

## Publications by Max Kanovich

Over 100 published papers and technical reports.

### Main Publications by Max Kanovich

- [1] Foundations for Decision Problems in Separation Logic with General Inductive Predicates. Timos Antonopoulos, Nikos Gorogiannis, Christoph Haase, Max Kanovich and Joel Ouaknine.  
Accepted to 17th International Conference on Foundations of Software Science and Computation Structures (FoSSaCS). 5-13 April 2014, Grenoble, France.
- [2] Undecidability of Propositional Separation Logic and its Neighbours. James Brotherston and Max Kanovich.  
To appear in Journal of the ACM, 44p, 2014.
- [3] Bounded Memory Protocols and Progressing Collaborative Systems (with A.Scedrov, T.Ban Kirigin, and V.Nigam). In: J. Crampton, S. Jajodia and K. Mayes, eds., The 18th European Symposium on Research in Computer Security (ESORICS 2013), Egham, UK, September 2013. Springer LNCS, 8134, Springer-Verlag, 2013, pp. 309 - 326.
- [4] (with V. Nigam, T. Ban Kirigin, A. Scedrov, C. Talcott, and R. Perovic). Towards an Automated Assistant for Clinical Investigations In: C.C. Yang, ed., 2nd ACM SIGHIT International Health Informatics Symposium (IHI 2012). Miami, Florida, USA, January 2012. ACM Digital Library
- [5] Light Linear Logics with Controlled Weakening: Expressibility, Confluent Strong Normalization. *Annals of Pure and Applied Logic* 163 (2012), pp. 854-874.
- [6] (with N.Gorogiannis and P.O’Hearn) The Complexity of Abduction for Separated Heap Abstractions. The 18th International Static Analysis Symposium (SAS 2011), Sept 14-16, Venice, Italy
- [7] (with P.Rowe and A.Scedrov) Collaborative Planning with Confidentiality. *Journal of Automated Reasoning* 46 (3-4) (2011) 389-421.
- [8] (with T.Ban Kirigin, V.Nigam and A.Scedrov) Bounded Memory Dolev-Yao Adversaries in Collaborative Systems. In: P.Degano et al., eds., The 7th International Workshop on Formal Aspects of Security & Trust (FAST2010). Springer LNCS Volume 6561, Springer-Verlag, 2011, pp.18-33.
- [9] (with Jacqueline Vauzeilles) Linear logic as a tool for planning under temporal uncertainty. *Theoretical Computer Science*, 412, 2011, pp.2072-2092
- [10] (with T.Ban Kirigin, V.Nigam and A.Scedrov) Progressing Collaborative Systems. In: V.Cortier et al., eds., FCS-PrivMod 2010 Workshop on Foundations of Security and Privacy. July 14-15, 2010, Edinburgh, UK, 17p.
- [11] (with James Brotherston) Undecidability of propositional separation logic and its neighbours, In *Proc. 25-th Annual IEEE Symposium on Logic in Computer Science, Edinburgh, Scotland, U.K.*, July 2010, 10p. A preliminary version of this paper was released as Imperial College technical report DTR10-1.
- [12] (with Paul Rowe and Andre Scedrov) On Decidability and Complexity of Policy Compliance in Collaborative Systems. Submitted to *Special Issue of the Journal of Automated Reasoning on Security Rewriting*, 32p.
- [13] (with Paul Rowe and Andre Scedrov) Policy Compliance in Collaborative Systems. In: *22nd IEEE Computer Security Foundations Symposium (CSF)*, Port Jefferson, New York, USA, July 2009. pp.218-233.
- [14] Light Linear Logic with Controlled Weakening: The missing link. In: *Proc. Symposium on Logical Foundations of Computer Science, LFCS’09*, Deerfield Beach, Florida, U.S.A., January 3-6, 2009. Lecture Notes in Computer Science 5407, S.Artemov and A.Nerode (Eds.) 2009, pp.246-264.
- [15] Multiset Rewriting over Fibonacci and Tribonacci Numbers. Submitted to Mints Festschrift, 21p.
- [16] (with Paul Rowe and Andre Scedrov) Collaborative Planning with Privacy. In: A. Sabelfeld, ed., *20th IEEE Computer Security Foundations Symposium (CSF 20)*, Venice, Italy, July 2007, pp. 265-278.

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- [18] A note on Rewriting Proofs and Fibonacci Numbers. In: *Proc. Symposium on Logical Foundations of Computer Science, LFCS'07*, New York, U.S.A., June 4-7, 2007. Lecture Notes in Computer Science 4514, S.Artemov and A.Nerode (Eds.) 2007, pp.284-292.
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## Dissertations by Max Kanovich

- [1] The problems of the efficient program synthesis within computational models. Doctor of Science Dissertation, Moscow (Lomonosov) University, Dept. of Computational Mathematics and Cybernetics, 1989, 180 p. (in Russian)
- [2] The complexity of bounded algorithmical problems and universality. Ph.D. Dissertation, Moscow (Lomonosov) University, Dept. of Mechanics and Mathematics, 1971, 130 p. (in Russian)