

Publications

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Publications in international journals and paper collections (no conference proceedings)

- J1 L.Kirousis and G. Kontogeorgiou. “The *problème des ménages* revisited,” To appear in: *The Mathematical Gazette*, 2018.
- J2 I. Giotis, L.M.Kirousis, K.I. Psaromiligkos, and D.M. Thilikos: “Acyclic edge coloring through the Lovász Local Lemma,” *Theor. Comp. Sci.* 665 (2017) 40–50.
- J3 J. Díaz, I. Giotis, L.M. Kirousis, E. Markakis, and M.J. Serna: “On the stability of generalized second price auctions with budgets,” *Theory of Computing Systems*, 59(1) (2016) 1–23.
- J4 J. Díaz, A.C. Kaporis, L.M. Kirousis, G.D. Kemkes, X. Pérez, and N. Wormald, “On the chromatic number of a random 5-regular graph,” *Journal of Graph Theory* 61(3) (2009) 157–191.
- J5 J. Díaz, L.M. Kirousis, D. Mitsche, and X. Pérez-Giménez, “On the satisfiability threshold of formulas with three literals per clause,” *Theor. Comput. Sci.* 410(30-32) (2009) 2920–2934.
- J6 A.C. Kaporis, L.M. Kirousis, Y.C. Stamatiou, M. Vamvakari, and M. Zito, “The unsatisfiability threshold revisited,” *Discrete Applied Mathematics* 155(12) (2007) 1525–1538.
- J7 G. Georgiadis and L.M. Kirousis, “Lightweight centrality measures in networks under attack,” *ComPlexUs: Modelling in Systems Biology, Social, Cognitive and Information Sciences* 3 (2006) 147–157.
- J8 A.C. Kaporis, L.M. Kirousis, and Y.C. Stamatiou, “How to prove conditional randomness using the Principle of Deferred Decisions,” in: A.G. Percus, G. Istrate and C. Moore, eds., *Computational Complexity and Statistical Physics* (Oxford University Press, New York, 2006) 179–194.
- J9 L.M. Kirousis, Y.C. Stamatiou, and M. Zito, “The unsatisfiability threshold conjecture: the techniques behind upper bound improvements,” in: A.G. Percus, G. Istrate and C. Moore, eds., *Computational Complexity and Statistical Physics* (Oxford University Press, New York, 2006) 159–178.
- J10 A.C. Kaporis, L.M. Kirousis, and E.G. Lalas, “The probabilistic analysis of a greedy satisfiability algorithm,” *Random Structures and Algorithms* 28(4) (2006) 444–480.
- J11 L.M. Kirousis and Ph.G. Kolaitis, “A dichotomy in the complexity of propositional circumscription,” *Theory of Computing Systems* 37(6) (2004) 695–715.
- J12 L.M. Kirousis and Ph.G. Kolaitis, “The complexity of minimal satisfiability problems,” *Information and Computation* 187 (2003) 20–39.

- J13 L.M. Kirousis, E. Kranakis, D. Krizanc, and Y.C. Stamatiou, “Locating information with uncertainty in fully interconnected networks: the case of nondistributed memory”, *Networks* 42(3) (2003) 169–180.
- J14 P. Bose, Ch. Kaklamanis, L.M. Kirousis, E. Kranakis, D. Krizanc, and D. Peleg, “Station layouts in the presence of location constraints,” *Journal of Interconnection Networks* 3(1&2) (2002) 1–17.
- J15 A.C. Kaporis, L.M. Kirousis, E. Kranakis, D. Krizanc, Y.C. Stamatiou, and E.C. Stavropoulos, “Locating information with uncertainty in fully interconnected networks with applications to world wide web information retrieval,” *The Computer Journal* 44(4) (2001) 221–229.
- J16 L.M. Kirousis, Y.C. Stamatiou, and M. Vamvakari, “Upper bounds and asymptotics for the q -binomial coefficients,” *Studies in Applied Mathematics* 107(1) (2001) 43–62.
- J17 D. Achlioptas, L.M. Kirousis, E. Kranakis, and D. Krizanc, “Rigorous results for random $(2 + p)$ -SAT,” *Theoretical Computer Science* 265 (2001) 109–129.
- J18 D. Achlioptas, L.M. Kirousis, E. Kranakis, D. Krizanc, M.S.O. Molloy, and Y.C. Stamatiou, “Random constraint satisfaction: a more accurate picture,” *Constraints* 6(4) (2001) 329–344.
- J19 N.D. Dendris, L.M. Kirousis, Y.C. Stamatiou, and D.M. Thilikos, “On parallel partial solutions and approximation schemes for local consistency in networks of constraints,” *Constraints* 5 (2000) 251–273.
- J20 L.M. Kirousis, E. Kranakis, D. Krizanc, and A. Pelc, “Power consumption in packet radio networks,” *Theoretical Computer Science* 243 (2000) 289–305.
- J21 L.M. Kirousis, E. Kranakis, D. Krizanc, and Y. Stamatiou, “Approximating the unsatisfiability threshold of random formulas,” *Random Structures and Algorithms* (1998) 253–269. Preliminary related results appeared in: L.M. Kirousis, E. Kranakis, and D. Krizanc, “A better upper bound for the unsatisfiability threshold,” in: B. Du, J. Gu and P.M. Pardalos (eds.) *Satisfiability Problem: Theory and Applications*, *DIMACS Series in Discrete Mathematics and Theoretical Computer Science* 35 (American Mathematical Society, 1997) 643–648.
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- J25 L.M. Kirousis and A.G. Veneris, “Efficient algorithms for checking the atomicity of a run of read and write operations,” *Acta Informatica* 32 (1995) 155–170.
- J26 N. Dendris, I. Kalafatis and L.M. Kirousis, “An efficient parallel algorithm for geometrically characterizing drawings of a class of 3-D objects,” *Journal of Mathematical Imaging and Vision* 4 (1994) 375–387.

- J27 L. M. Kirousis, P. Spirakis and Ph. Tsigas, “Reading many variables in one atomic operation: solutions with linear complexity,” *IEEE Transactions in Parallel and Distributed Systems* 5 (1994) 688–696.
- J28 L. Kirousis, M. Serna and P. Spirakis, “The parallel complexity of the graph connectivity problem,” *SIAM J. Computing* 22 (1993), 573–586.
- J29 H. Jung, L.M. Kirousis and P. Spirakis, “Lower bounds and efficient algorithms for multiprocessor scheduling of DAGs with communication delays,” *Information and Computation* 5 (1993) 94–104.
- J30 L. M. Kirousis, “Fast parallel constraint satisfaction,” *Artificial Intelligence* 64 (1993) 147–160 (Research Note).
- J31 D. Kavadias, L.M. Kirousis and P. Spirakis, “The complexity of the reliable connectivity problem,” *Information Processing Letters* 39 (1991) 245–252.
- J32 L.M. Kirousis, “On effectively labeling planar projections of polyhedra,” *IEEE Transactions on Pattern Analysis and Machine Intelligence* 12:2 (1990) 123–130.
- J33 L.M. Kirousis and E. Kranakis, “A brief survey of concurrent readers and writers,” *CWI Quarterly* 2 (1989) 307–330.
- J34 L.M. Kirousis and C.H. Papadimitriou, “The complexity of recognizing polyhedral scenes,” *Journal of Computer and System Sciences* 37 (1988) 14–38.
- J35 L.M. Kirousis and C.H. Papadimitriou, “Searching and pebbling,” *Theoretical Computer Science* 47 (1986) 205–218.
- J36 L.M. Kirousis and C.H. Papadimitriou, “Interval graphs and searching,” *Discrete Mathematics* 55 (1985) 181–184.
- J37 L.M. Kirousis, “A selection theorem,” *J. Symbolic Logic* 46 (1980) 437–438.
- J38 L. Harrington, L. Kirousis, and J. Schlipf, “A generalized Kleene-Moschovakis theorem,” *Proceedings of the American Mathematical Society* 68 (1978) 209–213.

Publications in electronic journals

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Articles in encyclopedias

- En1 A.C. Kaporis and L.M. Kirousis, “Thresholds of random k -SAT,” *Encyclopedia of Algorithms* (Springer 2016, 2236–2239).

Publications in conference proceedings¹

- C1 L. M. Kirousis, Ph.G. Kolaitis, and J. Livieratos. “Aggregation of votes with multiple positions on each issue,” *RAMiCS 2017, 16th International Conference in Relational and Algebraic Methods in Computer Science* (Springer, L.N. Computer Science, 2017, 209–225).

¹Almost all have subsequently appeared, or are under review, as expanded journal articles.

- C2 I. Giotis, L.M. Kirousis, K.I. Psaromiligkos, and D.M. Thilikos. “An alternative proof for the constructive asymmetric Lovász local lemma,” *CTW 2015, 3th Cologne Twente Workshop on Graphs and Combinatorial Optimization* (Conference proceedings, 2015, 89–92).
- C3 I. Giotis, L.M. Kirousis, K.I. Psaromiligkos, and D. M. Thilikos. “On the algorithmic Lovász local lemma and acyclic edge coloring,” *ANALCO 2015, Proceedings of the Twelfth Workshop on Analytic Algorithmics and Combinatorics*, (SIAM, 2015, 16–25).
- C4 J. Díaz, I. Giotis, L. M. Kirousis, E. Markakis, and M.J. Serna. “On the stability of generalized second price auctions with budgets,” *LATIN 2014, 11th Latin American Symposium on Theoretical Informatics* (Springer, L.N. Computer Science, 2014, 695–706).
- C5 L.M. Kirousis. “Coloring random graphs: A short survey,” *SYNASC 2009, 11th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing* (IEEE Computer Society, 2009, 8).
- C6 J. Díaz, L.M. Kirousis, D. Mitsche, and X. Pérez-Giménez, “A new upper bound for 3-SAT,” *FSTTCS 2008, IARCS Annual Conference on Foundations of Software Technology and Theoretical Computer Science* (Leibniz International Proceedings in Informatics, 2008, vol. 2, 163–164).
- C7 I. Chatzigiannakis, L.M. Kirousis, and Th. Stratiotis, “Probabilistic protocols for fair communication in wireless sensor networks,” *Proceedings of ALGOSENSORS 2008* (Springer, L.N. Computer Science, 2008, 100–110).
- C8 A.C. Kaporis, L.M. Kirousis, and E.C. Stavropoulos, “Approximating almost all instances of Max-Cut within a ratio above the Håstad threshold,” *ESA 2006, 14th Annual European Symposium on Algorithms* (Springer, L.N. Computer Science, 2006, 432–443).
- C9 G. Georgiadis and L.M. Kirousis, “Lightweight centrality measures in networks under attack,” *Proceedings of ECCS 2005, European Conference on Complex Systems*,
- C10 J. Díaz, A. Kaporis, L.M. Kirousis, and X. Pérez, “Partitioning networks into classes of mutually isolated nodes,” *Proceedings of ECCS 2005, European Conference on Complex Systems*,
- C11 J. Díaz, G. Grammatikopoulos, A.C. Kaporis, L.M. Kirousis, X. Pérez, and D.G. Sotiropoulos, “5-Regular Graphs are 3-Colorable with Positive Probability,” *ESA 2005, 13th Annual European Symposium on Algorithms* (Springer, L.N. Computer Science, 2005, 215–225).
- C12 A.C. Kaporis, L.M. Kirousis, E.I. Politopoulou, and P.G. Spirakis, “Experimental Results for Stackelberg Scheduling Strategies,” *WEA 2005, 4th International Workshop on Experimental and Efficient Algorithms*, (Springer, L.N. Computer Science, 2005, 77–88).
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- C15 L.M. Kirousis and Ph.G. Kolaitis, “On the complexity of model checking and inference in minimal models: Extended abstract,” Invited paper, *LPNMR 2001, Logic Programming and Nonmonotonic Reasoning, 6th International Conference, Proceedings*, (Springer, L.N. Artificial Intelligence, 2001, 42–53).
- C16 A.C. Kaporis, L.M. Kirousis, Y.C. Stamatiou, M. Vamvakari, and M. Zito, “The unsatisfiability threshold revisited,” *SAT 2001, Workshop on Theory and Applications of Satisfiability Testing*, affiliated with *LICS 2001, the 16th Annual IEEE Symposium on Logic in Computer Science, Electronic Notes in Discrete Mathematics 9* (2001) 81–95. A variant of this paper with title “Coupon collectors, q -binomial coefficients and the unsatisfiability threshold” appeared in: *ICTCS 2001, Theoretical Computer Science, 7th Italian Conference, Proceedings*, (Springer, L.N. Computer Science, 2001, 328–338).
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- C18 L.M. Kirousis and Ph.G. Kolaitis, “The complexity of minimal satisfiability problems,” *STACS 2000, 18th Annual Symposium on Theoretical Aspects of Computer Science*, (Springer, L.N. Computer Science, 2000, 407–418).
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- C20 P. Bose, C. Kaklamanis, L.M. Kirousis, E. Kranakis, D. Krizanc, and D. Peleg, “Station layouts in the presence of location constraints,” *ISAAC '99, Algorithms and Computation, 10th International Symposium*, (Springer, L.N. Computer Science, 1999, 269–278).
- C21 D. Achlioptas, L.M. Kirousis, E. Kranakis, and D. Krizanc, “Rigorous results for random $(2 + p)$ -SAT,” *RALCOM '97, Workshop on Randomized Algorithms in Sequential, Parallel, and Distributed Computing* (Workshop Proceedings, 1997).
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- C23 L.M. Kirousis, E. Kranakis, D. Krizanc, and A. Pelc, “Power consumption in packet radio networks,” *STACS '97, 14th Annual Symposium on Theoretical Aspects of Computer Science* (Springer, L.N. Computer Science, 1997, 363–374).
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- C30 L.M. Kirousis and A.G. Veneris, “Efficient algorithms for checking the atomicity of a run of read and write operations,” *WDAG '93, 7th Workshop on Distributed Algorithms and Computation* (Springer, L.N. Computer Science, 1993, 54–68).
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Books

As editor

- J. Díaz, L. Kirousis, L. Ortiz-Gracia, and M. Serna (eds.), *Research Perspectives CRM Barcelona, Extended Abstracts Summer 2015* (Springer, Birkhäuser Mathematics, 2015).
- Ch. Kaklamanis and L. Kirousis (eds.), *Sirocco 9, The 9th International Colloquium on Structural Information and Communication Complexity* (Proceedings in Informatics, Carleton Scientific, 2002).
- L.M. Kirousis and E. Kranakis (eds.), *Proceedings of the 2nd Colloquium on Structural Information and Communication Complexity, SIROCCO 1995* (Carleton University Press, International Informatics Series 2, 1996)
- S. Toueg, P. Spirakis, and L.M. Kirousis (eds.), *Proceedings of the 5th International Workshop on Distributed Algorithms, WDAG 1991* (Springer, L.N. Computer Science, 1992).

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- Ε. Κυρούσης, Χ. Μπούρας και Π. Σπυράκης, *Διακριτά Μαθηματικά: Τα Μαθηματικά της Επιστήμης των Υπολογιστών και Γ. Βουτσαδάκης, Ε. Κυρούσης, Χ. Μπούρας και Π. Σπυράκης, Διακριτά Μαθηματικά: Προβλήματα και Λύσεις, 2η ενιαία έκδοση* (Gutenberg, Αθήνα, 2008).

- Ε. Κυρούσης, Χ. Μπούρας, Ι. Σταματίου και Π. Σπυράκης, *Εισαγωγή στους Γράφους: Θεωρία, Προβλήματα και Λύσεις* (Εκδόσεις ΕΑ-ΙΤΥ, Αθήνα, 1999).