

List of publications

Alexander S. Kulikov

1. A. Golovnev, A. S. Kulikov, I. Mihajlin.
Families with Infants: A General Approach to Solve Hard Partition Problems.
Proceedings of 41st International Colloquium on Automata, Languages, and Programming (ICALP 2014). Lecture Notes in Computer Science 8572, Springer, pp. 551–562, 2014.
2. A. Golovnev, A. S. Kulikov, I. Mihajlin.
Solving SCS for Bounded Length Strings in Fewer than 2^n Steps.
Information Processing Letters. Volume 114, Issue 8, pp 421–425. 2014.
3. A. Golovnev, A. S. Kulikov, I. Mihajlin.
Solving 3-Superstring in $3^{n/3}$ Time.
Proceedings of 38th International Symposium on Mathematical Foundations of Computer Science (MFCS 2013), Lecture Notes in Computer Science 8087, Springer, pp. 480–491, 2013.
4. A. Golovnev, A. S. Kulikov, I. Mihajlin.
Approximating the Shortest Superstring Problem Using de Bruijn Graphs.
Proceedings of 24th Annual Symposium on Combinatorial Pattern Matching (CPM 2013), Lecture Notes in Computer Science 7922, Springer, pp. 120–129, 2013.
5. A. S. Kulikov, O. Melanich, I. Mihajlin.
A $5n - o(n)$ Lower Bound on the Circuit Size over U_2 of a Linear Boolean Function.
Proceedings of Computability in Europe (CiE 2012), Lecture Notes in Computer Science 7318, Springer, pp. 432–439, 2012.
6. E. Demenkov, A. S. Kulikov, I. Mihajlin, H. Morizumi.
Computing all MOD-functions simultaneously.
Proceedings of 7th International Computer Science Symposium in Russia (CSR 2012), Lecture Notes in Computer Science 7353, Springer, pp. 81–88, 2012.
7. E. Demenkov, A. S. Kulikov.
An Elementary Proof of a $3n - o(n)$ Lower Bound on the Circuit Complexity of Affine Dispersers.
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8. E. Demenkov, A. Kojevnikov, A. S. Kulikov, G. Yaroslavtsev.
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Information Processing Letters, 110, 2010, pp. 264–267.
9. P. Hrubes, S. Jukna, A. S. Kulikov, P. Pudlak.
On Convex Complexity Measures.
Theoretical Computer Science, vol. 411 (2010), pp. 1842–1854.
10. A. Kojevnikov, A. S. Kulikov.
Circuit Complexity and Multiplicative Complexity of Boolean Functions.
Proceedings of Computability in Europe (CiE 2010), Lecture Notes in Computer Science 6158, 2010, pp. 239–245.

11. К. Кулков, А. С. Куликов.
Новые верхние оценки для задачи максимальной выполнимости.
Дискретная математика, вып. 21(11), 2009, сс. 139-157.
12. Е. А. Hirsch, А. Kojevnikov, А. S. Kulikov, S. I. Nikolenko.
Complexity of Semialgebraic Proofs with Restricted Degree of Falsity.
Journal on Satisfiability, Boolean Modeling and Computation, Vol. 6, 2008, pp. 53-69.
13. S. Jukna, A. S. Kulikov.
Some Remarks on Covering Graphs by Complete Bipartite Subgraphs.
Discrete Mathematics, vol. 309(10), 2009, pp. 3399-3403.
14. А. А. Коевников, А. С. Кулаков, Г. Н. Ярославцев. Finding Efficient Circuits Using SAT-solvers.
Proceedings of the Twelfth International Conference on Theory and Applications of Satisfiability Testing (SAT 2009), Lecture Notes in Computer Science 5584, 2009, pp. 32–44.
15. А. С. Кулаков, К. Кутцков.
New Bounds for MAX-SAT by Clause Learning.
Proceedings of the 2nd International Computer Science Symposium in Russia (CSR 2007), Lecture Notes in Computer Science 4649, 2007, pp. 194–204.
16. А. Коевников, А. С. Кулаков.
Complexity of Semialgebraic Proofs with Restricted Degree of Falsity.
Proceedings of the Ninth International Conference on Theory and Applications of Satisfiability Testing (SAT 2006), Lecture Notes in Computer Science 4121, 2006, pp. 11–21.
17. А. Коевников, А. С. Кулаков.
A New Approach to Proving Upper Bounds for MAX-2-SAT.
Proceedings of the Seventeenth Annual ACM-SIAM Symposium on Discrete Algorithms (SODA 2006), 2006, pp.11–17.
18. А. С. Кулаков, С. С. Федин.
Автоматические доказательства верхних оценок на время работы алгоритмов расщепления.
Записки научных семинаров ПОМИ, вып. 316, 2004, сс. 111–128.
Английский перевод: Journal of Mathematical Sciences, vol. 134(5), 2006, pp.2383–2391.
19. А. С. Кулаков.
Автоматические доказательства верхних оценок для NP-трудных задач: детали реализации.
Препринт ПОМИ 21/2006, 2006.
20. А. С. Кулаков.
Automated Generation of Simplification Rules for SAT and MAXSAT.
Proceeding of Eighth International Conference on Theory and Applications of Satisfiability Testing (SAT 2005), Lecture Notes in Computer Science 3569, 2005, pp.430–436.
21. S. S. Fedin, A. Kojevnikov, B. Konev, A. S. Kulikov, S. I. Nikolenko, V. P. Orevkov.
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22. А. С. Кулаков.
Верхняя оценка $O(2^{0.16254n})$ для точной 3-выполнимости: более простое доказательство.
Записки научных семинаров ПОМИ, вып. 293, 2002, сс. 118–128.
Английский перевод: Journal of Mathematical Sciences, vol. 126(3), 2005, pp.1995–1999.

23. А. С. Куликов, С. С. Федин.
Верхняя оценка $2^{|E|/4}$ для задачи о максимальном разрезе.
Записки научных семинаров ПОМИ, вып. 293, 2002, сс.129–138.
Английский перевод: Journal of Mathematical Sciences, vol. 126(3), 2005, pp.1200–1204.