#### RESUME

### PAUL G. SPIRAKIS

## (1) Full Professor

Dept. of Computer Science and Engineering School of Engineering, Patras University, PATRAS-RION GREECE Department Chairman during Sept. 1987-Sept. 1989 Sept. 1989-Sept. 1991 and Sept. 1991 - Sept. 1993 Dept. Vice-Chairman during Sept. 1993-1995

(2) Director (since 1996) and senior researcher

of the (Research and Academic) Computer Technology Institute (R & A C.T.I.)

P.O. BOX 1122, 26110 Patras Greece.

C.T.I. is under the auspices of the Ministry of Education of Greece.

CTI is , under a recent law , the main Informatics Technology

Institute of the Ministry of Education.

- P. Spirakis directs scientifically the RACTI Research Unit 1 (Foundations of Computing) and the new Division of Security of Information Systems.
- (3) Director of the distributed systems and telematics laboratory of Patras University , 1996 on.
- (4) Director of Graduate Studies of the Dept. of Computer Science and Eng. Patras University, Greece, Sept. 2005-Sept. 2007. Also Sept. 2007-09.

Birth Date: August 29 1955 Children: Two daughters

Citizenship: Greek

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Phone (mobile): GREECE-6944-260936

email: spirakis@cti.gr

Paul Spirakis has served the Greek Army from Oct. 8/85 to April 11/87.

### 1. EDUCATION

#### **Graduate Studies**

Ph.D. in Applied Mathematics (Computer Science) Harvard University, December 1981. Official degree date: March 1982, Title: Probabilistic Algorithms, Algorithms with Random Inputs and Random Combinatorial Structures. Advisor: John H. Reif.

S.M. in Applied Mathematics (Computer Science) Harvard University, June 1979.

**Undergraduate Studies** 

Electrical Engineering Diploma. (National Tech. University of Athens) Grade: Excellent Athens, Greece, June 1978.

#### 2. HONORS

- 1. Fifth (among 50 competitors) in the Postdoctoral and junior faculty research competition in Mathematical Research, IBM Math. Sci. Dept. March 82).
- 2. The First Prize (among students of all over Greece), Greek Mathematics Society, May 1973.
- 3. Elected unanimously as Member of the Board of the European Association for Theoretical Computer Science (EATCS) in July 1997 in Bologna Italy.
- 4. Appointed as a Distinguished Visiting Scientist of Max Planck Informatik (MPI) in Germany , for the Fall of 2001.
- 5. Awardee of a prize for the Keynote speech in the 2001 High Performance Computing Conference, Hyderabad India Dec 2001.
- 6. Elected unanimously as one of the two vice -Presidents of the Council of the European Association for Theoretical Computer Science (EATCS), in July 2002 in the ICALP that took place in Malaga Spain. Re-elected in the same position unanimously , in ICALP 04 , in the ICALP that took place in Turku , Finland. Re-elected in the same position unanimously , in ICALP 2006 , which took place in Venice , Italy.
- 7. Co-author of a distinguished paper in EUROPAR 2003.
- 8. Appointed Member of ISTAG (Information Society Technologies Advisory Group), which is a honorary group of 40 experts from Europe, aiming at designing future European Research in Information Technology. Since Jan 03.
- 9. Best presentation co-awardee of the Poster " A software tool for Distributed Intrusion Detection in Computer Networks" with T. Komninos , Y.C. Stamatiou, E. Valeontis and H. Yannakopoulos , in the 2004 ACM PODC Conference.
- 10. Acknowledged between the top 50 scientists worldwide in Computer Science with respect to "The best Nurturers in Computer Science Research", published by B. Kumar and Y.N. Srikant, SIAM Data Mining, 05.
- 11. Scientific Chair of the 2005 ACM Conference "Symposium on Parallelism in Algorithms and Architectures (SPAA) ". SPAA is the top Conference in Foundations of parallelism.
- 12. Scientific Chair of IPDPS 06.

- 13. Scientific Chair of the 2nd International Workshop on Internet and Network Economics (WINE 2006).
- 14. Honoured by the local Patras Magazine press as the most popular scientist of the U. Patras, March 2008.
- 15. Scientific Leader of the project PNYKA for e-voting. The main result of the project was a new , secure and robust open-source e-voting system that got the First Prize in the Pan-European Competition of Open Source non-commercial e-voting systems , conducted by the Internet Foundation of Austria (IFA) Competence Center for e-voting and participation. Aug 2008.
- 16. Member of the ACM Europe Task Force, since Fall 2008. The ACM Europe task force is now the ACM Europe Council.
- 17. Member of the ERC/IDEAS Panel of evaluations for Computer Science , 2009-10.

### 3. GRANTS & PROJECTS FUNDED

- 1. National Science Foundation Grant (August 20 1985-Dec. 31 1988) for the project "Innovative Techniques for Concurrency Control in Database Systems" (Computer Research) Grant No DCR-8503497, amount \$ 150.000. P. Spirakis was the principal (and the only) investigator of this grant.
- 2. National Science Foundation Grant (July 15 1983-Dec. 31 1985) for the project "Distributed Systems, Parallel Graph Algorithms and Performance of Concurrency Control (Computer Research)" Grant No. MCS-8300630, Amount \$ 50.833. P. Spirakis was the principal (and the only) investigator of this grant.
- 3. New York University Award (Young Scholars) August 31 84 to August 31 85, for the project: "Development of Educational Software for a Personal Microcomputer Based Interactive Videodisc System", amount \$ 12.890. P. Spirakis was the principal investigator of this grant.
- 4. Paul Spirakis was a member of the research team of the USA National Science Foundation Grant of the CER (Coordinated Experimental Research) program, given to New York University. The project aimed in creating a large research laboratory in Robotics.
- 5. P. Spirakis was the principal Investigator and the director (in CTI) of the project SED (SETL Experimentation and Demonstrator) No. 1227 (1271) of ESPRIT I (EEC), 2 MECU (from July 15/86 to July 15/88). A cartography data base and a performance monitor for UNIX were developed in this

project. The project was succesfully completed.

- 6. P. Spirakis was the scientific director of the greek team of the project ALCOM (ALGORITHMS & COMPLEXITY) of the ESPRIT Basic Research Actions. (Amount is 2.1 MECU, from May 27/89 to April 27/92). The project was successfully completed.
- 7. P. Spirakis was co-principal investigator of the TELEMED project (Telecommunications in Medicine) of RACE (Subcontract to DETECON of FRG) from March 1/89 to March 1/1992. The team lead by P Spirakis is developing protocols for medical image transfer in non-local area networks. The project was successfully completed.
- 8. P. Spirakis was the scientific director of the cooperation with Ilmenan University of Germany whose goal is to build the necessary hardware and Expect System for Bioimpedance measurements, for the therapy of diabetes. The project was successfully completed.
- 9. P. Spirakis directed the Scientific Cooperation with Humboldt University, Berlin, Germany, on Parallel Algorithms (88-91 with H Jung). This cooperation has successfully ended.
- 10. P. Spirakis was the scientific director of the Greek Basic Research program (PENED) on Efficient Techniques for AI problems, from June 91 to June 93. The project has been completed with success.
- 11. P. Spirakis was the scientific director in CTI of the project REX of ESPRIT II (subcontract to Intracom) Apr 1990 May 1992 The project has been successfully ended.
- 12. P.Spirakis was the scientific director in the RACE II programme SECURENET. The programme is concerned with viruses and security of open broadband networks and has been successfully ended.
- 13. P. Spirakis is the scientific director of the CSE Dept of Patras University in the STRIDE project "Manufacturing automation of the Greek Textile industry" from jan 1 92 to jan 1 94. The total project funding is 2.1 MECU. The project ended successfully.
- 14. P. Spirakis is the scientific director of CTI in the project of the STRIDE programme "Helios", concerning X.400 services in the Greek wide area networks. The project lasts from Jan 1 92 to Jan 1 94 and its funding is 0.661 MECU. The project ended successfully.
- 15. P. Spirakis is the scientific director of the CTI team in the ESPRIT BASR (Basic Research) project ALCOM II (Algorithms and Complexity) from April 2 92 to April 2 95. The project funding is at 1.8 MECU. The project ended successfully.
- 16. P. Spirakis is the scientific director of the CTI team in the

ESPRIT Basic Research project GEPPCOM (General Purpose Parallel Computing) from Oct 1 1993 to Oct 1 1996. The project funding is at 1.8 MECU . the project ended successfully.

- 17. P. Spirakis is the scientific director of the CTI team in the ESPRIT Special Actions project DELTA-CIM (Delta Industrial Automation) from July 1993 to July 1996. The project funding is at 1 MECU. The project ended successfully.
- 18. P. Spirakis is the scientific director in the EC RACE II project SECURENET II (malicious attacks over open networks and their detection), from Dec 93 to Dec 95. The project ended successfully.
- 19. P.Spirakis is the scientific director of the CTI team in the IT Basic Research project "ALCOM-IT", conecrning algorithms and complexity. The program starts Nov 1 1995, for 36 months, and the approximate budget is 2 million ECU. The project ended successfully.
- 20. P. Spirakis is the scientific director of the CTI team in the project "TRENDS" of Telematics of the EU. The program concerns the use of novel network protocols in the Internet for remote training of educators (of high schools) in 7 European countries. The program starts on Jan 1 1996 and lasts 30 months. The approximate budget is about 2 million ECU. The project ended successfully.
- 21. P. Spirakis is the project leader of the Informatization of the Greek Health System of the Ministry of Health. The project is funded by the EU and its budget is approx. 30M ECU.
- 22. P. Spirakis is the scientific director of the project YPER of the Greek Secr of Technology , titled "Distributed Simulation" of approx. budget 100 KECU. The project ended with success and produced also a PhD in the subject.
- 23. P Spirakis is the scientific director of the project of technical consultancy of the Ministry of Naval commerce.
- 24. P Spirakis directs the Patras Univ part of the GUNET (Greek Universities Network ) project and is in the 4-member board of GUNET. He also directs the Patras Univ poject of the Integrated Voice Data Network.
- 25. P Spirakis directs the project of secure electronic lotteries (funded by Intralot)
- 26. p Spirakis co-directs the project of IP over ATM , funded by the Greek Public Telecom (OTE) (R&D Division)
- 27. Paul Spirakis is the scientific responsible on behalf of CTI for the EU IST project ASPIS, dealing with encryption of DVD. The project started on Jan 2000 and lasts 36 months.

- 28. Paul Spirakis is the scientific responsible on behalf of CTI for the EU FET IST programme ALCOM -FT (Algorithms and Complexity) The project started on Feb 2000 and lasts 30 months.
- 29. Paul Spirakis is the scientific director of the research programme "Mobile Computing: Algorithmic issues" funded by the Greek Secr of Research and Technology (PENED) 2000-on.
- 30. Paul Spirakis is the scientific director of the research programme FLAGS (Foundational aspects of global computing systems), of the EU FET Proactive scheme (global computing). The project starts on Jan 02 and lasts 3 years. The project aims in the algorithmic aspects of integration of mobile computing and ad-hoc networks and will examine the communication and stability issues of such systems as well as antagonism issues between the entities involved.
- 31. Paul Spirakis is the CTI scientific leader in the EU FET Proactive programme CRESSCO, starting Jan 02. The project lasts 3 years and addresses major algorithmic/technology issues of state of art networking.
- 32. Paul Spirakis is the CTI scientific leader of the EU DG Research network of training COMBSTRU (Combinatorial Structures), started Sept. 2002.
- 33. Paul Spirakis is the CTI scientific leader of the Integrated project DELIS (dynamically evolving large scale information systems) of EU/FET in the 6th framework. The project lasts 5 years starting January 04.
- 34. Paul Spirakis is the CTI scientific leader of the Integrated project AEOLUS , of EU/FET Global Computing II , approved and starting on Sept 1 2005.
- 35. Paul Spirakis leads the PENED/GGET/Greece scientific project on Algorithmic game theory , approved July 05, for 3 years.
- 36. Paul Spirakis leads the research lab infrastructure project

IRON (GGET-Research Labs) started Sept 2005.

- 37. Paul Spirakis leads the RACTI participation (with Th. Komninos) of the Project of the Southern Greece Innovation Peripheral Pole. The project started on Feb. 2007.
- 38. Paul Spirakis leads the Greek GGET research project PNYKA which does the first secure e-vote scheme in Greece.
- 39. Paul Spirakis leads the FP7 EU FET Proactive project FRONTS, which starts on Feb. 2008. The project will last 3 years and is about Foundations of Adaptive Networks

of Tiny Artefacts.

90. Paul Spirakis is hosting Professor for the IDEAS Grant RIMACO, where D. Achlioptas is the Principal Invetsigator.

#### 4. RESEARCH INTERESTS

#### **ALGORITHMS & COMPLEXITY**

Probabilistic methods in algorithms, combinatorial optimization, average case analysis of algorithms, parallel algorithms, algorithms and protocols for distributed systems, algorithms and complexity of graph theoretic problems, parallel complexity, approximations to hard problems. Recently, research on Foundational issues of algorithmic game theory.

#### COMPUTER SYSTEMS AND NETWORKS

Design and applications of network protocols, security in computer networks, telematics problems and services.

Telematics in Education.

Performance Analysis of Computer Systems, Performance and algorithms for Databases, Distributed Systems Design,

Queueing Theory.

### 5. PROFESSIONAL EXPERIENCE

### 5.1 RESEARCH

Senior Researcher of the Computer Technology Institute of Greece from July 1985 up to now. Associate Professor (tenured) of the Computer Science and Engineering Dept. of Patras University, Greece, from July 1985 to October 1990.

Full Professor of the same University from October 1990 to today.

Research in algorithmic and complexity issues of Game Theory. Research in Applications of Cryptography and Security. Research in parallel algorithms, complexity of parallel computation, probabilistic algorithms and algorithms with random inputs, concurrency control in databases, synchronization in distributed systems, random graphs, performance analysis of computer systems, telematics applications, efficient approximations to hard problems.

Assistant Professor in the Courant Inst. of Math. Sciences, New York University, from September 1982 up to 1987, tenure track position. Paul Spirakis passed successfully the 3rd year tenure review process.

Research in probabilistic algorithms, parallel algorithms, synchronization in distributed systems, performance analysis of computer systems, concurrency control in databases, and theory of Robot motions.

Post-doctoral Fellow at Harvard University, (Feb. 82 to Sept. 82). Research in distributed systems, probabilistic algorithms, parallel algorithms and performance of database concurrency control.

Research Assistant, Harvard Univ., June 81-June 82. Research in probabilistic algorithms, probabilistic methods in combinatorics, distributed systems, synchronization.

Research Assistant, Harvard Univ., June 80-June 81. Research in distributed systems, graph theory, performance of database concurrency control, computer networks.

Research Assistant, Harvard Univ., June 79-June 80. Research in efficient algorithms with random inputs, queueing theory.

#### 5.2 TEACHING

(a) Full Professor at the Computer Science and Engineering Dept. of Patras University.

#### **Teaches**

spring 09 : Approximation Algorithms (graduate course)

Fall 08: Game Theory, Economics and Algorithms, co-taught with L. Kirousis.

Fall 08: Advanced Algorithms, co-taught with C. Zaroliagis.

Spring 08 : Approximation Algorithms (Graduate Course)

Fall 07: Advanced Algorithms, co-taught with C. Zaroliagis.

Fall 07: Game Theory, Economics and Algorithms, co-taught with L. Kirousis.

Spring 07 : Approximation Algorithms (Graduate course)

Fall 06: Advanced Algorithms, co-taught with C. Zaroliagis.

Fall 06: Game Theory, Economics and Algorithms, co-taught with L. Kirousis

Spring 06: Lectures in Game Theory and Algorithmics in the Graduate Course of

the Dept. of Mathematics, Patras Univ., on Mathematics for Decision Making.

Spring 06: Approximation Algorithms (Graduate course).

Fall 05 : Game Theory , Economics and Algorithms, co-taught with L. Kirousis

Fall 05: Advanced Algorithms, co-taught with C. Zaroliagis

Spring 05: Invited Lecturer for game theory in the joint Graduate programme

of Patras Univ. between the departments of Mathematics and Computer Engineering.

Spring 05 : Approximation Algorithms (graduate course)

Fall 04: Game Theory, Economics and Algorithms, co-taught with L. Kirousis.

Fall 04: Advanced Algorithms.

Spring 04: Invited lecturer for game theory in the joint Graduate programme of Patras Univ.

between the Depts of Mathematics and Computer Engineering.

Spring 04: Approximation Algorithms, graduate course.

Fall 03: Game Theory, Economics and Algorithms, co-taught with

L Kirousis, (Graduate course in the joint program of Mathematics and

Computer Science, Patras U., also advanced elective in the

program of the Computer Eng. and Informatics dept.

Fall 02: Operating Systems Principles, Advanced Algorithms

Spring 03: Approximation Algorithms (Graduate course)

Fall 00; Operating systems, advanced algorithms

Spring 01: Operating systems II, approximation algorithms to hard problems (graduate course)

Fall 01: On leave in Max Planck Informatik

Spring 02: Operating Systems II, approximation algorithms.

Spring 00: Cryptography, Operating Systems II, approximation

algorithms to hard problems (graduate course)

Fall 99: Operating Systems, Advanced algorithms.

Spring 99 : Cryptography , Approximations of hard problems (grad course)

 $Fall\ 98: Operating\ Ssytems\ I\ ,\ Probability\ ,\ Probabilistic\ techniques$ 

in Algorithms (graduate course)

Spring 98 : Operating Systems II , Probabilistic Techniques in Algorithms (grad course)

Fall 97: Operating systems I, Advanced Algorithms

Spring 97: Operating systems II, Parallel algorithms (grad course)

Fall 96: Operating Systems I. Advanced Algorithms, Telematics I

 $Spring\ 96: Operating\ Systems\ II\ ,\ Parallel\ Algorithms\ (graduate\ course).$ 

Fall 95 : Operating Systems I, Telematics I, Distributed computing,

Advanced algorithms, Intro to Computer Science.

Fall 94: Operating Systems I, Parallel Algorithms

(graduate course), Advanced Topics

in Algorithms , Intro. to Computation

Spring 94 : Operating Systems II , Parallel Algorithms (graduate course)

Fall 94: Operating Systems I, Advanced Topics in algorithms.

Fall 93: Operating Systems I , Advanced Topics in Algorithms , Intro. to Computer Science .

Spring 93: Operating Systems II, Foundations of Computer Science.

Spring 92: Operating Systems II , Foundations of Computer Science (graduate course ) , Probability

Fall 91: Operating Systems I, Advanced Topics in Algorithms, Comp. Systems I

Spring 91: Operating Systems II, Probability

Fall 90: Operating Systems I, Intro. to Computer Sci., Advanced Algorithms

Spring 90 : Operating Systems II, Probability

Fall 87,88,89 : Operating Systems I

Spring 87,88,89: Theory of Computation, Operating Systems II

Fall 86: Discrete Mathematics, Operating Systems I

Spring 86: Theory of Computation, Operating Systems II

Fall 85: Operating Systems I, Computer Systems Architectures.

(b) Assistant Professor, Courant Institute of Mathematical Sciences, New York University, Computer Science Dept.

### Taught

Spring 85 : Operating Systems Design II (graduate course)

Fall 84: Performance analysis of Computer Systems (Graduate Course)

and Basic Algorithms (undergraduate course-honors section).

Spring 84: VLSI Design & Theory (graduate course) and Data Structures (undergraduate course)

Fall 83 : Advanced database design (graduate course)

Spring 83 : Operating Systems II, (graduate course)

Fall 82: Data Structures (undergraduate course) and Performance

Analysis of Computer Systems (graduate course).

# (c) Teaching Fellow at Harvard University

# Taught

Fall 81: Automatic Computing (AS10), undergraduate course.

Spring 81: AM251b, Operating Systems Optimization, (Graduate course)

Fall 80: Operating Systems Architecture, Graduate course

Fall 79: Efficient Algorithms, Graduate course

Fall 78: Introduction to Formal Systems (undergraduate course).

# 5.3 Consulting and Programming

- -Evaluator and Panel Member of the ERC IDEAS Programme 2009 on.
- -Evaluator of research infrastructures for a majour Greek University, fall 2008.
- -Projects Reviewer of the ISF (Israel Science Foundation) Spring 2007.
- -Independent Expert for the security of mobile telecommunications, June 2006 on.
- -Senior Consultant of the Greek Lottery Organization (OPAP AE), 1999-on.
- -Member of the IST (Information Society Technologies) management committee of the CEC from Jan 1999 to Jan 2004.
- -Consultant of the Greek State in Informatics in Education, Health,

Commercial Naval applications, Information Society.

- -Consultant of the major Greek firms.
- -Member of the Executive Council of the State Firm "National Network of Research and Technology SA", under auspices of the Ministry of Industry, Sept 98 to June 99.
- -Evaluator of Research Programmes in the Greek Secr of Reserach and Technology (1990 up to now in various programmes)
- -EU FET Proposals evaluator 2003-2004.
- -IT CEC Auditor in HPCN (1995-1998)
- -IT CEC Evaluator in Long Term Research, Spring 97, Fall 96
- -NATO Research evaluator, Spring 96
- -IT CEC Evaluator in Long Term Research, Fall 1995
- -IT CEC Evaluator in Long Term Research , Spring 1995
- -CEC Telematics and Applications National Representative, 1995 on.
- -Esprit III auditor in High Performance Computing (Fall 94)
- -Esprit III evaluator in High Performance Computing (Spring 93)
- -Esprit III evaluator in Basic Research (Spring 93)
- NSF 1993 Evaluator
- CEC DG XVI Telematics for Greece evaluator (1993)
- CEC DG XVI Expert in the Telematique Programme (Feb 92 on)
- CEC Brite/Euram Tech. Auditor 1992-95
- Esprit III evaluator in High Performance Computing (IPSS) October and November 1991
- Esprit III evaluator in Esprit Basic Research (Oct Nov 91)

- Research Visiting Member, IBM Yorktown (Hawthorne), August and September 1991, Sept 1992, Sept 93
- Esprit Basic Research evaluator, Oct-Nov 1991
- -Evaluator of the Greek Basic Research Program, Fall 1991
- Technical Expert of the EEC for the Mediterranean Integrated Program in Informatics in the Databases subject, July 89 to March 90
- ESPRIT II Evaluator, January 90.
- Consultant of the Expertnet Consulting firm (Jan 1991 now)
- Member of Executive Council of the ELSYP S.A. and Consultant in ELSYP S.A. (Fall 88 to 91) in the R&D section and the Cartography section
- Member of the Scientific Board of Ergodata SA Fall 87-Fall 91
- Author of the study for the Greek Computerized ID system (Ministry of Interior, 1987)
- Author of the study for the safety of personal information (Ministry of Interior, working Group, Nov. 1989 to Jan. 1990).
- Design of the MIS for the Technical body of the Greek Army (Spring 86 Spring 87)
- Study for the adaptation of UNIX in Greece (Ministry of Industry, Energy & Technology, Fall 86)
- Management Strategies Inc., Boston MA, Consultant during Summer 79 Fall 79
- Tri Companies, Boston MA, Applications Programmer (Summers of 80, 81, 82 and Fall 1980). Design of a Relational data base in PDP 11/70, VAX 11/780 (RSTS/G and VMS). Design of a report generator.

# 5.4 Greek Government, European Union Management Work

Member of the Advisory Board of the Region of Western Greece for Research and Innovation , Jan 2009 on.

Member of the Faculty Selection Committee, Open Univ. Cyprus, Nicosia, June 2007.

Member of the Ministry of Education Committee on the design of the Ministry's proposal for the 7th EU Framework, May 2006 on.

Member of the evaluation commitees for the large scale informatization of the Greek customs , the Greek Post-offices and the Command and Control system of the Ministry of Naval Commerce. Also , member of the strategic design commitees for the informatization of the greek law and justice , and for the Informatics in Education.

President of the Ministry of Justice Commitee for the monitoring and delivery of the Digital Central Criminal Records Commitee. From Jan 03 to today.

Greek representative in the Information Society Research Programme (IST) from Jan 99 till June 02.

Member of the Info Society Technologies Advisory Group (ISTAG), a prestigeous body of about 40 individuals advising EU for research policy, from Jan 03 to Jan 05.

Member of the Prime Minister committee for the Prime Minister Office Archivals , Spring 1998

Member of the Parliament Dept for Citizens Privacy (Sengen) since Sept 1997 to Sept 1999.

Member of Special Group of Minister of Industry for Informatics Research from Spring 1995 to Dec 2004.

EU DG XVI Expert 1992 to 1993.

Head of the Greek State Committee on Informatics and Education (Ministry of Education) Jan 94 to Jan 1997.

Greek task force on Telematics (Bangemann Commitee) 1994.

Executive Counsil Member of the Computer Tech. Institute (CTI) (Sept. 88 to today)

Research and Development Coordinator of CTI (Sept 93 to 96)

Chairman of the CSE Dept. of Patras Univ., (Sept. 87 to Sept. 93)

Vice-Chair of the CSE Dept of Patras Univ. (Sept 93-95)

Member of the Patras Univ. Senate (87-89, 91-93 and 94-96)

Member of Executive Counsil of ELSYP SA (1986 - 1990)

Vice-chair of the Counsil of the Informatics Development Bureaugh (Ministry of the Presidency) April 89 to 91.

# 5.5 Activity in Professional Societies

# A. Program Committee Membership and Chairmanship

Member of the PC of DISC 2010.

Member of the PC in Algorithms of IPDPS 2010

Chair of the PC of track A for ICALP 2010

PC Member of SAGT 2009.

Chair of the Steering Body of SAGT 2009.

PC Member of e-democracy 2009.

PC Member of SAGA 2009.

PC Member of WADS 2009

PC Member of SECRYPT 2009

PC Member of FCT 2009

Conference chair of ICALP 2009.

PC Member of ICALP 2009 Track A (Algorithms)

PC Member of ALGOSENSORS 2009.

PC Member of COMPLEX'09.

PC Member of WINE 2008

PC Member of SAGT 2008 (Symposium on Algorithmic Game Theory)

PC Member of DCOSS 2008

PC Member of WINE 2007

PC Member of TGC 2007

PC Member of OPODIS 2007

PC Member of ALGOSENSORS 2007

PC Member of NETECON-IBC 07

PC Member of PCI 2007

PC Member of CAI 2007 (Conference on algebraic Informatics)

PC Member of AAIM 2007

PC Member of DISC 2007 (Distributed Computing Conference)

Co-Chair of the ECCS 2006 Workshop: Optimization in Complex Nets.

PC member HiPS 2006

PC member OPODIS 2006

PC member TGC (Trustworthy Global Computing) 2006

PC Chair of WINE (Workshop on Internet and Network Economics) 2006

PC Member of the 2nd European Conference on Complex Systems, ECCS 2006.

PC member of Algosensors (ICALP workshop) 2006.

General Co-Chair IPDPS 06

PC member of AAIM 2006.

Steering Committee Member of IBC 06

PC member of RANDOM 2006

PC Algorithms Chair of DCOSS 05 (Distributed Computing and Sensor Systems)

PC member and steering committee member of IBC 05 (Incentives based Computing).

PC member WEA 2006

PC member WINE 2005

PC member SOFSEM 2006

PC member of the European Conference on Complex Systems, ECCS 2005.

PC member of Algebraic Informatics, 2005.

PC member in EPY 05 (The hellenic CS yearly conference)

Algorithms PC Chair in DCOSS 05.

PC Chair of ACM SPAA 05.

Program Committee member of WEA 05.

PC member of HCW 05 (Heterogeneous Computing Workshop)

General Co-Chair of IPDPS 06.

Program Committee member of DISC 04

Program Committee member of ALGOSENSORS 2004

Program Committee member of WEA 2004

Program committee member of MFCS 2004

Program committee member of Panhellenic Logic Symposium, PLS 2003.

Program Chair of the 1st Balkan Conference on informatics 2004

Vice Chair of IPDPS 04

Program committee member of MFCS 2003

Program committee member of FCT 2003

program committee member of WADS 2003

program committee member of RANDOM 2002

program committee member of COCOON 2002

Program Committee member of ACM STOC 2002

Program Committee member of IFIP TCS 2002

Chair of EUROPAR 2002 in Mobile Computing.

Program Committee member of CCS 2000

Program Committee member of IDPDS 2000

Conferences Chair of ACM STOC 2001 and ICALP 2001

Program Committee member in the ACM SPAA 2000 conference

Program Committee member in the ACM PODC 2000 conference

Program Commitee Chair in SIROCCO 2000.

Program Committee member in EUROPAR 2000.

Program Committee member in WOPC 2000.

Program Committee member in IS&N 2000 (Intelligent Services in Networks).

Steering Committee member in the RANDOM conference

Program Committee member in WADS 1999

Program Committee member in ICALP 1999

Program Committee member in ISAAC 98

Program Committee member in DISC (formerly WDAG) 98

Program Committee member in EUROPAR 98

Program Committee member in COCOON 98

Steering committee member in EUROPAR 98

Program Committee member in FTC 97

Program Committee member in WADS 97

Program Committee member in HPCS 97

Program Committee member in EUROPAR 97

Steering Committee member in EUROPAR 97

Program Commitee member in Irregular 97

Program Commitee member in WRPC 97

Program Commitee member in WDAG 97

Co-Chair of the 1996 SCIROCCO conference on network structure and communication

Program Commitee member of the European Symposium on Algorithms (ESA) 1996

Program Committee member of ICALP 1996 Conference

Program Committee Chair of the European Symposium on Algorithms (ESA 95)

Program Committee member of the 1995 WG (Graph Theoretic Concepts in Computer Science) Conference

Steering Committee Member of ESA (1994-1997)

Program Committee member of the SCIROCCO 1995 Conference.

Program committee member of EUROPAR 1995

Program Commitee member in the 94 WG (Graph Theoretic Concepts in Computer Science) Conference

Program Committee member in the DEXA 94 Conference (Databases and Expert System applications)

Program Committee member in the PARLE 94 Conference (Parallel Languages Europe)

Program Committee member in the 7th International Workshop on Distributed Algorithms (WDAG 93)

Program Committee member in the 1994 Italian Conference on Algorithms (CIAC 1994)

Program Committee member in the First Annual European Symposium on Algorithms (ESA 93)

Program Committee member in the 1993 Workshop on Graph Theoretic Concepts in Computer Science (WG 93)

Program Committee member in the 6th International Workshop on Distributed Algorithms (WDAG 92)

Program Commitee Co-chair in the 5th International Workshop on Distributed Algorithms (WDAG 91) Oct 1991.

Program Commitee Member in the Mathematics and AI Conference, Fall 91

Program Committee Member in the 4th International Workshop on Distributed Algorithms (WDAG 90) Oct 1990.

Steering Committee Member in the International Workshop on Distributed Algorithms (WDAG) since Oct 1990.

Program Committee Member in the 3rd Informatics Conference of the Greek Informatics Society, June 1991.

Program Committee Member in 2nd ACM Symposium on Parallel Algorithms and Architectures (SPAA), July 1990.

Steering Committee Member in ACM Symposium on Parallel Algorithms and Architectures since Fall 1988.

Program Committee Member in 14th and 16th ICALP (International Colloquium on Automata, Languages and Programming) of the European Association for Theoretical Computer Science, (July 89 and July 87).

Program Committee Member in 5th STACS (Symposium on Theoretical Aspects of Computer Science), sponsored by GI, AFCET, EATCS, Feb. 1989.

Program Committee Member in 1st International Conference on Supercomputing (ICS), Athens, 1987, June.

Program Committee Member in 2nd Aegean Workshop on Computing (AWOC'88) VLSI and Parallel Algorithms, July 1988.

Co-Chair of Conference and PC member in 1st Aegean Workshop on Computing (AWOC), VLSI and Parallel Algorithms, 1986.

Program Committee member in PARCELLA 88 (Parallel Algorithms and Cellular Automata), Academy of Sciences GDR, Berlin.

Program Committee member in International Symposium on Optimal Algorithms, Varna, Bulgaria, 1989.

Program Committee Member in 5th IEEE International Conference on Distributed Computing Systems, 1984.

B. Chairing of Conference Sessions

Session Chair in Algorithms and Complexity Sessions of

ICALP 2009, IPDPS 09, WINE 2008, ICALP 2008, WINE 2007, MFCS 07, WINE 2006, ICALP 06, SPAA 06, IPDPS 06, WINE 05, ISAAC 05, Algebraic Informatics 05 ,ICALP 05 , ACM SPAA 05 ,ICALP 04 ,ACM STOC 02 , ACM STOC 2001 , ICALP 2001 ,

ICALP 99, Dagstuhl Seminar on Parallel and Distributed algorithms 99,

DISC 98,ESA 98, ESA 97, ESA 96 WOPA 96 ICALP 96, ESA 1995, ESA 1994,

PARLE 94, ALCOM II workshop, ICALP 94,

ESA 1993, DIMACS Workshop on Parallel Algorithms Fall 1993,

WDAG 1993, 1992, 1991, 1990, SPAA 1990

ICALP (1987, 1989), STACS 1989, AWOC (1986, 1988).

Session Chair in 1983 IASTED International Symposium on Simulation & Modeling.

C. Membership in Scientific Societies

Member of the New York Academy of Sciences since Jan. 1995

Member of the Algorithms & Theory Committee of IFIP since March 1989.

Voting Member in Association for Computing Machinery. SIGACT (Special Interest Group on Automata and Computation Theory), SIGMETRICS (Special Interest Group on Performance Analysis of Computer Systems), EATCS (European Association for Theoretical Computer Science), AMS (American Mathematical Society), the MAA (Math Assoc of America), the Greek Tech. Chamber and the Greek Computer Society. Voting Member IEEE

# D. Refereeing & Reviewing

Member of the Panel of the IDEAS Programme for Computer Science.

Member of the Editorial Board of Computer Science Reviews, 2006 on.

Member of the Scientific Advisory Board of the U. Geneva for Informatics, 2006.

Reviewer of proposals for the EURYI (European Young Investigators) awards, 2006.

Reviewer of a proposal in the Austrian Research Foundation (FWF) 2005.

Reviewer of proposals in the Israeli Science Foundation, 2007.

Reviewer of the American Mathematical Society Reviews from 04 on.

Reviewer in the book "An Introduction to Database Systems, vol. I" of C. Date, 4th Edition, Addison-Wesley.

Referee in the Journal Applied Mathematics of the Society on Industrial and Applied Mathematics (SIAM) and in the journal of Discrete Applied Mathematics (DAM) .

Referee in Journals: ACM Transactions on Programming Languages and Systems, J. of Algorithms, Algorithmica, Parallel and Distributed Computing, Theoretical Computer Science, Information Processing Letters, Distributed Computing, Parallel Processing Letters, Random Structures and Algorithms, RAIRO J. Informatics, Discrete Math-Graph Theory (DM-GT) and others.

Referee in STOC , ESA , ICALP , DISC , PODC , SPAA , STACS , MFCS , Complexity , RANDOM and in many other conferences.

Reviewer (monthly) of the American Mathematical Society since March 2004.

Referee in the Performance Evaluation Conference (1992)

Referee in ACM Sigmetrics Conference (84, 85, 87, 88, 89)

Referee in USA NSF proposals (83, 84, 85, 86, 87 89 90 93 94).

Referee in IEEE Transactions on Computers .

Referee in the International Conference on Parallel Processing, 1990.

Referee in EEC ESPRIT Proposals (IPSS, BRA, HPCN, HPCA) (90 91 92 93 96).

Referee in CEC IT LTR Proposals 1997, 1996, 1995, 1994

Referee in EU FET 2001

Referee in NATO Research proposals 1996.

Auditor in the EEC BRITE programme (1992 - 95)

Auditor in the EU ESPRIT programme (1994-1996)

Referee in FET EU 2003, 2004 (6th framework)

## 6. PUBLICATIONS

Thesis

"Probabilistic Algorithms, Algorithms with Random Inputs and Random Combinatorial Structures" Ph.D. Thesis, Harvard University, December 1981 Order No 8216206, University Microfilms International, 300 N. Zeeb Road, Ann Arbor, MI 48106.

Books of international circulation

Editor & co-author of the book "Lectures on Parallel Computation" In Cambridge University Press ,1993 (with A. Gibbons)

Co-author of the book "Paradigms in Parallel Approximability" with J. Diaz, M. Serna and J. Toran, Cambridge Univ. Press, April 1997.

# Chapters in Books of International Circulation

Book: Approximation and Complexity in Numerical Optimization

Kluwer, P Pardalos (ed.) 2000,

chapter: Machine Partitioning and Scheduling under Fault-Tolerance Constraints

with D Fotakis

Book: Handbook on Randomization, Kluwer

Chapter: Randomised Techniques for Modeling faults and achieving Robust Computing"

Kluwer Acad. Publ. Vol. 1, pp 313-399

S. Rajasekaran, P. Pardalos and J. Reif (eds)

Summer 2001

with S. Nikoletseas

Book: Experimental Algorithmics . Editors R. Fleischer , E. Meineche Schmidt , B. Moret , chapter : 10 . Distributed Algorithms Engineering. with C. Zaroliagis. As an LNCS Volume 2547/2002 pp 197-228.

Book : Current Trends in Theoretical Computer Science (The Challenge of the New Century)

Vol. 1: Algorithms and Complexity

Publisher: WorldScientific

eds: G. Paun, G. Rosenberg, A. Salomaa

Chapter: Distributed Communication Algorithms for Ad-Hoc Mobile Networks

Summer 2004, ISBN 981-238-966-0, pp 337-372, 2004.

with S. Nikoletseas and Y. Chatzigiannakis

Book: Self-star Properties in Complex Information Systems.

Publisher: Springer-Verlag , LNCS volume 3460/2005 Chapter: Evolutionary games : an algorithmic approach

To appear : 2005 with : S. Kontogiannis

eds: O. Babaoglu, M. Jelasity et al.

Book: Handbook of Algorithms for Wireless Networking and Mobile Computing.

Publisher: Chapman & Hall/CRC

Chapter: Distributed Algorithms for Some Fundamental Problems in Ad Hoc Mobile

Environments. (Ch 7, Section II, pp 123-164)

Published in 2006. with S. Nikoletseas.

Book: New Trends in Parallel and Distributed Computing.

Publisher: HNI-VERLAGSSCHRIFTENREIHE, Band 181.

Chapter: Algorithmic issues in Coalitional and Dynamic Network Games.

(Invited Contributions, pp 25-42)

January 2006.

with D. Fotakis, S. Kontogiannis, P. Panagopoulou and C. Raptopoulos.

Book: Dagstuhl Volume 05361 "Algorithmic Aspects of Large and Complex Networks" (electronic: http://drops.dagstuhl.de/portals/05361/) chapter: A Cost Mechanism for Fair Pricing of Resource Usage, with M. Mavronicolas and P. Panagopoulou, April 2006.

Book : Handbook of Approximation Algorithms and metaheuristics. Editor : Theofilo Gonzalez.

Chapter: Randomized Approximation Algorithms, with S. Nikoletseas.

June 2007. Chapman and Hall, CRC.

Book: Handbook of Parallel Computing: Models, Algorithms and Applications.

Editor: S. Rajasekaran and J. Reif.

Chapter: No 20. Atomic Selfish Routing in Networks: A survey.

coauthor: S. Kontogiannis

Chapman and Hall / CRC Computer and Information Science Series.

Taylor and Francis, January 2008.

Book: Encyclopedia of Algorithms (Editor: Prof. Kao, Springer 2009) P. Spirakis is one of the Area Editors and has co-authored several Lemmata also.

Editor in journals and book volumes

Editor in the Computer Science Review (CSR) Journal of Elsevier.

Area Editor in various Lemmata in the Encyclopedia of Algorithms.

Editor of the 2006 WINE (Internet and Network Economics) volume, LNCS Springer.

Editor of the 2006 ACM SPAA Volume.

Co-Editor of the IPDPS 2006 Volume.

Editor of the Lecture Notes in Computer Science Volume 3560/05:

Distributed Computing in Sensor Systems.

coEditors: V. Prasanna, S. Iyengar, M. Welsh.

ISBN 3-540-26422-1

area Editor in JPDC (J Parallel and Distributed Computing)

Co-editor of TCS 291(1) 2003 with Shay Kutten

Coeditor of the ICALP 2001 volume (LNCS Springer Verlag)

Editor of the Volume 30 ,1 , 1997 of the Theory of Computing Systems Journal , Springer - Verlag

Editor of the Lecture Notes in Computer Science Sept. 1995 "Algorithms", for the ESA 1995 conference (LNCS Springer Verlag)

Editor of the 1996 SIROCCO volume with N Santoro

Editor of the journal "Theoretical Computer Science"

Editor of volume 277, Lecture Notes in Computer Science, "VLSI Algorithms and Architectures", Springer-Verlag, with F. Makedon, K. Mehlhorn, T. Papatheodorou.

Editor of the volume 579 of Lecture Notes in Computer Science (Springer Verlag) of the proceedings of the 5th international workshop on Distributed Algorithms (WDAG 91) with S. Toueg and L. Kirousis

Editor in the Algorithms Review Journal.

Editor in the Computational Geometry Journal (Theory and Applications) of Elsevier Science Publishers.

Editor of The Parallel Processing Letters (PPL) journal

Editor in the IJ Computing Theory

Editor of the Mathematical Systems Theory (MST) journal now called Theory of Computing Systems (TOCS)

Editor of the volume 865 of TCSA (Theoretical Computer Science Algorithms) of the ESA 95 best papers (1998)

Co-editor of the DISC 98 best papers volume in Theoretical Computer Science (TCS) journal.

Papers published in Scientific Journals

- (a) Without co-authors
- 1. "The parallel complexity of deadlock detection" in Theoretical Computer Science, North Holland Publishing Co, Fall 1987
- 2. "Optimal Parallel Randomized Algorithms for Sparse Addition and

Identification" in Information and Computation, Academic Press Inc., Spring 1988.

- (b) With co-authors
- 3. "Real Time Synchronization of Interprocess Communications", with John Reif, in ACM Transactions of Programming Languages and Systems, April, 1984.
- 4. "Unbounded speed variability in Distributed Systems", with John Reif, in SIAM Journal of Computing, February, 1985.
- 5. "Performance Analysis of Concurrency Control Methods in Database Systems", with Annie Shum, in Performance '81, F.J. Kylstra (editor), North Holland Publishing Co., 1981.
- 6. "Strong NP-hardness of moving many disks", with C. Yap, The NP-Completeness Column, edited by D.S. Johnson, Bell Laboratories, 9th edition, Fall 1983. Also, in Information Processing Letters, vol. 19, No. 1, 1984.
- 7. "Moving Many Pebbles in a Graph is polynomial time", with C. Yap, The NP-Completeness Column, edited by D.S. Johnson, Bell Laboratories, 9th edition, Fall 1983, J. of Algorithms.
- 8. K-connectivity in random undirected graphs", with J. Reif, in Discrete Mathematics, vol. 54, No. 2, April 1985.
- 9. "Queueing Delays in Buffered Multistage Interconnection Networks" with C. Bouras, J. Garofalakis and V. Triantafillou, PERFORMANCE EVALUATION REVIEW, vol. 15, No. 1, 1987, ACM Press.
- 10. "Efficient Distributed Algorithms by Using the Archimedean Time Assumption" with V. Tampakas, RAIRO Journal of Theoretical Informatics and Applications, AFCET, invited paper, Gauthier-Villars, 22(4), 1988 pp. 1-16.
- 11. "Expected Parallel Time and Sequential Space Complexity of Graph and Digraph Problems" with J. Reif, in the Special Issue of the Journal Algorithmica, on Graph Algorithms, 1992.
- 12. "Lower bounds and Efficient Algorithms for Multiprocessor Scheduling of Dags with Communication Delays" with H. Jung and L. Kirousis, in the Information and Computation journal, 1992.
- 13. "The Complexity of the Reliable Connectivity Problem" with D. Kavadias and L. Kirousis, in Information Processing Letters (IPL), 1991
- 14. "Efficient Parallel Algorithms for shortest paths in planar graphs"

- with G Pantziou and C Zaroliagis, in the BIT journal, 1992
- 15. "The Complexity of the Connected Subgraph Problem" with L Kirousis and M Serna , in the SIAM J. of Computing ,June 1993
- 16. "Tentative and Definite Distributed Computations: An optimistic approach to network synchronization" with J. Garofalakis, S. Rajsbaum and B. Tampakas, special issue on Robust Computations, Theoretical Computer Science (TCS) journal, 1994
- 17. "Reading many variables in one atomic operation: Solutions with Linear or Sublinear Complexity" with L. Kirousis and P. Tsigas, IEEE journal on Parallel and Distributed Systems
  July 1994
- 18. "Network security performance issues" with M.Denault , D. Karagiannis and D. Gritzalis , Computers and Security Journal , 1994
- 19. "Tail bounds for occupancy and the Satisfiability Threshold Conjecture" with A. Kamath, R. Motwani and K. Palem, in the journal of Random Structures and Algorithms, 1995.
- 20. "The fourth moment in Luby's distribution", with C. Zaroliagis, T. Pantziou, in the journal of Theoretical Computer Science (TCS) A (Algorithms, automata, complexity and games), vol.148, Sept.1995 (TCS 2015)
- 21. "Simple Atomic Snapshots: A Linear Complexity Solution with Unbounded Time Stamps" with L. Kirousis and F. Tsigas, in the Information Processing Letters (IPL) Journal, Vol 58, No 1, April 1996.
- 22. "Hammocks on Ears decomposition "with D. Kavvadias, G. Pantziou, C. Zaroliagis, in the Theoretical Computer Science journal, 1996. Vol 168, 121-154, 1996
- 23. "Architectural Aspects of an Intelligent DSS for Flow Shop Production Control" with I. Hadjiligeroudis, D. Sofotasios, N. Dendris, A. Tsakalidis, in Advanced Manufacturing Forum Vol 1, 1996, pp 75-84 Scitec Publ.
- 24. "Performance modeling of distributed timestamp ordering: Perfect and imperfect clocks" with C. Bouras, in the journal Performance Evaluation, 25, 1996, 105-130
- 25. "Average Case Analysis of Pure Greedy Hot Potato Routing in O(nlogn) time "with V. Triantafillou, Parallel Processing Letters Vol 7, No 3, 1997, 249-258

- 26. "BSP vs LOGP" with G Bilardi, A Pietracaprina, G Pucci, K Herley in Algorithmica Special issue on Parallel Computation, 1999, 24:405-422
- 27. "A note on the random generation and counting of matchings in dense graphs" with J Diaz , M Serna , Theoretical Computer Science A, 1998 , vol  $726\,$
- 28. "Random Generation of Matchings" with J Diaz, M Serna in the DIMACS AMS Series (American Math Society), Stirin Volume, Editors R Graham, J Kratochvil, F Roberts, J Nesetril, 1998
- 29." Frequency assignment in Mobile and Radio Networks" with D Fotakis G Pantziou, G Pentaris, in DIMACS AMS Series on Networks and Distributed Computing 1999.
- 30. "Analytical performance models for multistage interconnection networks with finite , infinite and zero length buffers" with C Bouras , D Garofalakis , V Triantafillou , to appear in the Performance Evaluation Journal , 1998
- 31. "Parallel algorithms for the minimum cut and the minimum length tree layout problems " with J Diaz , M Serna , A Gibbons , G Pantziou , and J Toran . Theoretical Computer Science Journal , 181 ,1997 , pp 267-287.
- 32. "High Performance Parallel Text Retrieval Over large scale document collections: the PFIRE system" with B Mamalis and V Tampakas, in the International Journal of Computers and their Applications Vol 6 No 3 Sept 1999
- 33. "High Performance Parallel Text Retrieval via Fat Trees" with B Mamalis and B Tampakas , in the TOCS 1999 journal. TOCS 32 , pp 591-623 , 1999
- 34. "Robust Parallel Computations through Randomization" with S Kontogiannis , G Pantziou , M Young, invited paper in the special issue of TOCS (Theory of Computing Systems) 2000.
- 35. "Machine partitioning and scheduling under fault tolerance constraints" with D Fotakis, book chapter in the Book titled as "Approximations and Complexity in Numerical Optimization: Continuous and Discrete Problems" P Pardalos ed, Kluwer Acad Publ,1999.
- 36. "Hardness results and efficient approximations for frequency assignment problems: Radio Labelling and RadioColoring" in the Journal of Computers and Artificial Intelligence (CAI) Vol 20 (2) pp 121-180, 2001.
- 37. "Competitive video on demand schedulers for Popular movies" with

- C Bouras, V Kapoulas, G Pantziou. In the Special Issue of Discrete Applied Mathematics on Combinatorial and algorithmic Aspects of Telecommunications, 129(1) 49-61, 2003.
- 38. "On -Demand Hypermedia / Multimedia Service using Pre-orchestrated scenarios over the Internet" with C Bouras, V Kapoulas, D Miras, V Ouzounis, A Tatakis, in the Networking and Information Systems Journal, vol 2, no 5-6, pp 741-762, 1999.
- 39. "STEPS : Supporting traditional educational procedures : A TCP/IP multimedia networks-based model" with C Bouras , P Lampsas , in the J. of Multimedia Tools and Applications , Kluwer Academic Publishers,  $16,\,251\text{-}276$  , 2002 .
- 40. "Connectivity Properties in Random Regular Graphs with Edge Faults "with S Nikoletseas, K Palem, M Yung, in the special issue on Randomised Computing of the International Journal of Foundations of Computer Science (IJFCS), 2000.
- 41." Scheduling Multithreaded Computations " with P Fatourou , in the Theory of Computing Systems Journal (TOCS) , 33, 173-232 , 2000.
- 42. "Minimum Congestion Redundant assignments to tolerate Random Faults" with D Fotakis, in the Algorithmica Journal, 2002
- 43. "Robustness of Interconnections in random Graphs-a Symbolic Approach" with P Flajolet, K Hatzis, S Nikoletseas, in the journal of Theoretical Computer Science (TCS) in 2002 TCS 287(2002) pp 515-534.
- 44. "Radiocolorings in planar graphs: Complexity and approximations" with D. Fotakis, S. Nikoletseas, V. Papadopoulou, accepted in the Theoretical Computer Science (TCS) special issue on selected best papers of MFCS 2000. TCS A 340(2005) 514-538.
- 45. "Competitive Call Control in Mobile Networks" with G Pantziou and G Pentaris, in TOCS Journal (paper no 1032) 2002.
- 46. "Attack propagation in networks" with S. Nikoletseas, G Prasinos and C. Zaroliaghis, in TOCS (Theory of Computing Systems) Theory Comput. Systems 36, 553-574 in 2003, Special Issue. Springer Verlag, New York Inc.
- 47. "An efficient deterministic parallel algorithm for two processors precedence constraint scheduling" with H. Jung , and M. Serna. In the J. of Theoretical Computer Science (TSC A) , 292, 2003, pp 639-652.
- 48. "Distributed Communication and Control Algorithms for Ad-Hoc Mobile

- Networks" in the Journal of Parallel and Distributed Computing , JPDC , 2003 , Special issue on Mobile Ad-Hoc Networking and Computing. JPDC 63(1)58-79 2003 .With S. Nikoletseas and Y. Chatzigiannakis
- 49. "Approximate Equilibria and Ball Fusion", with M. Mavronicolas and E. Koutsoupias, in Theory of Computing Systems (TOCS) journal, TOCS 36, 683-693,2003, Springer Verlag, New York Inc. (invited paper, 2003).
- 50. "A hierarchical adaptive distributed algorithm for load balancing" with K Antonis, J Garofalakis, J Mourtos, in the Journal of Parallel and Distributed Computing (JPDC) 64(1) 151-162, 2004.
- 51. "Distributed Communication Algorithms" with I Chatzigiannakis, S. Nikoletseas, Bulletin of the EATCS 78,133-162, 2002.
- 52. "A Comparative study of Protocols for efficient Data Propagation in Smart Dust Networks" with I. Chatzigiannakis, T. Dimitriou,M. Mavronicolas and S. Nikoletseas, in Parallel ProcesingLetters (PPL), special issue on best papers from EUROPAR 03, Vol 13, No 4, Dec 2003.
- 53. "Efficient and Robust Protocols for Local Detection and Propagation in Smart Dust Networks" MONET J. (Mobile Networks and Applications), Springer Science, Special Issue, Algorithmic Solutions for Wireless, Mobile, Ad-hoc and Sensor Nets, with S.Nikoletseas and I. Chtatzigiannakis, accepted 2003, in MONET 10:1 pp 133-149, Feb 2005.
- 54. "Space Efficient Hash Tables with Worst Case Constant Access Time" with D. Fotakis, P. Sanders, Rasmus Pagh, in the Theory of Computer Systems Journal (TOCS), Special issue for best papers of STACS 03, vol 38(2) pp 229-248, 2005.
- 55. "The structure and complexity of Extreme Nash Equilibria" with M. Mavronicolas, B. Monien, M. Gairing, T. Luecking in the Special Issue of Theoretical Computer Science (TCS) "Game Theory meets Complexity", Editors M. Mavronicolas and S. Abramsky. in the TCSA Sept 2005 issue.
- 56."The impact of network structure on the stability of greedy protocols" with D. Koukopoulos, M. Mavronicolas, S. Nikoletseas, in the Theory of Computer Systems journal (TOCS), 38(4) 425-460, 2005.
- 57. "Efficiency of oblivious versus non-oblivious schedulers for optimistic rate based flow control" with P. Fatourou and M. Mavronicolas, accepted in SIAM J. of Computing, 34(5): 1216-1252, 2005.
- 58. "The cost of concurrent, low contention, Read Modify Write" with M. Mavronicolas and C. Busch, in Theoretical Computer Science (TCS) Track A, Elsevier Press, 2005, TCS 333, pp 373-400, 2005.
- 59. "Selfish Unsplittable Flows" with S. Kontogiannis and D. Fotakis,

- in Theoretical Computer Science (TCS) Track A, Elsevier Press, 2005, TCSA 348(2005) pp 226-239, invited paper from the ICALP 04 Conference.
- 60. "Max-Min fair flow control sensitive to priorities" with P. Fatourou and M. Mavronicolas, in the Journal of Interconnection Networks (JOIN), World-Scientific Publ., Summer 2005.
- 61. "Direct Routing: Algorithms and Complexity" with C. Busch, Malik Magdon-Ismail and M. Mavronicolas, in the Special Issue of the ALGORITHMICA journal for selected papers of the ESA 04 Conference, S. Albers Ed., April 2006.
- 62. "Radiocolorongs in Periodic Planar Graphs: PSPACE Completeness and efficient approximations for the optimal range of frequencies" with D. Fotakis, S. Nikoletseas, V. Papadopoulou, accepted in the Journal of Discrete Algorithms (JDA), Elsevier, 4(3) pp 433-454, 2006.
- 63. "Large independent sets in general Random Intersection Graphs" with C. Raptopoulos and S. Nikoletseas, invited paper in the Journal of Theoretical Computer Science (TCS), Special Issue on Algorithmic aspects of Global Computing, TCS 406, 2008, 215-224.
- 64. "A probabilistic Algorithm for efficient and Robust Data Propagation in Wireless Sensor networks" with I. Chatzigiannakis, T. Dimitriou, S. Nikoletseas, accepted in the Ad-Hoc Networks Journal, (JADHOC), Elsevier, 4(5), pp. 621-635, 2006.
- 65. "Weighted Random Sampling with a Reservoir" with P. S. Efraimidis, in Information Processing Letters, IPL, 97(5) pp181-195, 2006.
- 66. "The chromatic and clique numbers of random scaled sector graphs" with J. Diaz , V. Sanwalani , and M. Serna. Theoretical Computer Science , TCS-A , Vol. 349, No 1 , Dec 2005. pp 40-51. Special issue on Graph Colorings.
- 67. "The Characteristic Algorithmic Approach for Ad-Hoc Mobile Networks" with S. Nikoletseas, Column: Distributed Computing, Bulletin of the EATCS 82, pp 126-169, 2004.
- 68. "The Infection Time of Graphs" with T. Dimitriou and S. Nikoletseas. Accepted in the J. Discrete Applied Mathematics , 2006, Elsevier, P. Hammer Editor.
- 69. "Approximation schemes for scheduling and covering on Unrellated machines" with Pavlos Efraimidis, in the Theoretical Computer Science journal (TCS), 359(2006) pp 400-417, Algorithms, Automata, Complexity and Games track.
- 70. "Real Time Distributed Detection of Network Attacks" with Th. Komninos and H. Tsaknakis, accepted in the Inernational Journal of Computer Science and Network Security, August 2006.

- 71. "The Price of Selfish Routing" with M. Mavronicolas, to appear in the ALGORITHMICA journal, 2007 (Electronic Appearance in Algorithmica March 2007). In Algorithmica, Vol. 48, No 1, June 2007, pp. 91-126.
- 72. "Cost Sharing Mechanisms for Fair Pricing of Resources Usage" with M. Mavronicolas and P. Panagopoulou , in the Algorithmica journal , 52(1) , pp 19-43 , 2008.
- 73. "Performance and Stability bounds for Dynamic Networks" with D. Koukopoulos and M. Mavronikolas, accepted in JPDC (Journal of Parallel and Distributed Computing) J. Parallel Distr. Comp. (JPDC) 67(4), (2007), pp. 386-399.
- 74. "Algorithms for Pure Nash Equilibria in weighted Congestion Games", with P. Panagopoulou, in the ACM Journal of Experimental Algorithms, 11, 2006
- 75. "A worm propagation model based on Scale Free Network Structures and People's email acquaintance Profiles" with Th. Komninos, Y. Stamatiou and G. Vavitsas, accepted in the International Journal of Computer Science and Network Security (IJCSNS), Feb. 2007.
- 76. "Design, Analysis and Performance Evaluation of Group Key Establishment in Wireless Sensor Networks" with I. Chatzigiannakis, E. Konstantinou, V. Liagkou, in the Electronic Notes in Theoretical Computer Science Journal (ENTCS), Vol. 171, issue 1, pp 17-31, April 2007.
- 77. "The increase of the Instability of Networks due to Quasi-Static Link Capacities" with D. Koukopoulos and M. Mavronicolas, in the Journal of Theoretical Computer Science (TCS track A), 381(1-3), pp 44-56, 2007.
- 78. "Atomic Congestion Games among Coalitions" with D. Fotakis and S. Kontogiannis, in the ACM Transactions on Algorithms (TALG), 4(4), 2008.
- 79. "Efficient Sensor Networks Design for Continuous Monitoring of Moving Objects" with S. Nikoletseas, in the Special Issue of TCS Track A (Journal Theoretical Computer Science) for Algorithms in Sensor Nets. Theoretical Computer Science, Vol. 402, issue 1, 28 July 2008, pp 56-66.
- 80. "The Structure and Complexity of Nash Equilibria for a Selfish Routing Game" with S. Kontogiannis, M. Mavronicolas, E. Koutsoupias and D. Fotakis, to appear in the Journal of Theoretical Computer Science (TCS), Elsevier, 2008.
- 81. "Computing on a Partially Eponymous Ring" with M. Mavronicolas and Loizos Michael, in the Journal of Theoretical Computer Science (TCS A), for the Special Issue of selected papers from OPODIS 2007. TCS Vol. 410, (6-7) 2009, pp. 595-613.
- 82. "Random Sampling of colourings of Sparse Random Graphs with a Constant number of colours" with Ch. Eythymiou, in the journal of Theoretical Computer Science, TCS 407, pp 134-154, Elsevier, Nov. 2008.

- 83."A network game with attackers and a defender" with M. Mavronicolas, V. Papadopoulou and A. Philippou, in the Algorithmica journal, (electronic version available), vol. 51, No. 3, July 2008, pp. 315-341.
- 84. "Well Supported Approximate Equilibria in Bimatrix Games" with S. Kontogiannis, to appear in Algorithmica, 2009.
- 85. "The Survival of the Weakest in Networks" with S. Nikoletseas and C. Raptopoulos, to appear in the Journal of Computational and Organization Theory, Springer, 2009.
- 86. "The Price of Optimum in Stackelberg Games on Arbitrary Single Commodity Networks and Latency Functions" with A. Kaporis, in TCS (Theoretical Computer Science), Elsevier, TCS 410 (8-10) pp 745-755,2009.
- 87. "Probabilistic Distributed Algorithms for Energy Efficient Routing and Tracking in Wireless Sensor Networks", with S. Nikoletseas, in Algorithms (MDPI) Journal, 2, pp. 121-157, 2009.
- 88. "An Optimization Approach for Approximate Nash Equilibria" with H. Tsaknakis, to appear in the journal Internet Mathematics, 2009.
- 89. "Cost-balancing Tolls for Atomic Network Congestion Games" with D. Fotakis, to appear in the journal Internet Mathematics, 2009.
- 90. "Strategies for Repeated games with Subsystem Takeovers Implementable by Deterministic and Self-Stabilizing Automata" with E. M. Schiller, S. Dolev and P. Tsigas, accepted in the International Journal on Autonomous and Adaptive Communications Systems (IJAACS), Special issue for the Autonomics 2008.
- 91. "Atomic Congestion Games: Fast, myopic and concurrent" with D. Fotakis and A. Kaporis, to appear in the Theory of Computing Systems (TOCS) journal, (Special issue on selected papers from SAGT 2008), 2009.
- 92. "On the support size of stable strategies in random games" with S. Kontogiannis, in the journal Theoretical Computer Science (TCS) 410 (8-10) pp 933-942, 2009.
- 93. "Book Review : Algorithmic Game Theory (Review of the Book by Nisan et al) , Computer Science Review Vol.3 , Issue 1 , Feb. 2009 pp. 41-46.
- 94. "Polynomial Algorithms for Approximate Nash Equilibria of bimatrix games" with S. Kontogiannis and P. Panagopoulou, J. Theoretical Computer Science (TCSA), Vo. 410(17), pp 1599-1606 (2009), Special Issue for WINE 2006.

## Papers published in Refereed Conferences Proceedings

- 1. "Fast Parallel Algorithms and the Complexity of Parallelism" (Invited Paper) PARCELLA 88 Conference, Academie-Verlag, Oct. 1988.
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- 147. "On radiocoloring hierarchically specified Planar Graphs: PSPACE completeness and approximations" with M Andreou, D Fotakis, S Nikoletseas, V Papadopoulou, in the 27th International Symposium on Mathematical Foundations of Computer Science (MFCS 2002), LNCS Springer-Verlag Proceedings.
- 148. "Smart Dust Protocols for Local Detection and Propagation" with S. Nikoletseas and I. Chatzigiannakis, in the ACM Principles of Mobile Computing, ACM POMC 2002, Proceedings.
- 149."On the Stability of Compositions of Universally Stable Greedy Contention Resolution Protocols" with D. Koukopoulos, M. Mavronicolas and S. Nikoletseas, in DISC (Distributed Computing Conference) 2002, LNCS Springer-Verlag Proceedings.
- 150. "The impact of network structure on the stability of Greedy Protocols" with D. Koukopoulos, M. Mavronicolas and S. Nikoletseas in the 2003 CIAC Conference, LNCS Springer-Verlag Proceedings.
- 151. " Algorithms and Experiments on Colouring Squares of Planar Graphs" with M. Andreou and S. Nikoletseas, in the 2003 Workshop on Experimental Algorithms (WEA 2003) Proceedings.
- 152. "Space Efficient Hash Tables with Worst Case Constant Access Time" with D. Fotakis, R. Pagh, P. Sanders, in the 2003 Symposium on Theoretical Aspects of Computer Science (STACS 2003), LNCS Springer-Verlag Proceedings.
- 153. "The cost of concurrent low contention Read Modify Write", with G Busch and M Mavronicolas, accepted in SIROCCO 03.
- 154. "Instability of networks with Quasi-static Link Capacities" with M Mavronicolas and D Koukopoulos, accepted in SIROCCO 03.
- 155. "Which is the worst case Nash Equilibrium?" with T. Luecking,

- M. Mavronicolas, B. Monien, M. Rode, I. Vrto, in the 2003 Mathematical Foundations of Computer Science (MFCS 2003),proceedings, Springer-Verlag.
- 156. "A comparative study of Protocols for efficient Data Propagation in Smart Dust Networks", with I. Chatzigiannakis, T. Dimitriou, M. Mavronicolas and S. Nikoletseas, DISTINGUISHED PAPER in EUROPAR 2003, Proceedings, Springer-Verlag.
- 157. "Nanopeer networks and Peer to peer worlds" in the 3rd IEEE International Conference on P2P computing, with S Nikoletseas, N Ntarmos, P Triantafillou, to appear, 2003 (P2P 2003).
- 158. "Extreme Nash Equilibria" with M. Gairing, T. Luecking, B. Monien, M. Mavronicolas, in the 8th Italian Conference on Theoretical Computer Science (ICTCS) Oct 2003, Invited paper.
- 159. "Electronic National Lotteries" with E. Konstantinou, B. Liagkou, Moti Young, I. Stamatiou, in the Conf. on Financial Cryptography (FC 04) 2004. Proceedings Springer Verlag LNCS.
- 160. "A Probabilistic Algorithm for efficient and robust Data Propagation in Smart Dust Networks", with I.Chadjigiannakis, T. Dimitriou, S. Nikoletseas, in the European Wireless 2004 Conference, accepted.
- 161. "Performance and Stability bounds for Dynamic Networks" with D. Koukopoulos and M. Mavronicolas, accepted in the 2004 ISPAN Conference (7th International Conference on Parallel Architectures, Algorithms and Networks"), Proceedings.
- 162. "SPEED: Scalable Protocols for Efficient Event Delivery in Sensor Networks", with T. Dimitriou, I. Krontiris and F. Nikakis, in the 3rd IFIP-TC6 Networking Conference (Networking 04), pp1300-1305.
- 163. "How to tell a good neigbourhood from a bad one: Satisfiability of Boolean formulae" with T. Dimitriou, in WEA 2004 (Workshop in Experimental Algorithms), Proceedings LNCS Springer-Verlag.
- 164. "The existence and efficient construction of large Independent Sets in General Random Intersection Graphs" with S. Nikoletseas and C. Raptopoulos , accepted in ICALP 2004 , Proceedings LNCS Springer-Verlag, Turku , Finland , July 2004.
- 165. "Selfish Unsplittable Flows" with D. Fotakis and S. Kontogiannis, accepted in ICALP 2004, Proceedings LNCS Springer-Verlag, Turku, Finland, July 2004.
- 166. "Evolutionary Game Theory: The Algorist's perspective" with S. Kontogiannis, in the "SELF\*" workshop, Bertinoro, Italy, June 2004.

Appeared as "Evolutionary Games: An algorithmic view" in the Self-Star Properties in Complex Information systems, pp 101-111, 2005.

- 167. "Foundational and Algorithmic aspects of Sensor Networks" invited paper and talk in the ALGOSENSORS 04 workshop, sattelite of ICALP 04, in the ALGOSENSORS 04 volume of LNCS, Springer-Verlag.
- 168. "Analysis of Information Propagation time between mobile entities" with T. Dimitriou and S. Nikoletseas , ADHOC-NOW 2004, Proceedings, Springer Verlag , LNCS.
- 169. "Direct Routing : Algorithms and Complexity" with C. Busch, M. Magdon-Ismail and M. Mavronicolas, in 12th Annual European Symposium on Algorithms (ESA 2004) , Track A,

LNCS Springer-Verlag Proceedings.

- 170. "self-organization of dynamic network entities for low contention routing via random walks" with S. Nikoletseas , DELIS workshop on Algorithmic Problems in ad-hoc networks, Wroclaw , Poland, June 25-27 2004, Proceedings.
- 171. "Efficient Information Propagation Algorithms in Smart Dust and NanoPeer Networks" with S. Nikoletseas, in GLOBAL COMPUTING 04, LNCS, Springer-Verlag.
- 172. "Experimental results for Stackelberg scheduling strategies", with A. Kaporis, E.Politopoulou, L. Kirousis, in the Workshop on Experimental and Efficient Algorithms 2005 (WEA 05), LNCS Springer-Verlag proceedings.
- 173. "Efficient convergence to Pure Nash equilibria in weighted network congestion games" with P. Panagopoulou , in the Workshop on Experimental and Efficient Algorithms 2005 (WEA 05) , LNCS Springer-Verlag proceedings.
- 174. "Generating and Radiocoloring Families of Perfect Graphs" with M. Andreou , V. Papadopoulou , B. Theodoridis and A. Xeros , in the Workshop on Experimental and Efficient Algorithms 2005 (WEA 05), LNCS Springer-Verlag proceedings.
- 175. "On the Existence of Hamilton Cycles in Random Intersection Graphs" with C. Efthymiou, in ICALP 05 Track A, LNCS Springer-Verlag.
- 176. "An application of the Monotone Linearizability Lemma" with C. Busch and M. Mavronicolas, in the Distributed Computing Column, EATCS Bulletin, pp 70-80, No 85, Feb. 2005.
- 177. "Symmetry in Selfish Routing" with S. Kontogiannis and D. Fotakis, to appear in the WAOA workshop of the ALGO 05 Conference, 2005, Springer-Verlag Proceedings.

- 178. "Selfish Routing and Congestion: A survey with S. Kontogiannis, a short paper in the 2nd European Conference on Complex Systems.
- 179. "Distributed algorithms for data propagation in deeply networked wireless sensor systems" with I. Chatzigiannakis and S. Nikoletseas , in the Proceedings of the 2nd European Conference on Complex Systems, (short paper) (ECCS 05) , 2005.
- 180."Trust Engineering: from requirements to system design and maintenance. (A working national lottery system experience) with E. Lonstantinou, V. Liagkou, Y. Stamatiou and M. Yung, in the Information Security Conference (ISC) 2005, proceedings, Springer-Verlag.
- 181. " A Cost Mechanism for Fair Pricing of Resource Usage" with M. Mavronicolas and P. Panagopoulou, in the WINE 2005, dec 15-17 05, Spinger-Verlag proceedings. (Accepted in the Main Programme).
- 182. " A Graph-Theoretic Network Security Game" with M. Mavronicolas, V. Papadopoulou, A. Philippou, in the WINE 2005, Special session on Internet Security, Dec 15-17 2005, Springer-Verlag Proceedings.
- 183. "Atomic Selfish Routing in Networks : A Survey "with S. Kontogiannis, accepted in WINE 2005, Special session on Network Protocol Pricing, Dec 15-17 2005, Springer-Verlag Proceedings.
- 184. "Simple and Efficient Greedy Algorithms for Hamilton Cycles in Random Intersection Graphs" with C. Raptopoulos, accepted in the ISAAC 2005 Conference, Dec 19-21 2005, Springer-Verlag Proceedings.
- 185. "Counting Stable Strategies in Random Evolutionary Games" with S. Kontogiannis, in the ISAAC 2005 Conference, Dec 19-21 2005, Spinger-Verlag Proceedings.
- 186. "A Network game with Attacker and Protector Entities" with M. Mavronicolas, V. Papadopoulou and A. Philippou, in the ISAAC 2005 Conference, Dec 19-21 2005, Springer-Verlag Proceedings.
- 187. "The Contribution of Game Theory to Complex systems" with S. Kontogiannis, in the PCI 2005, LNCS, 105-111.
- 188. "The power of the Defender" with M. Gelastou , M. Mavronicolas , V. Papadopoulou and A. Philippou , in the Workshop on Incentives Based Computing (IBC ) , IEEE Conf. on Distributed Computing Systems (ICDCS workshop) , Lisboa , July 2006.
- 189. "Atomic Congestion Games among Coalitions" with D. Fotakis and S. Kontogiannis, in ICALP 2006, Venice, Springer-Verlag Proceedings.

190. "The price of Optimum in Stackelberg games on arbitrary nets and latency functions", with Alex Kaporis,

in ACM SPAA, Symposium on Parallelism in Algorithms and Architectures, ACM Proceedins, Aug 30-Sep 2 2006 Boston USA.

- 191. "The threshold behaviour of the fixed radious random graph model and applications to the key management problem of sensor nets" with V. Liagkou, Y. Stamatiou and E. Makri , in ALGOSENSORS 2006, LNCS Springer-Verlag Proceedings.
- 192. "Design , analysis and Performance Evaluation of Group Key Establishment in Wireless Sensor Networks" with V. Liagkou, Y. Chatzigiannakis and E. Konstantinou in the 2nd Workshop on Cryptography for Ad Hoc Nets, WCAN 2006 , LNCS Springer-Verlag

Proceedings.

193. "The Price of Defense" with M. Mavronicolas, L. Michael, V. Papadopoulou and A. Philippou,

in the 2006 Mathematical Foundations of Computer Science Conference (MFCS 2006) LNCS Springer-Verlag Proceedings .

194. "Efficient approximations of Nash Equilibria" with S. Kontogiannis and P. Panagopoulou,

in WINE 2006, Proceedings, LNCS.

- 195. "The Price of Defence and Fractional Matchings" with M. Mavronicolas, G. Persiano, A. Philippou, V. Papadopoulou .Accepted in the ICDNC Conference, 2006.
- 196. "Antagonism in Networks: The survival of the weakest" with Ch. Raptopoulos and S. Nikoletseas, accepted in the ALGO 06 workshop WAOA (Workshop on Approximation and on-line Algorithms) 2006.
- 197. "Computing on a Partially Eponymous Ring" with M. Mavronicolas and Loizos Michael, in OPODIS 2006, LNCS Proceedings.
- 198. "Trust in Global Computing Systems as a limit property emerging from short range random interactions" with V. Liagkou, E. Makri, Y. Stamatiou, in the ARES 2007 (Frontiers section), Proceedings.
- 199. "Approximate and well supported approximate Nash Equilibria of Random bimatrix games" with P. Panagopoulou, accepted in PCI 2007.
- 200. "Convergence to Approximate Equilibria in Congestion Games among Coalitions" with D. Fotakis and S. Sarigiannidis, accepted in PCI 2007.
- 201. "On the asymptotic behaviour of formal logic based trust models" with E. Makri, V. Liagkou, Y. Stamatiou, accepted in PCI 2007.
- 202. " Agent-based Distributed Group Key Establishment in Wireless Sensor Networks " , with I. Chatzigiannakis , V. Liagkou,

- and E. Kwnstantinou, accepted in TSPUC 2007, the 3rd IEEE International workshop on Trust, Security and Privacy for Ubiquitus Computing, Helsinki, Finland June 2007, Proceedings.
- 203. "Efficient algorithms for Constant Well Supported Approximate Equilibria in Bimatrix Games" with Spyros Kontogiannis, accepted in ICALP 2007, LNCS Proceedings, Springer-Verlag.
- 204. "The second eigenvalue of random walks on symmetric Random Intersection Graphs" with S. Nikoletseas and C. Raptopoulos, accepted in the Conference on Algebraic Informatics.
- CAI 2007, Springer-Verlag LNCS Proceedings.
- 205. "A trust-centered approach for building e-voting systems" with A. Antoniou , C. Korakas.
- C. Manolopoulos , A. Panagiotakis , D. Sofotassios , Y. Stamatiou , in the EGOV 2007 Conference , accepted , Proceedings LNCS Springer.
- 206. "Game Authority for Robust and Scalable Distributed Selfish Computer System" with E. Shiller, S. Dolev, F. Tsigas, accepted as a brief announcement (BA) in the 26th ACM PODC (Principles of Distributed Computing) 2007, ACM Proceedings.
- 207. "On the Support Size of Stable Strategies in Random games" with S. Kontogiannis, accepted in the 4th Symposium on Stochastic Algorithms, Foundations and Applications, SAGA 2007, LNCS Springer Proceedings, Sept. 2007.
- 208. "Selfish Load Balancing under Partial Knowledge" with E. Koutsoupias and Panagiwta Panagopoulou, accepted in the 32nd International Symposium on Mathematical Foundations of Computer Science (MFCS 2007), LNCS Springer Proceedings, Aug. 2007.
- 209. "Well Supported Approximate Equilibria in Bimatrix Games" with S. Kontogiannis, accepted in the 32nd International Symposium on Mathematical Foundations of Computer Science, (MFCS 2007), LNCS Springer Proceedings, Aug. 2007.
- 210. "Expander Properties and the Cover Time of Random Intersection Graphs" with S. Nikoletseas and C. Raptopoulos , accepted in the 32nd International Symposium on Mathematical Foundations of Computer Science , (MFCS 2007) , LNCS Springer Proceedings , Aug. 2007.
- 211. "Probabilistic Techniques in Algorithmic Game Theory", with S. Kontogiannis, Invited paper and invited talk, in the 4th Symposium on Stochastic Algorithms. Foundations and Applications, SAGA 2007, LNCS Springer Proceedings, Sept. 2007.
- 212. "The digital territory as a Complex System of interacting agents, emergent properties and technologies" with V. Liagkou, E. Makri, Y. Stamatiou. Accepted in the 2007 European Symposium on Complex Systems (ECCS 07), as a short paper.
- 213. "Efficient Sensor Network Design for Continuous Monitoring of Moving objects" with S. Nikoletseas, accepted in ALGOSENSORS 2007, July 2007, Wroclaw, Poland, LNCS Proceedings, LNCS 4837, pp 18-31, 2008.

- 214. "Full and Local Information in Distributed Decision Making" with P. Panagopoulou, in the Workshop on Approximate and On-Line Algorithms, WAOA 2007, in ALGO 2007, Eilat, Israel, LNCS Proceedings.
- 215. "An Optimization Approach for Approximate Nash Equilibria" with H. Tsaknakis, accepted in the 3rd International Workshop on the Internet and Network Economics (WINE 2007), San Jose, USA, Dec. 2007, LNCS Springer Proceedings. Also in the Electronic Colloquium on Computational Complexity (ECCC) TR07-067.
- 216. "Cost-Balancing Tolls for Atomic Network Congestion Games" with D. Fotakis, accepted in the 3rd International Workshop on the Internet and Network Economics (WINE 2007), san Jose, USA, Dec. 2007, LNCS Springer Proceedings.
- 217. "Optimal Algorithms for Detecting Network Stability", with D. Koukopoulos, S. Nikolopoulos, and L. Palios, in the WALCOM 2008, Springer-Verlag LNCS Proceedings.
- 218. "Selfish Load Balancing: Concurrent, myopic and fast" with D Fotakis and A Kaporis, in the 2008 Symposium on Algorithmic Game Theory (SAGT 08), LNCS Proceedings.
- 219. "Myopic Distributed Protocols for singleton and independent-resource congestion Games" with D. Kaporis and D. Kalles, accepted in the Workshop on Experimental Algorithms, WEA 2008, LNCS Proceedings.
- 220. "Approximate Nash Equilibria for strategic two person Games" Invited Paper , in the 2008 Symposium on Algorithmic Game Theory, SAGT 2008 , LNCS Proceedings.
- 223. "Approximate Equilibria in Bimatrix Games" with S. Kontogiannis, P. Panagopoulou and H. Tsaknakis, in the Heinz Nixdorf Institut Volume 222, The European Integrated Project "Dynamically Evolving, Large Scale Information Systems (DELIS)", pp. 165-187, Feb. 2008.
- 224. "A Trusted Architectural Model for Interconnecting Testbeds of Wireless Sensor Networks" with I. Chatzigiannakis and V. Liagkou , in the Proceedings of the 2008 IEEE ELMAR Conference.
- 225. "Scheduling Tasks with Dependencies on Assymetric Multiprocessors: Energy and Time efficiency" with I. Chatzigiannakis and G. Gianoulis, in the ACM PODC 2008 Proceedings, as a brief announcement.
- 226. "The Dynamics of Probabilistic Population Protocols" with I. Chatzigiannakis, accepted in the DISC 2009 Conference as a brief announcement, Springer Verlag Proceedings.
- 227. "A Secure Architectural Model for an Internet-Based Digital Assets Management System" with I. Chatzigiannakis, V. Liagkou and D. Salouros, in the 2nd European Conference on Software Architectures as

- a Research Challenge paper, LNCS Proceedings.
- 228. "Adaptive Probabilistic Secure Routing in Mobile Wireless Sensor Networks" with I. Chatzigiannakis, V. Liagkou and K. Mpairaktaris, accepted in SoftCOM 2008 (IEEE Press proceedings).
- 229. "A step-wise refinement approach for enhancing eVoting acceptance" with C. Manolopoulos, P. Nakou , A. Panagiotaki , D. Sofotasios and Y. Stamatiou , accepted in ICEGOV2008.
- 230. "A Game Theoretic Approach for Efficient Graph Coloring" with P. Panagopoulou, in ISAAC 2008, Australia, LNCS Proceedings.
- 231. "The Dynamics of Adaptive Networked Societies of Tiny Artefacts" with I. Chatzigiannakis, in the Proceedings of the PerAda Workshop, 2008.
- 232. "Equilibria via correlated threats" with S. Kontogiannis , in WINE 2008 , LNCS Proceedings.
- 233. "Performance analysis of an optimization approach for approximate Nash equilibria in 2 person games" with Ch. Tsaknakis and D. Kanoulas, in WINE 2008, LNCS Proceedings.
- 234. "Combinatorial Properties for Efficient Communication in Distributed Networks with Local Intercations" with S. Nikoletseas and Ch. Raptopoulos, accepted in IEEE IPDPS 2009, Proceedings.
- 235. "Mediated Population Protocols" with O. Michail and I. Chatzigiannakis, accepted in the ICALP 2009 Conference, Track C, Springer Proceedings.
- 236. "Efficient Methods for Selfish Network Design" with D. Fotakis and A. Kaporis, accepted in the ICALP 2009 Conference, Track C, Springer Proceedings.
- 237. "On the performance of Approximate Equilibria in Congestion Games" with G. Christodoulou and E. Koutsoupias , accepted in the European Symposium of Algorithms (ESA) 2009 , LNCS Proceedings.
- 238. "Colmogorov Complexity Arguments in Propositional Logic" with I. Stamatiou, accepted in the PLS7 (Panhellenic Logic Symposium 2009), LNCS Proceedings.
- 239. "Colouring Non Sparse Intersection Graphs" with S. Nikoletseas and Ch. Raptopoulos , in MFCS 2009 (Mathematical Foundations of Computer Science) LNCS Proceedings.
- 240 . " Graph Mediated Protocols" with I Chatzigiannakis and O. Michail , accepted as a short paper in DISC 2009.

Volume Prefaces, Reports in the ECCC, Posters and Survey Articles.

- 1. "The logical First mile-Last mile Digital Termination Systems" in ICC 1986.
- 2. "VLSI Algorithms and Architectures" with F Maakedon, K Mehlhorn and T Papatheodorou, Aegean Workshop on Computing 1986.
- 3. "Algorithms" in ESA 1995.
- 4. "SIROCCO 96" with N. Santoro.
- 5. "Editor's foreword" in J. Theory of Computer Systems 1997.
- 6. "Random walks, conditional hitting sets and partial derandomization" with D. Fotakis, ECCC 1998.
- 7. "Graph Properties that facilitate travelling" with D. Fotakis ECCC 1998.
- 8. "Randomised Approximation schemes for scheduling unrelated parallel machines" with P. Efraimidis, ECCC 2000.
- 9. "Efficient Communication Establishment in Extremely Unreliable large Networks" with S. Nikoletseas, ECCC 2000.
- 10. "SIROCCO 2000" with M. Flammini, E. Nardelli, G. Protasi.
- 11. "The range of stability for heterogeneous and FIFO queuing nets" with D. Koukopoulos and S. Nikoletseas in ECCC 2001.
- 12. "Hardenss results and efficient approximations for frequency assignment problems and the Radio Coloring problem" with D. Fotakis, S. Nikoletseas, V. Papadopoulou in the Bulletin of the EATCS 75,2001.
- 13. "ICALP 2001" with F. Orejas and J.v. Leewven
- 14. "Mobile Computing, Mobile Networks" with F.Meyer auf der Heide, Mohan Kumar, S. Nikoletseas, EUROPAR 2002.
- 15. "FIFO is unstable at arbitarrily low rates " with D. Koukopoulos and M. Mavronicolas in ECCC 2003.
- 16. "Preface" with Shay Kutten in TCS 2003.
- 17. "A Software Tool for distributed Intrusion Detection in Computer Networks" with Y. Stamatiou, Th. Komninos, Giannakopoulos and Baleontis, Poster Session, ACM PODC 2004. Best Poster Presentation Award.
- 18. "The price of Optimum in Stackelberg Games" with E. Politopoulou and

- A. Kaporis, ECCC TR05-056, 2005.
- 19. Preface in the book (in Greek) "The future will judge us all" (THA MAS KRINEI OLOUS TO MELLON), about the introduction of Computing Technologies in the Greek Public Education System, Greek Letters (ELLHNIKA GRAMMATA) publishers, 2005.
- 20. "SPAA 2005", ACM Press Proceedings.
- 21. "IPDPS 2006" IEEE Press Proceedings.
- 22. "Efficient approximations to Nash Equilibria" with S. Kontogiannis and P. Panagopoulou, in the ECCC 2006.
- 23. "A security game " with M. Mavronicolas, A. Philippou , V. Papadopoulou , in the ECCS 2006 Conference.
- 24. "Spatial and Temporal Mixing Time of Glauber Dynamics" with Ch. Euthymiou, in the ECCS 2006 Conference.
- 25. Preface and scientific supervision of the Greek Tarnslation of the works of C. Shannon "Information Theory", Leader Books (in Greek)
- 26. "Internet and Network Economics". Preface of the WINE 2006 volume, with S. Kontogiannis and M. Mavronicolas, LNCS Springer.
- 27. "Eight Open Problems in Distributed Computing" with J. Aspnes, S. Dolev, P. Fatourou, C. Georgiou, C. Bush, A. Shvartsman, R. Wattenhofer, in the Bulletin of the EATCS, Oct. 2006, No 90, pp. 90-109
- 28. "An Optimization method for Approximate Nash Equilibria" with H. Tsaknakis, accepted as an ECCC Tech. Report , TR07-067.
- 29. "Guarding our digital society's well-being" with F. Meyer auf der Heide, S. Leonardi, P. Mahlmann, G. Weikum, in the wide circulation journal e-Strategies, 3-10-2007, www.britishpublishers.com.
- 30. Preface, TCS 410(17) pp 1551, Special Issue for WINE 2006 (2009).

# Prestigeous Invitations and Reports

- 1. Dagstuhl Computer Science Seminar on Analysis of Algorithms , July 1993 :Invited talk and report on " Regular random graphs with edge faults "
- 2. Dagstuhl Computer Science Seminar on Parallel Algorithms, Sept 1993: Invited talk and report on "Five paradigms for fast parallel approximations to problems that are hard to parallelise"

- 3. DIMACS Workshop on Parallel Algorithms "From Solving Combinatorial Problems to Grand Challenge Problems" Invited talk and report on "Paradigms for fast parallel approximations for problems that are hard to parallelise". Nov 17-19 1993, DIMACS Center, Rutgers Univ.
- 4. Keynote speaker in the 10th Anniversary of the British Theoretical Computer Society , March 1994
- 5. Dagstuhl Computer Science Seminar "random graphs and expanders" April 10-17 , 1994
- 6. Obervolfach seminar on Data Structures and Algorithms August 1994.
- 7. Dagstuhl Computer Sciene seminar on "on-line algorithms" 1995
- 8. Nominator for the Inamori Prizes in Information Sciences, 1995,1999
- 9. Invited Lectures on approximations complexity in the 1994 SCHOOL OF COMPLEXITY, Barcelona, Sept. 1994
- 10. Invited Lecturer on Parallel Algorithms in the School of Parallel Computation, Padova, Italy, June 1996
- 11. Invited Lecturer in the SCHOOL OF APPROXIMATION , Unesco and CISM, Trieste, Italy , Sept. 1996
- 12. Invited Speaker in the DIMACS Workshop on Discrete Probability, spoke about " Almost uniform generation of matchings in RNC", work joint with J Diaz, M Serna, P Psycharis and S Nikoletseas, DIMACS Rutgers Univ, Oct 1996.
- 13. Invited Speaker in the Theory Day of Paderborn Univ. , Germany , Febr. 1996
- 14. Keynote address speaker in the Workshop on randomised parallel computation (WRPC) of IPPS, March 1997, work joint with J. Diaz, M. Serna and P. Psycharis.
- 15. Invited speaker in the 1997 ALTEC II workshop (Saarbrucken, May 1997).
- 16. Invited speaker in the July 1997 Dagstuhl seminar on Average case analysis of algorithms.
- 17. Invited Speaker in the 1997 SIROCCO Conference
- 18. Invited Speaker in the DIMACS Workhshop on Networks and Distributed Computing , spoke about "On Line Algorithms for Mobile Networks" joint work with D Fotakis , G Pentaris , T Pantziou

### Lecture Notes and Books in Greek Language

- 19. " Invited Speaker in the Formal Languages Theory (FLT) 1997 Conference, in Thessaloniki , July 97 . Spoke about "Languages that Count"
- 20.Invited Speaker in the Dagstuhl Seminar in Agorithmic Aspects of Physics , Dec 1997 . Spoke about "Quantum Computing vs Classical Computing"
- 21.Invited Speaker in the 1999 Workshop on Phase Transition Systems, Univ of Liverpool, UK 1999. Title of talk "Thresholds in random structures"
- 22. Invited Speaker in the 1998 Workshop on AI, Thessaloniki, Greece, title "New results on Probabilistic Checkable Proofs"
- 23. Invited Speaker in the Dagstuhl Seminar on Parallel and Distributed Computing, Summer 1999.
- 24. Tutorial Speaker in the 1999 ACAI Conference, on the subject "Genetic Algorithms: An algorithmic approach", with P Psycharis, July 1999.
- 25. Invited Speaker in the 1999 School on "Chaos and Nonlinear Dynamics", on "Algorithmic Complexity". Joint work with D Fotakis. Patras, 1999.
- 26, "Invited member of the "Brainstorming Meeting in Computer Science", Jan 2000, CEC EU IST FET Proactive action.
- 27. Invited keynote speaker in the 2nd European Parliamentarian Conference, in the topic: Internet and democracy, Jan 2000
- 28. Invited Speaker in the MPI Computer Science Seminar . Spoke on the subject of "Distributed Decision Making : The case of no Communication", Feb 2000.
- 29. Invited Speaker in the Computer Science colloquium of Duke University, March 2000, on the subject of Distributed Decision Making.
- 30. Invited Speaker in the MFCS workshop in Algorithmic aspects of Networks , on the subject of Radio Frequency Assignment.
- 31. Lecturer in the School on Distributed Computing , MPI , Saarbrucken , on the topic "Mobile Computing " , Sept  $2000\,$
- 32. Invited Speaker in the Dagstuhl Seminar on Parallel and Distributed Computing, Sept 2000.
- 33. Invited Speaker in INRIA (Ph Flajolet group) France. November 2000. Spoke about Distributed Decision Making.

- 34. Keynote address in the 8th International Conference in High Performance Computing, Dec 2001, Hyderaband India. Title: Instability of FIFO and of Mixings of Stable Policies for Networks".
- 35. Invited lecturer in Max Planck Informatik for four lectures in the seminar of algorithmic aspects of networks , Fall 2001.
- 36. Invited speaker in the 18th British Colloquium on Theoretical Computer Science, HP Labs, Bristol, 7-11 April 2002.
- 37. Invited speaker in the Max Planck Symposium "Perspectives in Computer Science", Berlin, April 29-30 2002.
- 38. Invited speaker in the Dagstuhl Seminar on randomization and approximation in networks, June 2002.
- 39. Invited Guest of the Russian Academy of Sciences , Computing Center, April 2003.
- 40. Invited speaker in DIMACS seminar (Fall 2002) on Mobility Issues in Algorithms.
- 41. Invited Speaker in the 2003 Onassis Foundation Lectures, "Algorithmic Aspects of the Internet and the Web", Crete, July 2003.
- 42. Coauthor of the CEU-FET Report for the design of Global Computing II, with V. Sassone et al, Spring 2003.
- 43. Invited Lecturer of the minicourse on "Game Theory and Complexity" in the Universitat Politechnica Catalunya, Computer Science Dept, Barcelona, Spain, June 2003.
- 44. Lecturer (invited) of the Berkeley Univ CS Dept Theory Lunch (Dec 2003) on "the full mix Nash equilibrium conjecture".
- 45. Invited lecturer in the AGATE workshop "Algorithms and Game Theory" in Bertinoro , Italy , July 2004.
- $46.\ Invited\ speaker\ in\ SIROCCO\ 2004$  , June 04 , on "Algorithmic issues of congestion games."
- 47. Keynote speaker in ALGOSENSORS 2004.
- 48. Invited Speaker in the 2004 European Conference on Complex Systems (Future and Emerging Technologies FET-EU), Dec 5-8 2004. Title of talk: "The Complexity of Equilibria and the Cost of Anarchy in Network Congestion Games".
- 49. Invited Lecturer of the minicourse "Recent advances on Algorithmic Game

- Theory ", in the Universitat Politechnica Catalunya, Computer Science Dept. Barcelona, Spain, Oct 26-30 2004.
- 50. Invited keynote speaker in the 2005 March National Event on CS Research in Germany , Paderborn , March 2005.
- 51. Invited speaker in the "European Constitution" event, in the Patras Lawers auditorium, organised by the Ministry of Foreign Affairs. Subject spoken: Innovation and Technology in Europe, Feb 2005.
- $52.\ Invited\ Speaker$  in the Conference on Algebraic Informatics , The salloniki , Greece , Sept. 2005.

Talk: Monotone Groups and Monotone Operations.

- 53. Keynote Speaker, Greek Mathematical Society (Patras Branch), on the occasion of Prizes of the 2004 Competition.

  Title of talk: New Mathematics and new technology.
- 54. Invited speaker in the Dagstuhl Seminar on Complex Networks, Sept. 2005. Spoke on "A fair mechanism for resources pricing".
- 55. Invited speaker in the EU COST workshop on Algorithmic Challenges in Computer Science, Brussels, Aug 30-31 2005.
- 56. Invited speaker at the 2005 Panhellenic Conference in Informatics (PCI), Volos, Greece, Nov. 2005.
- 57. Keynote Speaker in the "Incentive Based Computing (IBC) 2005" Workshop, Compiegne, France, Sept. 2005.
- 58. Keynote Speaker in the Workshop on Autonomic Communications (WAC 2005).
- 59. Invited Speaker in the 2006 International Heinz Nixdorf Symposium , Paderborn, Germany.

January 17-18, 2006. Spoke on "Algorithmic issues in Coalitional and Dynamic Network Games".

- 60. Invited Speaker at the Feb 2006 Obervolfach seminar on Algorithmic Graph Theory. Spoke on "Graphs, Games and Algorithms".
- 61. Invited Speaker at the May 25-28 2006 Bertinoro Workshop on Cooperation among Selfish Entities (incorporating TagWorld 1). Spoke on "Coalitional and Antagonistic Games: Algorithmic Issues".
- 62. Invited Speaker at the August 30-31 2006 Workshop on Networks and Complexity. Spoke about "Cooperation and Antagonism in Networks". Sounio Greece 2006. Organiser: L. Tasioulas. Sponsored by Eurongn, an excellence network for Networks Science.
- 63. Coauthor of the report: "More is Different: The challenge of Complexity".

Published by the Excellence Network EXYSTENCE (Complex Systems Network of Excellence),

ISI, FET EU 2006.

- 67. Invited Lecturer of the UPC Barcelona minicourse on " Advances in Algorithmic Game Theory ", Oct 17-21 2006. Paul Spirakis was the single Lecturer in this course.
- 68. Invited Speaker in the DELIS CompNet workshop, Barcelona, Oct 20 2006. Title of talk: "Random Intersection Graphs"
- 69. Keynote speaker in the 23rd Conference of the Greek Mathematical Society (EME). Title of talk " Mathematics and Technology", EME Proceedings, Nov 2006.
- 70. Invited Speaker in the Bertinoro Workshop on "Adversarial Networks Theory". Title of talk: Network Security Games. Nov 27-30 2006, Bertinoro, Italy.
- 71. Invited lecturer in the Aeolus School on "Algorithmic Network Theory", Dec. 15-17 2006, Patras, Greece.
- 72. Chair of the PERAD 2007 Workshop, jointly organised by the EU/FET and EATCS, on Pervasive Adaptation, Brussels, Jan 26 2007.
- 73. Keynote Speaker of the 2007 (March) Annual Meeting of the AG Monien of the Univ. of Paderborn, held in Cyprus (Paphos). Paul Spirakis spoke about Efficient Algorithms for the construction of Well-Supported Approximate Nash Equilibria.
- 74. Invited Speaker in the March 2007 (25-28 March) workshop on Algorithmic Game Theory (AGT) of the DIMAP Institute of the University of Warwick, UK. Paul Spirakis spoke about Efficient Algorithms for Well-Supported Approximate Nash Equilibria.
- 75. Invited speaker at the May 7-11 Oberwolfach seminar 2007 on "Algoritms Engineering" where he spoke on "Experiments in Algorithmic Game Theory". Oberwolfach Report 25, 2007, jointly with P. Panagopoulou.
- 76. Invited Visitor at the Univ. of Paderborn, AG Monien Group, June 25-30 2007.
- 77. Invited Speaker in the 2007 SAGA Conference (Symposium on Stochastic Algorithms and

Applications). Spoke about : Probabilistic techniques in Algorithmic Game Theory. Sept. 13 and 14, 2007, ETH, Zurich.

- 78. Invited Lecturer in the 2007 Aeolus School of the Univ. of Salerno and EU/FET. Spoke about: A formal model of trust in global computers and applications to key establishment protocols in sensor networks. Sept. 18 2007.
- 79. Invited Lecturer of the UPC Barcelona minicourse on "Foundational Aspects of Sensor Networks", Sept. 24-28 2007. Paul Spirakis was the single Lecturer

in this course.

- 80. Invited speaker in the IFIP TC1 minicolloquium meeting during ETAPS in Budapest , March 2008. Paul Spirakis spoke on " Some issues in Algorithmic Game Theory".
- 81. Invited Keynote Speaker of the Moldova Academy of Sciences , April 16 to 19 2008. P. Spirakis spoke about "An example of a Research Institute in the Information Society".
- 82. Invited Lecturer in the Bertinoro School of "Hot Trends in Network Algorithms" (HoT-TiNA), May 6-8, 2008. P. Spirakis lectured about "Algorithmic Game Theory in Networks".
- 83. Invited Speaker in the 1st International Symposium on Algorithmic Game Theory (SAGT 2008), Paderborn, Germany, Apr 30-May 2 2008. P. Spirakis spoke about "Efficient Approximations for Nash Equilibria in 2 person strategic games".
- 84. Invited speaker in the meeting "ACM and Europe", organised by the Association for Computing Machinery (ACM), Paris, May 19 2008.
- 85. Semi-Plenary Speaker in the Annual FoCM (Foundations of Computational Mathematics Conference) 2008 in Hong-Kong, for the Workshop on "Relations to Computer Science", June 20-24 2008. P. Spirakis spoke on "Efficient Approximate Equilibria for 2 persons strategic games".
- 86. Invited speaker in the 3rd Athens Colloquium on Algorithms and Computation (ACAC 08). Spoke about "An Optimization Approach for Approximate Nash Equilibria". Athens Greece, Aug 26 2008.
- 87. Invited Speaker in the invited session 1 of the 2008 Pan\_Hellenic Conference in Informatics (Samos Greece, Aug 28-30 2008). Spoke about "Foundations of Economics and Web Science". Joint work with S. Kontogiannis.
- 88. Invited Speaker in the DYNAMO workshop , Arcachon , France , Sept. 2008. Spoke about "Probabilistic Population Protocols".
- 89. Invited Speaker in the Embedded Systems Platform for Western Greece workshop, Oct. 17 2008.
- 90. Invited speaker in the Patras Workshop of the Authority for the Privacy of Communications. Spoke about "Privacy: A view that puts the Citizen in the center". Oct. 13 2008.
- 91. Invited Speaker in the Open University of Cyprus. Spoke about "Foundational Aspects of Sensor Nets", Jan 9, 2009.
- 92. Keynote Speaker at the first Annual Workshop of FRONTS in Bertinoro , Italy , Jan. 23 2009. Spoke about "Generalized Population Protocols".

- 93. Invited Speaker in the WebSci'09 Conference (Athens , Greece). Spoke about "Trust in the Web" , March 2009.
- 94. Invited Speaker in the Dagstuhl/DYNAMO workshop , June 1-5, 2009. Spoke about Mediated Population Protocols.
- 95. Invited Speaker in the 2009 Practical Aspects of Security Workshop (PRACSE 2009), June 11-12 2009. Spoke about Trust in the Web.
- 96. Plenary Speaker in the Research Workshop of the Greek Military University (Evelpidwn). June 17-18 2009. Spoke about Research Policy.
- 97. Invited Tutorial Speaker in the 16th Interational Conference on Systems, Signals and Image Processing (IWSSIP 2009), Chalkis, Greece, June 19 2009. Spoke about Foundations of Sensor Networks.

#### Books in Greek

- 1. Operating Systems (Theory & Practice) (in Greek) Vol. I, Patras Univ. Publications, 1988
- 2. Notes in Theory of Computing (in Greek) Patras Univ. Publications, 1988.
- 3. Discrete Mathematics: The Mathematics of Computer Science (in Greek), Patras University, also Gutenberg Eds, 1993 with C Bouras and L Kirousis
- 4. Discrete Mathematics : Problems and Solutions (in Greek) Gutenberg Eds , 1994 , with C Bouras , L Kirousis and A. Voutsadakis
- 5. Elements of the Probabilistic Method , with S Nikoletseas, Gutenberg Eds, 1997 .
- 6.Introduction to Graphs : Theory and Problems , with Y. Stamatiou , C Bouras , L Kirousis , Gutenberg Eds , 1999.
- 7. Operating systems principles . By P Spirakis , Greek Open University , 2001.
- 8. Algorithms, with D Fotakis, Greek Open University, 2002.
- 9. Security of Networks and Computing Systems ( Dare the Intruders), with Th. Komninos , Greek Letters , 2003

- 10. Modern Cryptography : A pleasant ride. With P. Nastou and Y. Stamatiu. Greek Letters , 2004.
- 11. Discrete Mathematics , with problems and solutions" new Edition Gutenberg , Oct. 2008 , with C. Bouras, L.kirousis , and G. Voutsadakis.

# Book Chapters and Journal Articles in Greek

- 1. "Large Scale Information Systems: Some faces of Complexity" in the "Project Management: The Greek Experience" (PROPOMPOS Publ. Ypsilantis-Syrakoylis Eds, Nov. 2005, pp. 156-162)
- 2. "To the outlet for cheap and fast Internet" Journal International and European Politics (Diethnis and Eyrwpaiki Politiki) March 2006, Vol 1, Special Issue on the Information Society, PAPAZHSH Editors, pp 61-64.
- 3. "Internet and Democracy" with R. Efstathiadou and C. Manolopoulos, 2nd Conference on Electronic Democracy, Hellenic Sci. Council for the Information Society, Proceedings, March 2006.
- 4. "We and our smart machines" in the VHMA ideas journal (monthly, of the Greek newspaper "To Vima"). Sept 07 2007.

# PhDs awarded with P Spirakis as thesis advisor

- 1.M Serna , now Full Professor in Univ Polytech Catalunya Spain
- 2.A Tuzhilin , now Full Professor in business school , NYU USA
- 3. G Pantziou, now Professor, Tech Eng School Athens
- 4. C Bouras, now Full Professor, CSE Dept Patras Univ.
- 5. J Garofalakis, now Associate professor, CSE dept Patras Univ.
- 6. C Zaroliagis, now Associate professor, CSE Dept Patras Univ.
- 7. P Tsigas (co advisor with L Kirousis) now Senior Lecturer in Sweden
- 8. M Papatriantafillou, now Professor in Sweden

- 9. V Triantafillou, now Professor at the Tech Institute of Mesologgi
- 10. H Antonopoulou, now professor Patras Tech Institute
- 11. B Tampakas, now Professor in Patras Tech Institute
- 12. P Psycharis, now industrialist.
- 13. B Mamalis, now Professor in the Athens Technological Institute.
- 14. P Fatourou, now lecturer in the CS Dept U.of Ioannina, Greece.
- 15. D Fotakis, now assistant Professor in the CS Dept U. of Aegean.
- 16. K Hadjis, now in Industry
- 17. K Antonis, now in Industry.
- 18. G Pentaris, now in Industry.
- 19. S Kontogiannis, now lecturer in the CS Dept. of U. of Ioannina, Greece.
- 20. S. Nikoletseas , now Assistant Professor in the Dept of Computer Engineering and Informatics , U Patras and Director of Research Unit 1 in CTI. Also Visiting Associate Professor , U. Geneva.
- 21. P. Efraimides , now lecturer in the Electrical Eng. Dept of the Univ of Thrace , Greece.
- $22.\ I.\ Chatzigiannakis$  , now Post Doctoral CTI Researcher and lecturer (Law 407) in the CSE Dept of Patras University .
- 23. V. Papadopoulou, now temporary faculty, U Cyprus.
- 24. D. Koukopoulos, now elected Assistant Professor at the U. Ioannina, department of Informatics and Culture.
- 25. M. Andreou, now temporary faculty at the Dept. of Electrical Eng. U Cyprus, Cyprus.
- 26. V. Kapoulas, now Researcher in RACTI Greece.
- NOTE: P. Spirakis has also supervised many MSc and undergraduate Diploma Theses. Among them, most noticeable, the undergraduate Diploma Thesis of Dimitris Achlioptas. D. Achlioptas has won a prestigeous post-doctoral grant in the first call of the IDEAS Programme of EU.
- 27. V. Liagkou, now Researcher in RACTI Greece.
- 28. C. Raptopoulos, now Post Doc in U. Paderborn, Germany.
- 29. P. Panagopoulou, now Post Doc in RACTI.

- 30. Ch. Eythymiou, now Post Doc in RACTI.
- 31. Th. Komninos , now Director of IT Applications in the Ministry of Education of Greece and also Head of Security and Infrastructures , and Member of the Executive Council of RACTI.

# Books strongly citing the work of P Spirakis

- 1. Fault Tolerant Parallel Computation , Alex Schwartsman , MIT Press
- 2. Limits of Parallel Computation, Ruzzo et al, Prentice Hall
- 3. Randomised Algorithms, Motwani and Raghavan
- 4. Algorithmic Game Theory, Nisan, Roughgarden, Tardos, Vazirani.