

## Antonis Economou – Curriculum Vitae

### A. General Information.

Name : Antonis Economou  
Address 1 (office) : University of Athens  
Department of Mathematics  
Section of Statistics and OR  
Panepistemiopolis  
Athens 15784  
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Address 2 (home) : 6 Rodon st.  
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Athens 15772  
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### B. Studies.

- **B.Sc. in Mathematics (1989-1993).**  
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.

Stochastic Models in Operations Research (OR) – Stochastic Models in Mathematical Biology – Applied Probability

- Markov Chains, Renewal Processes, Semi-Markov Processes and Markov renewal processes with applications to OR and Mathematical Biology
- Generating Function Methods in Stochastic Models
- Matrix-Analytic Methods in Stochastic Models
- Stochastic Orders
- Markov Decision Processes
- Equilibrium Theory and Pricing Problems in Stochastic Models
- Queueing Theory
- Stochastic Networks
- Stochastic Population Models
- Stochastic Epidemiology

### 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, University of Athens.
- 2005 - 2009 : Assistant Professor (without tenure) at the Department of Mathematics, University of Athens.
- 2009 - 2011 : Assistant Professor (with tenure) at the Department of Mathematics, University of Athens.
- 2011 - : Associate Professor (with tenure) at the Department of Mathematics, University of Athens.

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

#### 1. Papers published in journals.

*Distribution of the papers in scientific journals:*

<i>European Journal of Operational Research</i>	6
<i>Queueing Systems</i>	6
<i>Stochastic Models</i>	4
<i>Journal of Applied Probability</i>	3
<i>Probability in Eng. and Inform. Sciences</i>	3
<i>Advances in Applied Probability:</i>	2
<i>Stochastic Analysis and Applications:</i>	2

<i>Naval Research Logistics</i>	1
<i>Operations Research Letters</i>	1
<i>Computers and Operations Research</i>	1
<i>RAIRO – Operations Research:</i>	1
<i>INFORMS Journal of Computing</i>	1
<i>Performance Evaluation</i>	1
<i>Journal of Statistical Planning and Inference</i>	1
<i>Methodology Computing Applied Probabil.</i>	1
<i>International Journal of Simulation</i>	1
<i>Journal of Statistical Theory and Practice</i>	1
<i>European Transactions Telecommunications</i>	1
<i>Electronic Modelling</i>	1
<i>Journal of Computational and Applied Math</i>	1
<i>Mathematical Biosciences</i>	1
<i>Journal of Biological Dynamics</i>	1
<i>Mathematical Biosciences and Engineering</i>	1

1. 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. Economou, A. and Fakinos, D. (1998) Product form stationary distributions for queueing networks with blocking and rerouting.  
*Queueing Systems* **30**, 251-260.
3. 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**, 196-206.
4. 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.
5. Economou, A. (1999) Geometric-form bounds for the  $GI^X/M/1$  queueing system.  
*Probability in the Engineering and Informational Sciences* **13** (4), 509-520.

6. Economou, A. (2000) A stochastic lower bound for assemble-transfer batch service queueing networks.  
*Journal of Applied Probability* **37** (3), 881-889.
7. 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.
8. Economou, A. (2002) An alternative model for queueing systems with single arrivals, batch services and customer coalescence.  
*Queueing Systems* **40** (4), 407-432.
9. Economou, A. (2003) Necessary and sufficient conditions for the stochastic comparison of Jackson networks.  
*Probability in the Engineering and Informational Sciences* **17**, 143-151.
10. 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.
11. Economou, A. (2003) On the control of a compound immigration process through total catastrophes.  
*European Journal of Operational Research* **147**, 522-529.
12. 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**, 625-640.
13. 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.
14. 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.
15. Economou, A. (2004) Stationary distributions of discrete-time Markov chains in random environment: Exact computations and bounds.  
*Stochastic Models* **20** (1), 103-127.
16. 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.
17. Economou, A. (2004) The compound Poisson immigration process subject to binomial catastrophes.  
*Journal of Applied Probability* **41** (2), 508-523.

18. 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.
19. Economou, A. (2005) Generalized product-form stationary distributions for Markov chains in random environments with queueing applications.  
*Advances in Applied Probability* **37**, 185-211.
20. 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**, 353-378.
21. Artalejo, J. R., Economou, A. and Lopez-Herrero, M.J. (2005) Analysis of a multiserver queue with setup times.  
*Queueing Systems* **52**, 53-76.
22. Artalejo, J. R., Economou, A. and Gómez-Corral, A. (2007) Applications of maximum queue length to call center management.  
*Computers and Operations Research* **34**, 983-996.
23. 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**, 1687-1702.
24. 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**, 121-126.
25. Economou, A. and Gómez-Corral, A. (2007) The batch Markovian arrival process subject to renewal generated geometric catastrophes.  
*Stochastic Models* **23** (2), 211-233
26. 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
27. Burnetas, A. and Economou, A. (2007) Equilibrium customer strategies in a single server Markovian queue with setup times.  
*Queueing Systems* **56**, 213-228.
28. 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**, 1042-1056.

29. Economou, A. and Fakinos, D. (2008) Alternative approached for the transient analysis of Markov chains with catastrophes.  
*Journal of Statistical Theory and Practice* **2** (2), 183-197.
30. Economou, A. and Kanta, S. (2008) Optimal balking strategies and pricing for the single server Markovian queue with compartmented waiting space.  
*Queueing Systems* **59**, 237-269.  
DOI: 10.1007/s11134-008-9083-8
31. Economou, A. and Kanta, S. (2008) Equilibrium balking strategies in the observable single server queue with breakdowns and repairs.  
*Operations Research Letters* **36**, 696-699.  
DOI: 10.1016/j.orl.2008.06.006
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**, 75-99.  
DOI: 10.1017/S0269964809000084
33. 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**, 389-401.  
DOI: 10.1002/ett.1294
34. Adan, I., Economou, A. and Kapodistria, S. (2009) Synchronized reneing in queueing systems with vacations.  
*Queueing Systems* **62**, 1-33.  
DOI: 10.1007/s11134-009-9112-2
35. Economou, A. and Kapodistria, S. (2010) Synchronized abandonments in a single server unreliable queue.  
*European Journal of Operational Research* **203**, 143-155.  
DOI:10.1016/j.ejor.2009.07.014
36. 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**, 2563-2574.  
DOI: 10.1016/j.cam.2009.11.003
37. Economou, A., Kapodistria, S. and Resing, J. (2010) The single server queue with synchronized services.  
*Stochastic Models* **26**, 617-648.  
DOI: 10.1080/15326349.2010.519670

38. 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**, 45-55.  
DOI: 10.1016/j.mbs.2010.08.006
39. Economou, A. and Kanta, S. (2011) Equilibrium customer strategies and social-profit maximization in the single-server constant retrial queue.  
*Naval Research Logistics* **58**, 107-122.  
DOI: 10.1002/nav.20444
40. Artalejo, J.R., Economou, A. and Lopez-Herrero, M.J. (2011) Stochastic epidemic models revisited: Analysis of some continuous performance measures.  
*Journal of Biological Dynamics*.  
DOI: 10.1080/17513758.2011.552737
41. Dimou, S., Economou, A. and Fakinos, D. (2011) The single server vacation queueing model with geometric abandonments.  
*Journal of Statistical Planning and Inference* **141**, 2863-2877.  
DOI: 10.1016/j.jspi.2011.03.010

## **2. Papers accepted in journals.**

42. Economou, A., Gomez-Corral, A. and Kanta, S. (2011) Optimal balking strategies in single-server queues with general service and vacation times. *Performance Evaluation*. DOI: 10.1016/j.peva.2011.07.001

## **3. Papers submitted or under revision in journals.**

43. Dimou, S., Economou, A. and Fakinos, D. An M/G/. group-arrival loss system with retrials.  
Submitted.
44. Dimou, S. and Economou, A. The single server queue with catastrophes and geometric reneging.  
Under revision.
45. Boudali, O. and Economou, A. Equilibrium balking strategies in the single server Markovian queue with catastrophes.  
Under revision.
46. Economou, A. and Manou, A. Equilibrium balking strategies for a clearing queueing system in alternating environment.  
Under revision.

#### 4. Papers published in conference proceedings.

47. Economou, A. and Fakinos, D. (1997) Product form stationary distributions for queueing networks with blocking and rerouting.  
*Proceedings 10<sup>th</sup> Pan-Hellenic Statistics Conference (ESI 1997)*, Athens.
48. Economou, A. and Fakinos, D. (2002) A model for the influence of a point process on a continuous time Markov chain and applications.  
*Proceedings 10<sup>th</sup> Pan-Hellenic Statistics Conference (ESI 2002)*, Ioannina.
49. Economou, A. (2003) A characterization of product-form stationary distributions for queueing systems in random environment.  
*Proceedings 17<sup>th</sup> European Simulation Multiconference SCS Europe BVBA (10<sup>th</sup> International Conference on Analytical and Stochastic Modelling Techniques and Applications (ASMTA 2003))*, pp. 193-198. Nottingham, United Kingdom.
50. 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.
51. 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 3<sup>rd</sup> International Conference on Mathematical and Computational Models*, Arumuganathan R. and Nadarajan R. eds., Allied Publishers, pp 3-15.
52. Economou, A. (2009) The maximum number of infectives in SIS epidemic models: Computational techniques and quasi-stationary distributions.  
*Proceedings of the 6<sup>th</sup> 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.

#### 5. Research reports.

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



## 6. Theses and dissertations.

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

## F. Teaching

### 1. Courses

1. 1995 - 1997 : University of Athens, Department of Mathematics – Undergraduate courses –Teaching assistant
  - Introduction to Operations Research (2h/w–Winter 1995,1996,1997).
2. 1999 - 2001: University of Crete, Department of Applied Mathematics – Undergraduate courses
  - Linear Algebra I (6h/w–Winter 1999)
  - Linear and Non-Linear Programming (6h/w–Spring 2000)
  - Statistics I (6h/w–Winter 2000)
  - Stochastic Processes (6h/w–Spring 2001)
3. 2001 - : University of Athens, Department of Mathematics – Undergraduate courses
  - Introduction to Operations Research (4h/w–Winter 2001, 2002)
  - Combinatorics I (3h/w–Winters 2001, 2002, 4h/w–Winter 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011)
  - Stochastic Methods in Operations Research (4h/w-Spring 2012)
  - Theory of Probability I (5h/w-Spring 2010)
  - Theory of Probability II (4h/w–Spring 2002, 2003, 2004)
  - Queueing Theory (3h/w–Spring 2003, 2004 Winter 2004, 2005, 2006 Spring 2008 Winter 2008, 2009)
4. 2001- : University of Athens, Department of Mathematics, Program in Statistics and Operations Research – Graduate courses
  - Theory of Reliability (4h/w–Spring 2002 in cooperation with Prof. Chryssafinou)
  - Stochastic Models in Operations Research (4h/w–Winter 2003, 2004, 2005, 2007, 2008, 2010 in cooperation with Assoc. Prof. Melolidakis)
  - Algorithmic and Computational Techniques in Stochastic Models (4h/ w–Spring 2005, 2007)

- Stochastic Dynamic Programming (4h/ w–Spring 2006)
  - Stochastic Processes (4h/w Winter 2006, Spring 2009, Spring 2012)
5. 2003- : 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)
  - Risk Theory – Actuarial Mathematics (3h/w 2009)
  - Mathematical Models in Marketing (3h/w 2009, 2010, 2011 in cooperation with Prof. Mageirou and Assoc. Prof. Burnetas)
6. 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, 350p.).

## 3. Theses supervision

### Advisor for the 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, 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, 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, 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, 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, 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, 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, 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, University of Athens (In Greek).
9. Kapodistria, S. (2006) *Algorithmic Techniques in Markov Chains: Matrix-Analytic Methods and Applications*. Master Thesis for the MSc in Statistics and OR, Department of Mathematics, 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, 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, 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, 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, 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, University of Athens.
3. Boudali, O. Under preparation.
4. Manou, A. Under preparation.

### **Member of the evaluating committee 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.
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).
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).
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).

### **G. Scholarships and distinctions.**

1. Awards in International and National Student Competitions in Mathematics:
  - Honorable mention in the 29<sup>th</sup> International Mathematical Olympiad (Canberra, Australia 1988).
  - Bronze medal in the 6<sup>th</sup> Balkan Mathematical Olympiad (Split, Yugoslavia 1989).
  - Honorable mention in the 30<sup>th</sup> International Mathematical Olympiad (Braunschweig, Germany 1989).
  - Honorable mention in the 3<sup>rd</sup> Greek Mathematical Olympiad (Athens, Greece 1986).
  - Bronze medal in the 4<sup>th</sup> Greek Mathematical Olympiad (Athens, Greece 1987).
  - Silver medal in the 5<sup>th</sup> Greek Mathematical Olympiad (Athens, Greece 1988).
2. 2<sup>nd</sup> 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 2<sup>nd</sup> Junior Balkan Mathematical Olympiad (Athens, Greece 1998).

#### **H. Participation in conferences.**

1. **10<sup>th</sup> 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. **11<sup>th</sup> 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. **10<sup>th</sup> INFORMS Applied Probability Conference**, Ulm, Germany 26-28/7/1999.  
Economou A. (1999) Product-form networks with multilevel signals.
4. **1<sup>st</sup> 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<sup>th</sup> 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<sup>th</sup> 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<sup>th</sup> 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<sup>th</sup> 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.
1. **1<sup>st</sup> 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.
2. **17<sup>th</sup> European Simulation Multiconference SCS Europe BVBA (10<sup>th</sup> 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.
3. **2<sup>nd</sup> 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-form approximations and stochastic comparisons.
4. **5<sup>th</sup> International Conference in Matrix Analytic Methods in Stochastic Models**, Pisa, Italy 21-24/6/2005.
5. **13<sup>th</sup> 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.
6. **2<sup>nd</sup> 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.
7. **6<sup>th</sup> 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.
8. **12<sup>th</sup> 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.

9. **14<sup>th</sup> 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.

10. **2<sup>nd</sup> 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.

11. **7<sup>th</sup> International Workshop on Retrial Queues (WRQ)**, Athens, Greece 17-19/7/2008.

12. **3<sup>rd</sup> 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.

13. **3<sup>rd</sup> Meeting of the EURO Working Group on Stochastic Modelling (StochMod10)**, Nafplion, Greece 7-9/6/2010.

14. **3<sup>rd</sup> 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.

15. **16<sup>th</sup> 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.

16. **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.

## **I. Participation in funded research programs.**

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.

Scientific coordinator: Antonis Economou.

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

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: Apostolos Burnetas.  
Reference number: Grant 70/3/7388, University of Athens, European Social Fund and National Resources.
3. Research program “Kapodistrias”, ELKE University of Athens, 2004-2005.  
Research proposal: Busy period distributions in queueing systems.  
Role: Scientific coordinator.  
Scientific coordinator: Antonis Economou.  
Reference number: Grant 70/4/6415, University of Athens.
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: 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: Antonis Economou.  
Reference number: Grant 70/4/6415, University of Athens.
6. Research program Spanish National Board Program, 2009-2011.  
Research Proposal: Stochastic Models in Biology and Queueing Theory.  
Role: Researcher  
Scientific coordinator: Jesus R. Artalejo.  
Reference number: Grant MTM2008-01121, Ministerio de Ciencia e Innovación 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: Antonis Economou.  
Reference number: Grant 70/4/6415, University of Athens.



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: Apostolos Burnetas – Zeynep Aksin.  
 Reference number:
  
9. Research program Spanish National Board Program, 2012-2014.  
 Research Proposal: Stochastic Epidemic and Population Modelling.  
 Role: Researcher.  
 Scientific coordinator: Jesus R. Artalejo.  
 Reference number: Grant ??? Ministerio de Ciencia e Innovacion de España.

## **J. Refereeing, editorial and organizational work.**

1. Referee for the journals:
  - **4OR**
  - **Advances in Operations Research**
  - **Annals of Operations Research**
  - **Applied Mathematical Modelling**
  - **Applied Mathematics and Computation**
  - **Communications in Statistics – Theory and Methods**
  - **Computers and Operations Research**
  - **Discrete Event Dynamic Systems**
  - **European Journal of Operational Research**
  - **Flexible Services and Manufacturing**
  - **IEEE Communication Letters**
  - **International Journal of Engineering**
  - **Journal of Advanced Research in Applied Mathematics**
  - **Journal of Computational and Applied Mathematics**
  - **Journal of Optimization Theory and Applications**
  - **Journal of Statistical Planning and Inference**
  - **Mathematical and Computer Modelling**
  - **Mathematical Methods in the Applied Sciences**
  - **Methodology and Computing in Applied Probability**
  - **Naval Research Logistics**
  - **Nonlinear Analysis**
  - **Operational Research, An International Journal**
  - **Operations Research**
  - **OPSEARCH**
  - **OR Spectrum**
  - **Performance Evaluation**
  - **Probability in the Engineering and Informational Sciences**
  - **Quality Technology and Quantitative Management**
  - **Queueing Systems**

- **Simulation Modelling Practice and Theory**
  - **TOP**
  - **REVSTAT**
2. Associate editor for the journal:
    - **Asian-Pacific Journal of Operational Research**
  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**  
Special issue on **Algorithmic and Computational Methods in Retrieval Queues**. See Economou, A. (2010) Editorial: Algorithmic and computational methods in retrieval queues. *Computers and Operations Research* **37**, 1157.
  4. Chairman of the Scientific and Organization Committee of the conference:
    - **7<sup>th</sup> International Workshop on Retrieval Queues (7<sup>th</sup> WRQ)**, Athens 17-19/7/2008.
  5. Vice-Chairman of the Scientific and Organization Committee of the conference:
    - **3<sup>rd</sup> Meeting of the EURO Group on Stochastic Modelling (StochMod10)**, Nafplion, 7-9/6/2010.
  6. Member of the Scientific Committee of the conferences:
    - **12<sup>th</sup> International Conference on Analytical and Stochastic Modelling Techniques and Applications (ASMTA 2005)**, Riga, Latvia, 1-4/6/2005.
    - **6<sup>th</sup> International Workshop on Retrieval Queues (6<sup>th</sup> WRQ)**, Miraflores de la Sierra, Spain 8-10/7/2006.
    - **13<sup>th</sup> International Conference on Analytical and Stochastic Modelling Techniques and Applications (ASMTA 2006)**, Bonn, Germany, 28-31/5/2006.
    - **14<sup>th</sup> International Conference on Analytical and Stochastic Modelling Techniques and Applications (ASMTA 2007)**, Prague, Czech Republic, 4-6/6/2007.
    - **15<sup>th</sup> International Conference on Analytical and Stochastic Modelling Techniques and Applications (ASMTA 2008)**, Nicosia, Cyprus, 3-6/6/2008.
    - **16<sup>th</sup> International Conference on Analytical and Stochastic Modelling Techniques and Applications (ASMTA 2009)**, Madrid, Spain, 9-12/6/2009.
    - **3<sup>rd</sup> Madrid Conference on Queueing Theory (3<sup>rd</sup> MCQT)**, Toledo, Spain, 28/6-1/7/2010.

- **8<sup>th</sup> International Workshop on Retrial Queues (8<sup>th</sup> WRQ)**, Beijing, China, 27-29/7/2010.
- **17<sup>th</sup> International Conference on Analytical and Stochastic Modelling Techniques and Applications (ASMTA 2010)**, Cardiff, United Kingdom, 14-16/6/2010.
- **Mathematical Modeling and Applied Soft Computing**, Coimbatore, India 11-13/7/2012.

## K. Citations.

According Scopus: 156 (including self citations)

## L. Invitations.

### 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)  
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<sup>st</sup> Summer School in Financial and Actuarial Mathematics**, Samos.  
Economou (2003) An introduction to integer programming with economic and management science applications
2. **13<sup>th</sup> 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. **3<sup>rd</sup> 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. **3<sup>rd</sup> 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

## M. 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)
2. I completed my military service in the Greek Army during 1998-1999.
3. Languages other than English:
  - Greek (excellent fluency in speaking, reading and writing)
  - Spanish (excellent fluency in speaking, reading and writing – I have the Diploma Superior Español como Lengua Extranjera del Instituto Cervantes).