Curriculum Vitae

Aristeidis (Aris) Pagourtzis

Studies

Diploma in Electrical Engineering (1989) NTU Athens, Greece.

Ph.D. in Electrical and Computer Engineering (1999), NTU Athens, Greece.

Positions

Current: Professor at the School of Electrical and Computer Engineering of NTUA and Lead Researcher in Archimedes, AthenaRC.

Earlier: Visiting Professor at the University of Ioannina (2000), Research Associate at the University of Liverpool (2000-2002), Visiting Research Fellow at ETH Zuerich (Nov-Dec 2000 and Mar-Jul 2002), Adjunct Lecturer at the University of Athens and at NTUA (2003-2005), Lecturer (2006-2010), Assistant Professor (2010-2015) and Associate Professor (2015-2020) at the School of Electrical and Computer Engineering of NTUA.

Research interests

Distributed computing, network algorithms, approximation algorithms, cryptography, counting complexity, quantum computing. Most cited contributions: distributed protocols for ad-hoc networks, optical networks optimization algorithms, cryptographic signatures, counting complexity, subset sum computations.

Academic Service

- *PC chair* : 23rd International Symposium on Fundamentals of Computation Theory (FCT 2021), Athens, Greece. 1st and 2nd Workshop on Foundations of Consensus and Distributed Ledgers (FoCoDiLe 2020 and 2021).
- *PC member*: 45th IEEE International Conference on Distributed Computing Systems (ICDCS 2025), 34th International Workshop on Combinatorial Algorithms (IWOCA 2024), International Symposium on Algorithmics of Wireless Networks (ALGOWIN 2023, formerly ALGOSENSORS), 3rd Workshop on Foundations of Consensus and Distributed Ledgers (FoCoDiLe 2022), 15th International Workshop on Frontiers in Algorithmics (FAW 2021), International Symposium on Algorithms and Experiments for Wireless Sensor Networks (ALGOSENSORS 2021), 31st International Workshop on Combinatorial Algorithms (IWOCA 2020), 17th Workshop on Approximation and Online Algorithms (WAOA 2019), 21st International Symposium on Fundamentals of Computation Theory (FCT 2019), 14th International Symposium on Experimental Algorithms (SEA 2015), Data Protection and Security (DPS - IISA 2014), WAOA 2008, AdHocNow 2007.
- *PC and OC member*: Blockchain Summer School 2023, 10th International Conference on Algorithms and Complexity (CIAC 2017) (organization chair), AtheCrypt (2013-2023, annually), and Athens Colloquium on Algorithms and Complexity (ACAC 2006-2023, annually).
- *OC member*: 12th International Symposium on Algorithmic Game Theory (SAGT 2019). *Workshops chair* of AdHocNow 2015. *Local committee* member of EUROCRYPT 2013.
- *Guest Editor,* Journal of Computer Systems and Sciences, Special Issue on Fundamentals of Computation Theory, and Theoretical Computer Science, Special Issue on Algorithms and Complexity, TCS 754 (2019).
- *Reviewing*. Journals: Theoretical Computer Science, IEEE/ACM Transactions on Networking, Algorithmica, Journal of Computer Systems and Sciences, IEEE Transactions on Computers, Information Processing Letters, Information and Computation, Discrete Applied Mathematics etc. Conferences: ICALP, SODA, SIROCCO, FCT, MFCS, ESA, etc.
- *Reviewer* for ERC grants (European Commission), NSERC grants (Canada), and for several national research proposals (Greece).
- *External PhD examiner*: Nikolaos Melissinos, “Contributions to Approximation and Parameterization in Combinatorial Optimization”, Université Paris-Dauphine (Dec 2022, adv. L. Gourvès, A. Harutyunyan), Mudhi Aljamea, "Advances in String Algorithms for Information Security Applications", King's College (May 2016, adv. C. Iliopoulos), Georgios Stamoulis, “Approximation Algorithms for Resource Allocation and Network Problems”, IDSIA, Lugano (Dec 2013, adv. M. Mastrolilli), Eduardo Pacheco, “Swarms of Bouncing Robots”, Carleton University (July 2014, adv. J. Czyzowicz, E. Kranakis).

Teaching

Undergraduate courses. Current: Algorithms and Complexity, Advanced Algorithms, Cryptography, Foundations of Computer Science, Programming Techniques. Past: Introduction to Programming, Fortran and Object Oriented Programming.

Graduate courses. Current: Structural Complexity, Algorithmic Data Science, Network Algorithms and Complexity, Advanced Topics in Cryptography. Past: Approximation Algorithms, Parallel and Distributed Algorithms.

Student supervision

- *PhD advisees (theses completed, in parentheses year of graduation and first affiliation after PhD)*: Ioannis Papaioannou (2024, NTUA), Aggeliki Chalki (2022, Reykjavík University), Panagiotis Grontas (2020, NTUA), Dimitris Sakavalas (2016, Boston College), Eleni Bakali (2018, co-advised with Stathis Zachos, NTUA), Evangelos Bampas (2009, co-advised with Stathis Zachos, Bordeaux), Dora Souliou (2006, co-advised with Panagiotis Tsanakas, NTUA), Katerina Potika (2004, co-advised with Stathis Zachos, San Jose State University).
- *PhD advisees (theses in progress*): Pourandokht Behrouz, Thomas Souliotis, Stavros Petsalakis, Marianna Spyrakou, Danai Balla, Orestis Konstantinidis, Eleni Makri, Sotiris Kanellopoulos, Andreas Kontogiannis (co-advised with Ioannis Panageas), Christos Pergaminellis, Konstantinos Sismanis, Lydia Negka.
- *Advisor* or *co-advisor* for more than 40 Diploma and M.Sc. theses in: School of ECE, NTUA, School of Natural Sciences and Applied Mathematics, NTUA, Graduate Program in Logic and Algorithms (NTUA, NKUA, U Patras), Graduate Program in Applied Mathematical Sciences (NTUA), and Graduate Program in Algorithms, Logic and Discrete Mathematics (NTUA, NKUA). Many of them continued for doctoral studies in universities and institutes worldwide: Stanford, Yale, Cornell, Oxford, ETH Zuerich, CMU, Paris-Dauphine, Liverpool, Edinburgh, etc.
- Recent graduates *(in parentheses first affiliation after graduation)* : Vassilis Xanthopoulos (2024, MPI), Georgios Tsoumas (2024, UPF), Christos Tsoufis (2023, Paris-Dauphine), Nikitas Paslis (2022, UPF), Sotirios Kanellopoulos (2022, NTUA), Orestis Chardouvelis (2021, CMU), Manolis Vasilakis (2021, Paris-Dauphine), Stelios Kasouridis (2021, Yale), Elli Anastasiadi (2020, Reykjavík), Nikos Melissinos (2019, Paris-Dauphine), Theofilos Triommatis (2020, Liverpool), Foivos Fioravantes (2019, INRIA), Alexandros Zacharakis (2019, UPF), Vaggos Chatziafratis (2015, Stanford).

Research funding

- Lead Researcher at “Archimedes” Center for Research in Artificial Intelligence, Data Science and Algorithms (since Jan 2023).
- *co-Principal Investigator,* research project “MEGA-ACE: Multidisciplinary Educational Global Alliance for Algorand Center of Excellence”, (2022-2024).
- *Principal Investigator,* research project “ParaDeStruct: Complexity and approximability of counting problems through structural, descriptive, and parameterized methods”, NTUA (2021 – 2023).
- *Senior researcher*, basic research project "Algorithms of Today", Thales, Greek Secretariat of Research and Technology, 2011-15.
- *Invited researcher* COCA ANR project “Combinatorial Optimization with Competing Agents” (2012-13, Paris).
- *Principal Investigator*, basic research project "Byzantine Agreement and Leader Election Protocols in Ad Hoc Networks", NTUA, 2007-10.
- *Senior* or *junior researcher* in more than ten NTUA, UK, France and Switzerland projects in algorithms, complexity and optimization (1995-2013).
- *Additional funding:* Recipient of 5 "Kallipos" grants for e-book authoring (2021-22 and 2014-15):
  - Fine-Grained Complexity (with V. Nakos). E-book (in Greek), Kallipos Publications, in progress.
  - Community Detection (with P. Potikas and D. Souliou). E-book (in Greek), Kallipos Publications, in progress.
  - Computational Cryptography (with E. Zachos and P. Grontas). E-book (in Greek), Kallipos Publications, 2015. Available Online at: http://hdl.handle.net/11419/5439.
  - Algorithmic Theory of Distributed Computing (with E. Markou, E. Kranakis, and D. Krizanc). E-book (in Greek), Kallipos Publications, 2015. Available Online at: http://hdl.handle.net/11419/5769.

- Foundations of Computer Science (with E. Zachos and Th. Souliou). E-book (in Greek), Kallipos Publications, 2015. Available Online at: http://hdl.handle.net/11419/5452.

Research Collaborations

Aris Pagourtzis is a member of the Computation and Reasoning Lab (CoReLab, https://www.corelab.ntua.gr/) of the School of ECE, NTUA. CoReLab has a long standing tradition of excellence in teaching and research training, and is internationally well known for its many former diploma and MSc students that currently hold faculty and postdoctoral positions in top universities abroad. In the last 10 years, faculty members of Corelab have research mentored more than 50 students of ECE who continued their studies, in the PhD level, in top universities abroad (e.g., MIT, Stanford, CMU, Cornell, Columbia, Princeton, Harvard, University of Texas at Austin, UPenn, Northeastern).

CoReLab members maintain a well developed network of international collaborations with top research groups in major universities and industrial labs worldwide (e.g. MIT, Northeastern, University of Wisconsin-Madison, University of Texas at Austin, University of California at Irvine, Singapore University of Technology and Design, University of Edinburgh, University of Liverpool, King's College, University Paris-Dauphine, Sorbonne University, Google Research, Yahoo Research).

Among others, the group regularly hosts researchers with expertise in algorithms and complexity, distributed computing, cryptography, optimization. Some recent visits and talks:

- Prof. Konstantinos Bimpikis, Stanford, talk on "Market Fragmentation and Inefficiencies in Maritime Shipping" (Oct 2023).
- Prof. Vaggos Chatziafratis, UC Santa Cruz, short visit for collaboration on clustering problems (Sep 2022).
- Prof. Aris Filos-Ratsikas (University of Liverpool), talk on "The Complexity of Consensus-Halving and Necklace Splitting" (Nov 2021).
- Dr. Ioannis Panageas (SUTD), visit and talk on "Depth-Width Trade-offs for Neural Networks through the lens of Dynamical Systems" (Jul 2020).
- Prof. Costis Georgiou, Ryerson University, short visit for collaboration on distributed computing problems (Jul 2019).
- Prof. Evangelos Kranakis, Carleton University, short visit for collaboration on mobile agent problems with Byzantine adversaries (May 2019).
- Dr. Laurent Gourves, Universite Paris-Dauphine, short visit for collaboration on optimization problems (Nov 2018).
- Prof. Tomas Radzik, King's College London, short visit for collaboration on distributed broadcasting in radio networks (Oct 2017).
- Prof. Stratis Ioannidis, Northeastern University, talk on "Adaptive Caching Networks with Optimality Guarantees", (Dec 2017).
- Prof. Abhi Shelat, Northeastern University, (July 2017).

Since the beginning of 2023, two CoReLab members, Aris Pagourtzis and Dimitris Fotakis, serve as Lead Researchers with the recently founded Archimedes Center for Research in Artificial Intelligence, Data Science and Algorithms. Through this collaboration they have taken part in a number of research activities involving close and intense collaboration with many renowned scientists such as Christos Papadimitriou (Columbia), Costis Daskalakis (MIT), Christos Tzamos (NKUA), George Christodoulou (AUTH), Alkmini Sgouritsa (AUEB), Ioannis Panageas (UC Irvine), Chara Podimata (MIT), Thodoris Lykouris (MIT), Vasilis Syrgkanis (Stanford), and a number of doctoral and graduate students.

Invited talks

City University of New York, ETH Zuerich, University of Ulm, Schloss Dagstuhl, Université Paris-Sud (Orsay), University of Liverpool, Athens University of Economics and Business, University of Athens, Université Paris-Dauphine, Paris LIP6, USI Lugano, Lancaster University, University of Liverpool, UCL, University of Ioannina, Panteion University, Luiss University.

Research visits

Long-term visits: ETH Zuerich, invited by Prof. Peter Widmayer (Oct-Nov 2000 and Mar-Jul 2002), University of Rochester, invited by Prof. Lane A. Hemaspaandra (1 month-long visit, Oct '09) Université Paris-Dauphine, invited by Dr. Laurent Gourvès (five month-long visits 2012, 2013, 2016, 2019, 2022), King's College London, invited by Prof. Tomasz Radzik (sabbatical, 2015-16).

Short-term visits: Ulm (2001, hosted by Prof. Uwe Schoening), Lancaster (2016, hosted by Dr. Bingsheng Zhang), Liverpool (2016, hosted by Prof. Leszek Gasieniec), Luiss University (2023 & 2025, hosted by Prof. Giuseppe Italiano).

Publications

Co-author of four books on foundations of computer science, distributed computing and cryptography and of about a hundred scientific publications in high quality journals and conferences (Algorithmica, IEEE/ACM Transactions on Networking, Distributed Computing, PODC, ESA, MFCS, TAMC, et al.).

An incomplete list follows.

I. Books

1. **Foundations of Informatics** (with E. Zachos, in Greek). Tsotras publications, 2014.
2. **Computational Cryptography** (with E. Zachos and P. Grontas). E-book (in Greek), Kallipos Publications, 2015. Available Online at: http://hdl.handle.net/11419/5439.
3. **Foundations of Computer Science** (with E. Zachos and Th. Souliou). E-book (in Greek), Kallipos Publications, 2015. Available Online at: http://hdl.handle.net/11419/5452.
4. **Algorithmic Theory of Distributed Computing** (with E. Markou, E. Kranakis, and D. Krizanc). E-book (in Greek), Kallipos Publications, 2015. Available Online at: http://hdl.handle.net/11419/5769.
5. **Introduction to the Theory of Computation** (M. Sipser), editor for the 3rd Greek edition, Crete University Press, 2020.

II. Journal articles (selected publications)

1. Konstantinos Sismanis, Petros Potikas, Dora Souliou, Aris Pagourtzis. **Overlapping community detection using graph attention networks.** *Future Generation Computer Systems* 163: 107529 (2025).
2. Giannis Alonistiotis, Antonis Antonopoulos, Nikolaos Melissinos, Aris Pagourtzis, Stavros Petsalakis, Manolis Vasilakis. **Approximating subset sum ratio via partition computations.** *Acta Informatica* 61(2): 101-113 (2024).
3. Antonis Antonopoulos, Aris Pagourtzis, Stavros Petsalakis, and Manolis Vasilakis. **Faster algorithms for *k*-subset sum and variations**. *Journal of Combinatorial Optimization* 45.1, pages 24 (2023).
4. Konstantinos Georgiou, Evangelos Kranakis, Nikos Leonardos, Aris Pagourtzis, Ioannis Papaioannou. **Optimal circle search despite the presence of faulty robots**. *Inf. Process. Lett.* 182: 106391 (2023).
5. Panagiotis Grontas, Aris Pagourtzis. **Anonymity and everlasting privacy in electronic voting**. *Int. J. Inf. Sec.* 22(4): 819-832 (2023).
6. Antonis Antonopoulos, Aris Pagourtzis, Stavros Petsalakis, Manolis Vasilakis. **Faster algorithms for k-subset sum and variations**. *J. Comb. Optim.* 45(1): 24 (2023).
7. Nikos Leonardos, Aris Pagourtzis, Ioannis Papaioannou. **Byzantine fault tolerant symmetric-persistent circle evacuation**. *Theor. Comput. Sci.* 956: 113839 (2023).
8. Eleni Bakali, Aggeliki Chalki, Andreas Göbel, Aris Pagourtzis, and Stathis Zachos. **Guest column: A panorama of counting problems the decision version of which is in P**. *SIGACT News*, 53(3):46–68, 2022. (invited article)
9. Antonis Antonopoulos, Eleni Bakali, Aggeliki Chalki, Aris Pagourtzis, Petros Pantavos, Stathis Zachos. **Completeness, approximability and exponential time results for counting problems with easy decision version**. *Theoretical Computer Science* 915: 55-73 (2022).
10. Mehdi Khosravian Ghadikolaei, Nikolaos Melissinos, Jérôme Monnot, Aris Pagourtzis. **Extension and its price for the connected vertex cover problem**. *Theoretical Computer Science* 904: 66-80 (2022)
11. Panagiotis Grontas, Aris Pagourtzis, Alexandros Zacharakis, Bingsheng Zhang. **Publicly Auditable Conditional Blind Signatures**, *Journal of Computer Security 29(2): 229-271* (2021).

12. Parikshit Saikia, Sushanta Karmakar, Aris Pagourtzis. **Primal-dual based distributed approximation algorithm for Prize-collecting Steiner tree**. *Discrete Mathematics Algorithms and Applications* 13(2): 2150008:1-2150008:48 (2021).
13. Evangelos Bampas, Christina Karousatou, Aris Pagourtzis, Katerina Potika: **Path Multicoloring in Spider Graphs with Even Color Multiplicity**. *Information Processing Letters* 133: 1-4 (2018).
14. Evangelos Bampas, Christina Karousatou, Aris Pagourtzis, Katerina Potika: **Minimum multiplicity edge coloring via orientation**. Discrete Applied Mathematics 247: 380-388 (2018).
15. E. Bampas, A.-N. Göbel, A. Pagourtzis, A. Tentes. **On the connection between interval size functions and path counting**. *Computational Complexity* 26(2): 421-467 (2017)
16. A. Pagourtzis, G. Panagiotakos, D. Sakavalas. **Reliable broadcast with respect to topology knowledge**. *Distributed Computing* 30(2): 87-102 (2017).
17. S. Karmakar, P. Koutris, A. Pagourtzis and D. Sakavalas. **Energy-Efficient Broadcasting in Ad Hoc Wireless Network**s. *Journal of Discrete Algorithms*, 42: 2-13 (2017).
18. E. Bampas, N. Leonardos, E. Markou, A. Pagourtzis, M. Petrolia. **Improved periodic data retrieval in asynchronous rings with a faulty host**. *Theoretical Computer Science* 608: 231-254 (2015).
19. E. Bampas, A. Pagourtzis, G. Pierrakos, and K. Potika. **On a non-cooperative model for wavelength assignment in multifiber optical networks**. *IEEE/ACM Transactions on Networking*, 20(4): 1125-1137, 2012.
20. M. Cieliebak, S. Eidenbenz, A. Pagourtzis, and K. Schlude. **On the Complexity of Variations of Equal Sum Subsets**. *Nordic Journal of Computing*, 14(3), pp. 151-172, 2008.
21. A. Pagourtzis, K. Potika, and S. Zachos. **Path multicoloring with fewer colors in spiders and caterpillars**. *Computing*, 80(3), pp. 255-274, Springer Wien, 2007.
22. L. Gasieniec, A. Pagourtzis, I. Potapov, and T. Radzik. **Deterministic Communication in Radio Networks with Large Labels**. *Algorithmica*, 47(1), pp. 97-117, Springer, 2007.
23. C. Nomikos, A. Pagourtzis, and S. Zachos. **Routing and Path Multi-Coloring**. *Information Processing Letters*, 80(5), σελ. 249-256, Elsevier Science, 2001.

III. Conference proceedings (selected peer-reviewed publications)

1. Andreas Kontogiannis, Vasilis Pollatos, Sotiris Kanellopoulos, Panayotis Mertikopoulos, Aris Pagourtzis, Ioannis Panageas. **The Computational Complexity of Finding Second-Order Stationary Points**. Proc. ICML 2024.
2. Eleni Bakali, Aggeliki Chalki, Sotiris Kanellopoulos, Aris Pagourtzis, Stathis Zachos. **On the Power of Counting the Total Number of Computation Paths of NPTMs.** Proc. TAMC 2024: 209-220.
3. Laurent Gourvès, Aris Pagourtzis. **Removable Online Knapsack with Bounded Size Items**. SOFSEM 2024: 283-296.
4. Pourandokht Behrouz, Orestis Konstantinidis, Nikos Leonardos, Aris Pagourtzis, Ioannis Papaioannou and Marianna Spyrakou, **Byzantine Fault-Tolerant Protocols for (n, f)-evacuation from a Circle**. Proc. International Symposium on Algorithmics of Wireless Networks (ALGOWIN 2023).
5. G. Alonistiotis, A. Antonopoulos, N. Melissinos, A. Pagourtzis, S. Petsalakis, M. Vasilakis, **Approximating Subset Sum Ratio via Subset Sum Computations**, In *Proc. IWOCA 2022: 33rd International Workshop on Combinatorial Algorithms*. Lecture Notes in Computer Science, vol 13270, pp. 73-85. Springer, Cham. https://doi.org/10.1007/978-3-031-06678-8_6.
6. Antonis Antonopoulos, Aris Pagourtzis, Stavros Petsalakis, Manolis Vasilakis, **Faster Algorithms for k-Subset Sum and Variations**. In *Proc. FAW 2021: International Joint Conference*. Lecture Notes in Computer Science, vol 12874, pp. 37-52. Springer, Cham. https://doi.org/10.1007/978-3-030-97099-4_3.
7. Nikos Leonardos, Aris Pagourtzis, Ioannis Papaioannou, **Byzantine Fault Tolerant Symmetric-Persistent Circle Evacuation.** In *Proc. ALGOSENSORS 2021*, LNCS, vol 12961, pp. 111-123. Springer, Cham.
8. Eleni Bakali, Aggeliki Chalki, and Aris Pagourtzis, **Characterizations and approximability of hard counting classes below #P**. In: Chen J., Feng Q., Xu J. (eds) *Proc. of the 16th Annual Conference on Theory and Applications of Models of Computation (TAMC 2020)*, Changsha, China, Lecture Notes in Computer Science, vol 12337, pp. 251-262, Springer Cham.

9. Theofilos Triommatis and Aris Pagourtzis, **Approximate #Knapsack Computations to Count Semi-Fair Allocations**. In: Chen J., Feng Q., Xu J. (eds) *Proc. of the 16th Annual Conference on Theory and Applications of Models of Computation (TAMC 2020)*, Changsha, China, Lecture Notes in Computer Science, vol 12337, pp. 239-250, Springer Cham.
10. Nikolaos Melissinos, Aris Pagourtzis and Theofilos Triommatis, **Approximation Schemes for Subset Sum Ratio Problems.** In Li M. (eds) *14th International Frontiers of Algorithmics Workshop (FAW 2020)*, Haikou Hainan, China, October 19-21, 2020, Proceedings, Lecture Notes in Computer Science, vol 12340, pp. 96-107, Springer Nature.
11. Dimitris Fotakis, Laurent Gourves, Stelios Kasouridis and Aris Pagourtzis, **Object Allocation and Positive Graph Externalities.** To appear in the 24th European Conference on Artificial Intelligence (ECAI 2020).
12. Konstantinos Georgiou, Evangelos Kranakis, Nikos Leonardos, Aris Pagourtzis, Ioannis Papaioannou: **Optimal Circle Search Despite the Presence of Faulty Robots**. *ALGOSENSORS 2019*: Springer LNCS 11931, pp. 192-205.
13. Mehdi Khosravian Ghadikolaei, Nikolaos Melissinos, Jerome Monnot and Aris Pagourtzis: **Extension and its price for the connected vertex cover problem**. In *Proc. of the 30th International Workshop on Combinatorial Algorithms (IWOCA 2019)*, Pisa, Italy, 23-25 July 2019, Springer LNCS vol. 11638, pp. 315-326.
14. Dora Souliou, Petros Potikas, Katerina Potika, Aris Pagourtzis: **Weight assignment on edges towards improved community detection**. In Proc. *23rd International Database Engineering & Applications Symposium, IDEAS 2019*, June 10-12, 2019, Athens, Greece.
15. Aris Pagourtzis and Tomasz Radzik. **Tight Bounds for Deterministic h-Shot Broadcast in Ad-Hoc Directed Radio Networks**. In *Proc. of the 43rd International Symposium on Mathematical Foundations of Computer Science, MFCS 2018*, August 27-31, 2018, Liverpool, UK, LNCS pp. 80:1-80:13.
16. Ketki Kulkarni, Aris Pagourtzis, Katerina Potika, Petros Potikas, Dora Souliou: **Community Detection via Neighborhood Overlap and Spanning Tree Computations.** In *Proc. ALGOCLOUD 2018, Revised Selected Papers*, Helsinki, Finland, August 20-21, 2018, LNCS 11409, pp. 13-24, Springer, 2019.
17. Nikolaos Melissinos and Aris Pagourtzis. **A Faster FPTAS for the Subset-Sums Ratio Problem**. *In Proc. Computing and Combinatorics - 24th International Conference, COCOON 2018*, Qing Dao, China, July 2-4, 2018, LNCS 10976, pp. 602-614, Springer, 2018.
18. P. Grontas, A. Pagourtzis, A. Zacharakis, and B. Zhang. **Towards everlasting privacy and efficient coercion resistance in remote electronic voting**. In *Financial Cryptography and Data Security. FC 2018.* Lecture Notes in Computer Science, vol 10958, pp. 210-231. Springer, Berlin, Heidelberg.
19. Aris Pagourtzis, Giorgos Panagiotakos, Dimitris Sakavalas. **Reliable Communication via Semilattice Properties of Partial Knowledge**. *Proc. 21st Fundamentals of Computation Theory Symposium (FCT 2017)*, LNCS 10472: 367-380, Springer, 2017.
20. P. Grontas, A. Pagourtzis, A. Zacharakis. **Coercion Resistance in a Practical Secret Voting Scheme for Large Scale Elections.** In *Proceedings ISPAN-FCST-ISCC 2017*, June 21-23, 2017, Exeter, UK, pp. 514-519, IEEE Computer Society 2017.
21. E. Kranakis, D. Krizanc, E. Markou, A. Pagourtzis, F. Ramírez. **Different Speeds Suffice for Rendezvous of Two Agents on Arbitrary Graphs**. In *Proc. of 43rd International Conference on Current Trends in Theory and Practice of Computer Science (SOFSEM 2017)*, vol. 10139 of LNCS, pp. 79-90, Springer, 2017.
22. Eleni Bakali, Aggeliki Chalki, Aris Pagourtzis, Petros Pantavos, Stathis Zachos. **Completeness Results for Counting Problems with Easy Decision**. In *Proc. CIAC 2017*, LNCS 10236: 55-66, Springer, 2017.
23. Aris Pagourtzis, Giorgos Panagiotakos, Dimitris Sakavalas: **Reliable message transmission under partial knowledge and general adversaries** (brief announcement). In *Proceedings of PODC 2016*, Chicago, IL, USA, July 25-28, 2016, pages 203–205. ACM, 2016.
24. Christina Karousatou, Evangelos Bampas, Aris Pagourtzis, Katerina Potika: **Scheduling Connections via Path and Edge Multicoloring**. In: Papavassiliou, S., Ruehrup, S. (eds) *Ad-hoc, Mobile, and Wireless Networks. ADHOC-NOW 2015.* Lecture Notes in Computer Science, vol 9143 ,pp. 33-47. Springer, Cham.
25. Aris Pagourtzis, Giorgos Panagiotakos, Dimitris Sakavalas: **Reliable Broadcast with Respect to Topology Knowledge**. In: Kuhn, F. (eds) *Distributed Computing. DISC 2014.* Lecture Notes in Computer Science, vol 8784, pp. 107-121. Springer, Berlin, Heidelberg.

26. Laurent Gourvès, Jérôme Monnot, Aris Pagourtzis. **The Lazy Matroid Problem**. *IFIP TCS 2014*: Springer LNCS vol. 8705, pp. 66-77.
27. Evangelos Bampas, Nikos Leonardos, Euripides Markou, Aris Pagourtzis, Matoula Petrolia. **Improved Periodic Data Retrieval in Asynchronous Rings with a Faulty Host**. *SIROCCO 2014*: Springer LNCS vol 8576, pp. 355-370.
28. Laurent Gourvès, Jérôme Monnot, Aris Pagourtzis. **The Lazy Bureaucrat Problem with Common Arrivals and Deadlines: Approximation and Mechanism Design**. *FCT 2013*: Springer LNCS vol. 8070, pp. 171-182.
29. Chris Litsas, Aris Pagourtzis, Dimitris Sakavalas. **A Graph Parameter That Matches the Resilience of the Certified Propagation Algorithm**. *ADHOC-NOW 2013*: Springer LNCS vol 7960, pp. 269-280.
30. Evangelos Bampas, Aris Pagourtzis, George Pierrakos, Vasilis Syrgkanis. **Selfish Resource Allocation in Optical Networks**. *CIAC 2013*: Springer LNCS vol. 7878, pp. 25-36.
31. P. Koutris and A. Pagourtzis. **Oblivious k-shot broadcasting in ad hoc radio networks**. In Proceedings of the 17th Computing: The Australasian Theory Symposium (*CATS 2011*), Perth, Australia, January 2011, CPRIT, Vol. 119, pp. 161-168.
32. P. Koutris and A. Pagourtzis. **Brief announcement: k-shot distributed broadcasting in radio networks**. In Proceedings of the 29th ACM SIGACT-SIGOPS symposium on Principles of Distributed Computing (*PODC 2010*). ACM, New York, NY, USA, 77-78. DOI=10.1145/1835698.1835717.
33. E. Bampas, A.-N. Göbel, A. Pagourtzis, and A. Tentes. **On the connection between interval size functions and path counting**. In Proceedings of *TAMC 2009* - 6th Annual Conference on Theory and Applications of Models of Computation, LNCS 5532, pp. 108-117. Springer-Verlag, Berlin Heidelberg, 2009.
34. E. Bampas, A. Pagourtzis, G. Pierrakos, and K. Potika. **On a non-cooperative model for wavelength assignment in multifiber optical networks**. In Proceedings of *ISAAC 2008* - 19th International Symposium on Algorithms and Computation, LNCS 5369, pp. 159-170. Springer-Verlag, Berlin Heidelberg, 2008.
35. E. Bampas, A. Pagourtzis, and K. Potika. **Maximum profit wavelength assignment in WDM rings (extended abstract)**. In Proceedings of *CTW 2008* - 7th Cologne-Twente Workshop on Graphs and Combinatorial Optimization, pp. 35-38, 2008.
36. C. Nomikos, A. Pagourtzis, and S. Zachos. **Randomized and Approximation Algorithms for Blue-Red Matching**. In Kučera, L., Kučera, A. (eds) Mathematical Foundations of Computer Science 2007. MFCS 2007. Lecture Notes in Computer Science, vol 4708, pp. 55-63. Springer, Berlin, Heidelberg.
37. I. Milis, A. Pagourtzis, and K. Potika. **Selfish Routing and Path Coloring in All-Optical Networks**. In Proceedings of 4th Workshop on Combinatorial and Algorithmic Aspects of Networking (*CAAN 2007*), Lecture Notes in Computer Science 4852, pp. 71-84, Springer-Verlag 2007.
38. E. Bampas, G. Kaouri, M. Lampis, and A. Pagourtzis. **Periodic Metro Scheduling**. In Proceedings of the 6th Workshop on Algorithmic Methods and Models for Optimization of Railways (*ATMOS 2006*), Schloss Dagstuhl Research Online Publication Server (http:// drops.dagstuhl.de/ opus/volltexte/ 2006/684/).
39. A. Pagourtzis, and S. Zachos. **The Complexity of Counting Functions with Easy Decision Version**. In Proceedings of 31st International Symposium on Mathematical Foundations of Computer Science (*MFCS 2006*), Lecture Notes in Computer Science 4162, pp. 741-752, Springer-Verlag 2006.
40. I. Z. Emiris, E. Markou, and A. Pagourtzis. **Distributed Routing with Tree Networks with Few Landmarks**. In Proceedings of 3rd Workshop on Combinatorial and Algorithmic Aspects of Networking (*CAAN 2006*), July 2006, Chester, United Kingdom. Lecture Notes in Computer Science 4235, pp. 45-57, Springer-Verlag 2006.
41. F. Coenen, P. Leng, A. Pagourtzis, D. Souliou and W. Rytter. **Techniques for Faster Generation of Frequent Itemsets Using Interim Support Trees**. In Proceedings of the 25th SGAI International Conference on Innovative Techniques and Applications of Artificial Intelligence (*AI 2005*), Dec 13 -- 14, pp. 263-276, Springer London.
42. D. Souliou, A. Pagourtzis, and N. Drosinos, **Computing Frequent Itemsets in Parallel Using Partial Support Trees**. In Proceedings of 10th European PVM/MPI Conference (Euro PVM/MPI 2005), Sep 18 − 21, 2005, Sorrento (Naples), Italy. Lecture Notes in Computer Science 3666, pp. 28-37, Springer-Verlag 2005.
43. C. Nomikos, A. Pagourtzis, K. Potika, and S. Zachos, **Fiber Cost Reduction and Wavelength Minimization in Multifiber WDM Networks**, *Proceedings of the Third IFIP-TC6 Networking Conference (Networking 2004),* Athens, Greece, May 9−14, 2004, Lecture Notes in Computer Science 3042, pp. 150−161, Springer-Verlag.

44. S. Eidenbenz, A. Pagourtzis, and P. Widmayer, **Flexible Train Rostering**, *Proceedings of the 14th Annual International Symposium on Algorithms and Computation (ISAAC 2003)*, Kyoto, Japan, December 15-17, 2003, Lecture Notes in Computer Science 2906, pp. 615−624, Springer-Verlag.
45. M. Cieliebak, S. Eidenbenz, and A. Pagourtzis, **Composing Equipotent Teams**. *Proceedings of 14th International Symposium on Fundamentals of Computation Theory (FCT 2003)*, Malmoe, Sweden, Aug 13−15, 2003, Lecture Notes in Computer Science 2751, pp. 98−108, Springer-Verlag, 2003.
46. T. Erlebach, A. Pagourtzis, E. Potika, and S. Stefanakos, **Resource Allocation Problems in Multifiber WDM Tree Networks**. *Proceedings of 29th Workshop on Graph Theoretic Concepts in Computer Science (WG 2003)*, Jun 19 – 21 2003, Elspeet Netherlands, Lecture Notes in Computer Science 2880, pp. 218-229, Springer Verlag, 2003.
47. C. Nomikos, A. Pagourtzis, and S. Zachos, **Minimizing Request Blocking in All-Optical Rings**. *Proceedings of the 22nd Annual Joint Conference of the IEEE Computer and Communications Societies (IEEE INFOCOM 2003*), Mar 30 – Apr 3 2003, San Francisco, CA, USA.
48. A. Pagourtzis, I. Potapov, and W. Rytter, **Observations on Parallel Computation of Transitive and Max-Closure Problems**. *Proceedings of 9th European PVM/MPI Conference (PVM/MPI 2002)*, Sep 29 − Oct 02, 2002, Linz, Austria, Lecture Notes in Computer Science 2474, pp. 217-225, Springer-Verlag.
49. L. Gasieniec, A. Pagourtzis, and I. Potapov, **Deterministic Communication in Radio Networks with Large Labels**. *Proceedings of 10th European Symposium on Algorithms (ESA 2002)*, Sep 17−21, 2002, Rome, Lecture Notes in Computer Science 2641, pp. 512-524, Springer-Verlag.
50. A. Pagourtzis, I. Potapov, and W. Rytter, **PVM Computation of the Transitive Closure: The Dependency Graph Approach**. *Proceedings of 8th European PVM/MPI Conference (PVM/MPI 2001)*, Santorini/Thera, Greece, September 23−26, 2001, Lecture Notes in Computer Science 2131, pp. 249−256, Springer-Verlag.
51. B. S. Chlebus, L. Gasieniec, A. Lingas, and A.T. Pagourtzis, **Oblivious Gossiping in ad-hoc Radio Networks**. *Proceedings of 5th Int. Workshop on Discrete Algorithms and Methods for Mobile Computing and Communications (DialM'2001)*, Rome, Italy, July 21, 2001, pp. 44−51, ACM Press, NY, 2001.
52. A. Kiayias, A. Pagourtzis, and S. Zachos, **Cook Reductions Blur Structural Differences Between Functional Complexity Classes**. *Proceedings of 2nd Panhellenic Logic Symposium (PLS '99)*, pp. 132-137, Delphi, Jul 13−17, 1999.