2004-2006.

Research proposal: Performance evaluation and control of certain queueing systems.

Role: Researcher.

Scientific coordinator (PI): Apostolos Burnetas.

Reference number: Grant 70/3/7388, University of Athens, European Social Fund and National Resources.

Financing: €50000.

3. Research program "Kapodistrias", ELKE University of Athens, 2004-2005.

Research proposal: Busy period distributions in queueing systems.

Role: Scientific coordinator.

Scientific coordinator (PI): Antonis Economou.

Reference number: Grant 70/4/6415, University of Athens.

Financing: €1500.

4. Research program "MEC" Spanish National Board Program, 2005-2008. Research Proposal: Retrial systems with blocking: Computational techniques with applications in engineering.

Role: Researcher

Scientific coordinator (PI): Jesus R.Artalejo.

Reference number: Grant MTM2005-01248, Ministerio de Ciencia e Innovación de España.

5. Research program "Kapodistrias", ELKE University of Athens 2006-2007.

Research Proposal: Study of queueing systems with retrials.

Role: Scientific coordinator.

Scientific coordinator (PI): Antonis Economou.

Reference number: Grant 70/4/6415, University of Athens.

Financing: €1200

6. Research program Spanish National Board Program, 2009-2011.

Research Proposal: Stochastic Models in Biology and Queueing Theory.

Role: Researcher

Scientific coordinator (PI): Jesus R. Artalejo.

Reference number: Grant MTM2008-01121, Ministerio de Ciencia e Innovacion de España.

7. Research program "Kapodistrias", ELKE University of Athens 2009-2010.

Research Proposal: Performance evaluation and customer equilibrium strategies in queueing systems.

Role: Scientific coordinator.

Scientific coordinator (PI): Antonis Economou.

Reference number: Grant 70/4/6415, University of Athens.

Financing: €2100.

8. Research program "Joint Research and Technology Programs Greece-Turkey", Ministry for Development, Greece 2010-2012.

Research Proposal: Service systems with strategic customers: Equilibrium analysis and the value of information.

Role: Researcher

Scientific coordinators (PI): Apostolos Burnetas – Zeynep Aksin.

Reference number:

Financing: €15000.

9. Research program Spanish National Board Program, 2012-2014.

Research Proposal: Stochastic Epidemic and Population Modelling.

Role: Researcher.

Scientific coordinator (PI): Jesus R. Artalejo.

Reference number: Grant MTM2011-23864 Ministerio de Ciencia e Innovacion de España.

10. Research program "Education and Lifelong Learning" of the National Strategic Reference Framework (NSRF) – Research Funding Program: Thalis – Athens University of Economics and Business.

Research Proposal: New Methods in the Analysis of Market Competition: Oligopoly, Networks and Regulation.

Role: Researcher

Scientific coordinator (PI): Nickolaos Vettas.

Reference number: 830103/75-12.

Financing: €549900.

11. Research program "Education and Lifelong Learning" of the National Strategic Reference Framework (NSRF) – Research Funding Program: Aristia II – University of Athens.

Research Proposal: Optimization of stochastic systems under partial information and applications.

Role: Researcher.

Scientific coordinator (PI): Apostolos Burnetas.

Reference number: Grant 4357.

Financing: €50000

12. Research program "Second Scholarship program for PhD candidates" ELIDEK Foundation, Greece. 2019-2021.

Research proposal: Strategic customer behavior in queueing systems.

Role: Scientific coordinator (PI).

Reference number: 16184 (ELKE-EKPA)

Financing: €18000

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J. Refereeing, editorial, conference organization assignments.

1. Referee for the journals:

4OR

Advances in Applied Probability

Advances in Operations Research

Annals of Operations Research

Applied Mathematical Modelling

Applied Mathematics and Computation

Communications in Statistics – Theory and Methods

Computers and Industrial Engineering

Computers and Operations Research

Discrete Event Dynamic Systems

Dynamic Games and Applications

European Journal of Operational Research

Flexible Services and Manufacturing

IEEE Communication Letters

IIE Transactions

IISE Transactions

IMA Journal of Management Mathematics

International Journal of Engineering

Journal of Advanced Research in Applied Mathematics

Journal of Applied Mathematics

Journal of Applied Probability

Journal of Biological Dynamics

Journal of Computational and Applied Mathematics

Journal of Optimization Theory and Applications

Journal of Statistical Planning and Inference

Management Science

Manufacturing & Service Operations Management

Mathematical Biosciences

Mathematical and Computer Modelling

Mathematical Methods in the Applied Sciences

Mathematical Problems in Engineering

Methodology and Computing in Applied Probability

Naval Research Logistics

Nonlinear Analysis

Operational Research, An International Journal

Operations Research

Operations Research Letters

Operations Research Perspectives

OPSEARCH

OR Spectrum

Performance Evaluation

Probability in the Engineering and Informational Sciences

Production and Operations Management

Quality Technology and Quantitative Management

Queueing Systems

RAIRO – Operations Research

Simulation Modelling Practice and Theory

Surveys in Operations Research and Management TOP

Transportation Science REVSTAT

2. Associate editor for the journal:

- Asian-Pacific Journal of Operational Research (2004-today)
- Methodology and Computing in Applied Probability (2022-today)
- RAIRO-OR (2014-2017)
- Queueing Models and Service Management (2018-today)
- Queueing Systems QUES (2019-today)

3. Guest editor for the journal:

- Quality Technology and Quantitative Management Special issue on Queueing Systems with Vacations (with J.R. Artalejo)
- Computers and Operations Research (2010)
 Special issue on Algorithmic and Computational Methods in Retrial Queues. See

Economou, A. (2010) Editorial: Algorithmic and computational methods in retrial queues. *Computers and Operations Research* **37**, 1157.

• Queueing Systems (2020)
Special issue on Strategic Queueing (with V. Kulkarni). See
Economou, A. and Kulkarni, V. (2020) Editorial introduction to the
special issue on 'Strategic Queueing: Game-theoretic Models in
Queueing Theory' – Part 1. Queueing Systems 96, 201-203.
Economou, A. and Kulkarni, V. (2021) Editorial introduction to the
special issue on 'Strategic Queueing: Game-theoretic Models in
Queueing Theory' – Part 2. Queueing Systems 97, 221-222.

4. Organization of international conferences:

- 7th International Workshop on Retrial Queues (7th WRQ), Athens 17-19/7/2008 (Chairman of the Scientific and Organizing Committee).
- 3rd Meeting of the EURO Working Group on Stochastic Modeling (StochMod10), Nafplio 7-9/6/2010 (Vice-Chairman of the Organizing Committee).
- Series of Workshops on Retrial Queues (Member of the Steering Committee).
- Series of European Conferences on Queueing Theory (Member of the Steering Committee).

5. Member of the Scientific Committee of the conferences:

- 12th International Conference on Analytical and Stochastic Modelling Techniques and Applications (ASMTA 2005), Riga, Latvia, 1-4/6/2005.
- 6th International Workshop on Retrial Queues (6th WRQ), Miraflores de la Sierra, Spain 8-10/7/2006.
- 13th International Conference on Analytical and Stochastic Modelling Techniques and Applications (ASMTA 2006), Bonn, Germany, 28-31/5/2006.

- 14th International Conference on Analytical and Stochastic Modelling Techniques and Applications (ASMTA 2007), Prague, Czech Republic, 4-6/6/2007.
- 15th International Conference on Analytical and Stochastic Modelling Techniques and Applications (ASMTA 2008), Nicosia, Cyprus, 3-6/6/2008.
- 16th International Conference on Analytical and Stochastic Modelling Techniques and Applications (ASMTA 2009), Madrid, Spain, 9-12/6/2009.
- 3rd Madrid Conference on Queueing Theory (3rd MCQT), Toledo, Spain, 28/6-1/7/2010.
- 8th International Workshop on Retrial Queues (8th WRQ), Beijing, China, 27-29/7/2010.
- 17th International Conference on Analytical and Stochastic Modelling Techniques and Applications (ASMTA 2010), Cardiff, United Kingdom, 14-16/6/2010.
- 3rd Meeting of the EURO Group on Stochastic Modelling (StochMod10), Nafplion, Greece, 7-9/6/2010.
- 18th International Conference on Analytical and Stochastic Modelling Techniques and Applications (ASMTA 2011), Venice, Italy, 20-22/6/2011.
- 19th International Conference on Analytical and Stochastic Modelling Techniques and Applications (ASMTA 2012), Grenoble, France, 4-6/6/2012.
- Mathematical Modeling and Applied Soft Computing, Coimbature, India 11-13/7/2012.
- 20th International Conference on Analytical and Stochastic Modelling Techniques and Applications (ASMTA 2013), Ghent, Belgium, 8-10/7/2013.
- 21st International Conference on Analytical and Stochastic Modelling Techniques and Applications (ASMTA 2014), Budapest, Hungary, 30/6-2/7/2014.
- 10th International Workshop on Retrial Queues (10th WRQ), Tokyo, Japan, 24-26/7/2014.
- 1st European Conference in Queueing Theory (1st ECQT), Ghent, Belgium, 20-22/8/2014.
- 18th INFORMS Applied Probability Society Conference, Istanbul, Turkey, 5-8/7/2015.
- 3rd International Conference on Computing Sciences, Punjab, India, 8-9/4/2016.
- 23rd International Conference on Analytical and Stochastic Modelling Techniques and Applications (ASMTA 2016), Cardiff, Wales, UK, 24-26/8/2016.
- 2nd European Conference on Queueing Theory (ECQT 2016), Toulouse, France, 18-20/7/2016 (member of the steering committee).
- 11th Workshop on Retrial Queues (WRQ11), Amsterdam, The Netherlands, 31/8-2/9/2016.

- 24th International Conference on Analytical and Stochastic Modelling Techniques and Applications (ASMTA 2017), Newcastle-upon-Tyne, UK, 10-12/7/2017
- 12th International Conference on Queueing Theory and Network Applications (QTNA 2017), Yanshan University, Qinhuangdao, China, 21-23/8/2017
- 13th International Conference on Queueing Theory and Network Applications (QTNA2018), Tsukuba, Japan, 25-27/6/2018
- 3rd European Conference on Queueing Theory (ECQT 2018), Jerusalem, Israel, 2-4/7/2018
- 12th International Workshop on Retrial Queues (WRQ 2018), Tomsk, Russia, 10-15/9/2018.
- 25th International Conference on Analytical and Stochastic Modelling Techniques and Applications (ASMTA 2019), People's Friendship University of Russia (RUDN), Russia, 23-25/10/2019.
- 14th International Symposium on Operations Research and its Applications and the 15th International Conference on Queueing Theory and Network Applications (ISORA-QTNA2020), Xian, China, 19-23/8/2020.
- 26th International Conference on Analytical and Stochastic Modelling Techniques and Applications (ASMTA 2021), Tsukuba, Japan, 9-14/12/2021.
- 13th International Workshop on Retrial Queues and Related Topics (WRQ 2021), CMS College, Kottayam, India, 6-8/12/2021.

K. Citations.

According SCOPUS:

Total citations: 1462 (excluding self citations: 1297, excluding self citations of all authors: 1225).

h-index: 23 (excluding self citations: 22, excluding self citations of all authors: 21).

According Google Scholar:

Total citations: 2004 (from 2017-: 1061)

h-index: 28 (from 2017-: 19) i10-index: 46 (from 2017-: 33)

L. Invited Talks.

1. Invited talks in Departments

- 1. **University of Padova, Department of Mathematics** (March 2000) Economou (2000) On queueing systems with batch departures and customer coalescence: performance evaluation and control.
- 2. University of Rome I La Sapienza, Department of Mathematics (March 2000)
 - Economou (2000) On queueing systems with batch departures and customer coalescence: performance evaluation and control.
- 3. University of Aegean, Department of Mathematics (May 2000)

- Economou (2000) The property of quasi-reversibility in queueing systems: Basic concepts and recent results.
- 4. University Complutense Madrid, Faculty of Mathematics (April 2004)
 - Economou (2004) Product-form stationary distributions for continuous time Markov chains in random environment and queueing applications.
- 5. University Complutense Madrid, School of Statistics (April 2004) Economou (2004) Product-form stationary distributions for continuous time Markov chains in random environment and queueing applications.
- 6. Technical University of Lisbon, Instituto Superior Tecnico, Department of Mathematics (October 2005)

 France (2005) Product form stationary distributions for continuous
 - Economou (2005) Product-form stationary distributions for continuous time Markov chains in random environment and queueing applications
- 7. Technical University of Lisbon, Instituto Superior Tecnico, Department of Mathematics (June 2007)
 Economou (2007) Pricing and equilibrium behavior for a Markovian queue with setup times.
- 8. **Technical University of Eindhoven, EURANDOM** (March 2011) Economou (2011) The single server queue with synchronized repeated services: A semi-Markovian queue with binomial transitions.
- 9. University Carlos III of Madrid, Department of Statistics (April 2011)
 - Economou (2011) Equilibrium customer strategies and social-profit maximization in retrial queues.

2. Invited talks in Conferences and Workshops.

- 1. **1**st **Summer School in Financial and Actuarial Mathematics**, Samos. Economou (2003) An introduction to integer programming with economic and management science applications
- 2. 13th Annual Congress of the Sociedade Portuguesa de Estatística (SPE), Ericeira, Portugal 28-1/10/2005.
 - Economou, A. (2005) Applications of stochastic orders in queueing theory: Comparisons and approximations of queueing networks
- 3. 3rd International Workshop on Tools for Solving Structured Markov Chains (SMCTools 2008), Athens 20/10/2008.
 - Economou (2008) Continuous-time Markov chains with binomial transitions: Modeling, analysis and applications in queueing systems with synchronized events.
- 4. **3rd Madrid Conference on Queueing Theory (MCQT'10),** Toledo, Spain 28/6-1/7/2010.
 - Economou, A. (2010) The single server queue with synchronized repeated services.
- 5. **7**th International Workshop in Applied Probability (IWAP2014), Antalya, Turkey 16-19/6/2014.
 - Economou, A. (2014) Game Theory meets Queueing: Strategic behavior in service systems.
- 6. INFORMS Applied Probability Society Conference 2015 (INFORMSAPS2015), Istanbul 5-8/7/2015.

- Economou, A. (2015) Strategic customers in queueing systems: Bridging observable and unobservable models. Semi-plenary talk.
- 7. **INFORMS Annual Meeting 2021,** Anaheim, California, USA, 24-27/10/2021.
 - Economou, A. (2021) The impact of information on strategic customer behavior in a transportation station. Invited talk in a session.
- 8. **13th International Workshop on Retrial Queues and Related Topics** (**WRQ2021**), CMS College Kottayam, Kerala, India, 6-8/12/2021. Economou, A. (2021) Strategic customer behavior in retrial queues. Plenary talk.
- 9. **26**th International Conference on Analytical and Stochastic Modelling Techniques and Applications (ASMTA2021), Online, Japan, 13-14/12/2021.
 - Economou, A. (2021) The impact of information on strategic customer behavior in queueing systems. Plenary talk.
- 10. Operations Research Society of Israel Annual Meeting 2022 (ORSIS 2022), Jerusalem, Israel, 30-31/5/2022.
 - Economou, A. (2022) Strategic customer behavior in queues with batch services. Plenary talk.
- 11. Special Edition of the Queueing Colloquium, EURANDOM, on the occasion of the 60th birthday of Ivo Adan and Jacques Resing, Eindhoven, The Netherlands, 8/6/2022.
 - Economou, A. (2022) The impact of information on strategic customers behavior in queueing systems. Invited talk.

3. Short-term visits for research collaborations.

- 1. North Carolina State University, July 2001 (10 days). Research Collaboration with Professor Xiuli Chao.
- 2. University Complutense of Madrid, February 2004 (7 days). Research Collaboration with Professor Jesus Artalejo.
- 3. Technical University of Lisbon Instituto Superior Tecnico, October 2005 (5 days). Research Collaboration with Professor Antonio Pacheco.
- 4. Technical University of Eindhoven and EURANDOM, March 2011 (7 days). Research Collaboration with Professors Ivo Adan and Jacques Resing.
- 5. University Carlos III of Madrid, April 2011 (5 days). Research Collaboration with Dr. Spyridoula Kanta.
- 6. University Complutense of Madrid, November 2011 (6 days). Research Collaboration with Professors Antonio Gomez-Corral, Jesus Artalejo and Maria Jesus Lopez-Herrero.
- 7. Tel-Aviv University, May and June 2022 (4 days) Research Collaboration with Professor Refael Hassin.

M. Administrative tasks

- 1. Member of several Departmental committees in the Department of Mathematics, University of Athens:
 - Program of undergraduate studies
 - Coordination of graduate studies
 - ERASMUS
 - Invigilations program
 - Evaluation/selection of graduate students for the MSc program in Statistics and OR
- 2. Member of several inter-Departmental committees:
 - Coordination of graduate studies in the Mathematics of Market and Production (joint MSc program with the Department of Economics, National & Kapodistrian University of Athens and the Department of Informatics, Athens University of Economics and Business).
- 3. Member of the senate of the University of Athens (2009)
- 4. Director of the Section of Statistics and Operations Research, Department of Mathematics, National & Kapodistrian University of Athens (2016-2019).
- 5. Director of the MSc and Phd programs in Mathematics, Department of Mathematics, National & Kapodistrian University of Athens (2017-2019).
- 6. Associate Director of the MSc and Phd programs in Mathematics, Department of Mathematics, National & Kapodistrian University of Athens (2019-2021).
- 7. Vice Chairman, Department of Mathematics, National & Kapodistrian University of Athens (2022-2024).

N. Miscellaneous

- 1. Member of the Scientific societies:
 - Hellenic Statistical Institute (ESI) (1997)
 - Hellenic Society of Operational Research (EEEE) (1997 -2000)
 - American Mathematical Society (AMS) (1993 2000)
 - Institute for Operations Research/Management Science (INFORMS) (2001-2003, 2015-2017, 2021-)
- 2. I completed my military service in the Greek Army during 1998-1999.
- 3. Languages: Greek (Native)

English (Proficiency in English, University of Michigan)
Spanish (Diploma Superior Espanol como Lengua Extranjera,
Instituto Cervantes)