

References

- [1] Mikel Aldaz, Joos Heintz, Guillermo Matera, José L. Montaña, and Luis M. Pardo. Combinatorial hardness proofs for polynomial evaluation. In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998)*, volume 1450 of *LNCS*, pages 167–175. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.
- [2] Michael Alekhnovich, Sam Buss, Shlomo Moran, and Toniann Pitassi. Minimum propositional proof length is np -hard to linearly approximate. In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998)*, volume 1450 of *LNCS*, pages 176–184. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.
- [3] Kazuyuki Amano and Akira Maruoka. A superpolynomial lower bound for a circuit computing the clique function with at most $(1/6) \log \log n$ negation gates. In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998)*, volume 1450 of *LNCS*, pages 399–408. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.
- [4] Andris Ambainis, David Mix Barrington, and Huong LêThanh. On counting ac^0 circuits with negative constants. In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998)*, volume 1450 of *LNCS*, pages 409–417. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.

- [5] Klaus Ambos-Spies, Steffen Lempp, and Gunter Mainhardt. Randomness vs. completeness: On the diagonalization strength of resource-bounded random sets. In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998)*, volume 1450 of *LNCS*, pages 465–473. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.
- [6] Vincenzo Auletta, Ioannis Caragiannis, Christos Kaklamanis, and Pino Persiano. On the complexity of wavelength converters. In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998)*, volume 1450 of *LNCS*, pages 771–779. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.
- [7] Giorgio Ausiello, Giuseppe F. Italiano, and Umberto Nanni. Hypergraph traversal revisited: Cost measures and dynamic algorithms. In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998)*, volume 1450 of *LNCS*, pages 1–16. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.
- [8] Matthias Baaz, Agata Ciabattoni, Christian Fermüller, and Helmut Veith. Proof theory of fuzzy logics: Urquhart's c and related logics. In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998)*, volume 1450 of *LNCS*, pages 203–212. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.
- [9] Gilles Barthe. The semi-full closure of pure type systems. In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of the 23rd International Symposium on Mathematical Foundations of Computer Science*,

MFCS'98 (Brno, Czech Republic, August 24-28, 1998), volume 1450 of *LNCS*, pages 316–325. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.

- [10] Klaus Barthelmann. When can an equational simple graph be generated by hyperedge replacement? In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998)*, volume 1450 of *LNCS*, pages 543–552. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.
- [11] Marcin Benke. Predicative polymorphic subtyping. In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998)*, volume 1450 of *LNCS*, pages 326–335. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.
- [12] Levke Bentzien. Positive turing and truth-table completeness for nexp are incomparable. In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998)*, volume 1450 of *LNCS*, pages 474–482. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.
- [13] S.L. Bezrukov, J.D. Chavez, L.H. Harper, M. Röttger, and U.-P. Schroeder. Embedding of hypercubes into grids. In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998)*, volume 1450 of *LNCS*, pages 693–701. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.
- [14] G.M. Bierman. A computational interpretation of the $\lambda\mu$ -calculus. In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceed-*

ings of the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998), volume 1450 of *LNCS*, pages 336–345. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.

- [15] Hans L. Bodlaender and Torben Hagerup. Tree decompositions of small diameter. In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998)*, volume 1450 of *LNCS*, pages 702–712. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.
- [16] Richard Bonner, Rūsiņš Freivalds, Jānis Lapīņš, and Antra Lukjanska. Nonstochastic languages as projections of 2-tape quasideterministic languages. In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998)*, volume 1450 of *LNCS*, pages 213–219. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.
- [17] Egon Börger and Wolfram Schulte. Defining the java virtual machine as platform for provably correct java compilation. In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998)*, volume 1450 of *LNCS*, pages 17–35. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.
- [18] Hajo Broersma, Andreas Huck, Ton Kloks, Otto Koppius, Dieter Kratsch, Haiko Müller, and Hilde Tuinstra. Degree-preserving forests. In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998)*, volume 1450 of *LNCS*, pages 713–721. Springer-Verlag,

Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.

- [19] Thomas Buchholz, Andreas Klein, and Martin Kutrib. One guess one-way cellular arrays. In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998)*, volume 1450 of *LNCS*, pages 807–815. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.
- [20] Gianpiero Cattaneo and Luciano Margara. Topological definitions of chaos applied to cellular automata dynamics. In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998)*, volume 1450 of *LNCS*, pages 816–824. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.
- [21] Christian Choffrut and Sandor Horvath. Equations in transfinite strings. In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998)*, volume 1450 of *LNCS*, pages 656–664. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.
- [22] Marek Chrobak and Christoph Dürr. Reconstructing polyatomic structures from discrete x-rays: np -completeness proof for three atoms. In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998)*, volume 1450 of *LNCS*, pages 185–193. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.
- [23] Jacek Chrząszcz. Polymorphic subtyping without distributivity. In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of*

the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998), volume 1450 of *LNCS*, pages 346–355. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.

- [24] Bruno Courcelle and Denis Lapoire. Facial circuits of planar graphs and context-free languages. In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998)*, volume 1450 of *LNCS*, pages 616–624. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.
- [25] A. Crauser, K. Mehlhorn, U. Meyer, and P. Sanders. A parallelization of dijkstra's shortest path algorithm. In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998)*, volume 1450 of *LNCS*, pages 722–731. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.
- [26] M. Crochemore, F. Mignosi, and A. Restivo. Minimal forbidden words and factor automata. In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998)*, volume 1450 of *LNCS*, pages 665–673. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.
- [27] Carsten Damm. On boolean vs. modular arithmetic for circuits and communication protocols. In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998)*, volume 1450 of *LNCS*, pages 780–788. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.
- [28] Alessandra di Pierro and Herbert Wiklicky. Probabilistic concurrent constraint programming: Towards a fully abstract model. In

- Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998)*, volume 1450 of *LNCS*, pages 446–455. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.
- [29] Bruno Durand and Sylvain Porrot. Comparison between the complexity of a function and the complexity of its graphs. In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998)*, volume 1450 of *LNCS*, pages 732–739. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.
 - [30] E. Allen Emerson and Richard J. Trefler. Model checking real-time properties of symmetric systems. In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998)*, volume 1450 of *LNCS*, pages 427–436. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.
 - [31] Henning Fernau and Ludwig Staiger. Ifs and control languages. In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998)*, volume 1450 of *LNCS*, pages 740–750. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.
 - [32] Maria C.F. Ferreira, Delia Kesner, and Laurence Puel. Reducing ac-termination to termination. In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998)*, volume 1450 of *LNCS*, pages 239–247. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.

- [33] Zoltán Fülöp, Eija Jurvanen, Magnus Steinby, and Sándor Vágvölgyi. On one-pass term rewriting. In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998)*, volume 1450 of *LNCS*, pages 248–256. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.
- [34] Paul Gastin, Raphaël Meyer, and Antoine Petit. A (non-elementary) modular decision procedure for *ltrl*. In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998)*, volume 1450 of *LNCS*, pages 356–365. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.
- [35] Roberto Giacobazzi, Francesco Ranzato, and Francesca Scozzari. Complete abstract interpretations made constructive. In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998)*, volume 1450 of *LNCS*, pages 366–377. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.
- [36] Judy Goldsmith, Mitsunori Ogiara, and Jörg Rothe. Tally np sets and easy census functions. In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998)*, volume 1450 of *LNCS*, pages 483–492. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.
- [37] Martin Grohe and Thomas Schwentick. Locality of order-invariant first-order formulas. In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998)*, volume 1450 of *LNCS*, pages 437–445. Springer-Verlag,

Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.

- [38] Martin Große-Rhode, Francesco Parisi-Presicce, and Marta Simeoni. Spatial and temporal refinement of typed graph transformation systems. In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998)*, volume 1450 of *LNCS*, pages 553–561. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.
- [39] Christian Hagenah and Anca Muscholl. Computing ϵ -free nfa from regular expressions in $o(n \log^2(n))$ time. In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998)*, volume 1450 of *LNCS*, pages 277–285. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.
- [40] David Harel. Towards a theory of recursive structures. In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998)*, volume 1450 of *LNCS*, pages 36–53. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.
- [41] Tero Harju, Alexandru Mateescu, and Arto Salomaa. Shuffle on trajectories: The schützenberger product and related operations. In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998)*, volume 1450 of *LNCS*, pages 503–511. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.
- [42] Lane A. Hemaspaandra and Jörg Rothe. A second step towards circuit complexity-theoretic analogs of rice's theorem. In Luboš Brim,

Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998)*, volume 1450 of *LNCS*, pages 418–426. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.

- [43] Miki Hermann and Gernot Salzer. On the word, subsumption, and complement problem for recurrent term schematizations. In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998)*, volume 1450 of *LNCS*, pages 257–266. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.
- [44] Thomas Hofmeister and Hanno Lefmann. Approximating maximum independent sets in uniform hypergraphs. In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998)*, volume 1450 of *LNCS*, pages 562–570. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.
- [45] Juraj Hromkovič. Communication complexity and lower bounds on multilective computations. In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998)*, volume 1450 of *LNCS*, pages 789–797. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.
- [46] Thomas Hune and Mogens Nielsen. Timed bisimulation and open maps. In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998)*, volume 1450 of *LNCS*, pages 378–387. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.

- [47] Kazuo Iwama and Chuzo Iwamoto. Improved time and space hierarchies of one-tape off-line tms. In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998)*, volume 1450 of *LNCS*, pages 580–588. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.
- [48] Kazuo Iwama, Mitsushi Nozoe, and Shuzo Yajima. Optimizing obdds is still intractable for monotone functions. In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998)*, volume 1450 of *LNCS*, pages 625–635. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.
- [49] Juhani Karhumäki, Ján Maňuch, and Wojciech Plandowski. On defect effect of bi-infinite words. In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998)*, volume 1450 of *LNCS*, pages 674–682. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.
- [50] Yonit Kesten and Amir Pnueli. Modularization and abstraction: The keys to practical formal verification. In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998)*, volume 1450 of *LNCS*, pages 54–71. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.
- [51] Johannes Köbler and Rainer Schuler. Average-case intractability vs. worst-case intractability. In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998)*, volume 1450 of *LNCS*, pages 493–502. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.

- [52] Roman Kolpakov, Gregory Kucherov, and Yuri Tarannikov. On repetition-free binary words of minimal density. In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998)*, volume 1450 of *LNCS*, pages 683–692. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.
- [53] Werner Kuich. Gaußian elimination and a characterization of algebraic power series. In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998)*, volume 1450 of *LNCS*, pages 512–521. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.
- [54] Nikolai N. Kuzjurin. Locally explicit construction of rödl's asymptotically good packings. In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998)*, volume 1450 of *LNCS*, pages 194–202. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.
- [55] Salvatore La Torre and Margherita Napoli. Representing hyper-graphs by regular languages. In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998)*, volume 1450 of *LNCS*, pages 571–579. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.
- [56] Michel Latteux, David Simplot, and Alain Terlutte. Iterated length-preserving rational transductions. In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998)*, volume 1450 of *LNCS*, pages 286–

295. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.
- [57] Luis-Miguel Lopez and Philippe Narbel. D0l-systems and surface automorphisms. In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998)*, volume 1450 of *LNCS*, pages 522–532. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.
 - [58] Wolfgang Maass. On the role of time and space in neural computation. In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998)*, volume 1450 of *LNCS*, pages 72–83. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.
 - [59] Giovanni Manzini. Characterization of sensitive linear cellular automata with respect to the counting distance. In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998)*, volume 1450 of *LNCS*, pages 825–833. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.
 - [60] Oliver Matz. One quantifier will do in existential monadic second-order logic over pictures. In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998)*, volume 1450 of *LNCS*, pages 751–759. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.
 - [61] Jacques Mazoyer and Ivan Rapaport. Additive cellular automata over z_p and the bottom of (ca, \leq) . In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno,*

Czech Republic, August 24-28, 1998), volume 1450 of *LNCS*, pages 834–843. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.

- [62] Kurt Mehlhorn and Stefan Näher. From algorithms to working programs: On the use of program checking in leda. In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998)*, volume 1450 of *LNCS*, pages 84–93. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.
- [63] Silvio Micali. Computationally-sound checkers. In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998)*, volume 1450 of *LNCS*, pages 94–116. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.
- [64] Paweł Mielniczuk and Leszek Pacholski. Tarskian set constraints are in nexptime. In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998)*, volume 1450 of *LNCS*, pages 589–596. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.
- [65] Mogens Nielsen. Reasoning about the past. In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998)*, volume 1450 of *LNCS*, pages 117–128. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.
- [66] Flemming Nielson and Hanne Riis Nielson. Flow logic for imperative objects. In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Pro-*

ceedings of the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998), volume 1450 of *LNCS*, pages 220–228. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.

- [67] Holger Petersen. The head hierarchy for oblivious finite automata with polynomial advice collapses. In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998)*, volume 1450 of *LNCS*, pages 296–304. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.
- [68] Harry Preuß and Anand Srivastav. Blockwise variable orderings for shared bdds. In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998)*, volume 1450 of *LNCS*, pages 636–644. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.
- [69] Pavel Pudlák. Satisfiability — algorithms and logic. In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998)*, volume 1450 of *LNCS*, pages 129–141. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.
- [70] Alexander Rabinovich. Expressive completeness of temporal logic of action. In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998)*, volume 1450 of *LNCS*, pages 229–238. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.
- [71] Klaus Reinhardt. On some recognizable picture-languages. In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of*

the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998), volume 1450 of *LNCS*, pages 760–770. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.

- [72] Isabelle Ryl, Yves Roos, and Mireille Clerbout. About synchronization languages. In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998)*, volume 1450 of *LNCS*, pages 533–542. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.
- [73] Géraud Sénizergues. The equivalence problem for deterministic push-down transducers into abelian groups. In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998)*, volume 1450 of *LNCS*, pages 305–315. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.
- [74] Alex K. Simpson. Lazy functional algorithms for exact real functionals. In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998)*, volume 1450 of *LNCS*, pages 456–464. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.
- [75] Anna Slobodová. On the composition problem for obdds with multiple variable orders. In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998)*, volume 1450 of *LNCS*, pages 645–655. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.
- [76] Jiří Srba. Deadlocking states in context-free process algebra. In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of*

the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998), volume 1450 of *LNCS*, pages 388–398. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.

- [77] Colin Stirling. The joys of bisimulation. In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998)*, volume 1450 of *LNCS*, pages 142–151. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.
- [78] Hélène Touzet. Encoding the hydra battle as a rewrite system. In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998)*, volume 1450 of *LNCS*, pages 267–276. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.
- [79] Sergei Vorobyov. $\forall\exists^*$ -equational theory of context unification is π_1^0 -hard. In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998)*, volume 1450 of *LNCS*, pages 597–606. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.
- [80] Klaus Weihrauch and Xizhong Zheng. A finite hierarchy of the recursively enumerable real numbers. In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998)*, volume 1450 of *LNCS*, pages 798–806. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.
- [81] Jiří Wiedermann. Speeding-up nondeterministic single-tape off-line computations by one alternation. In Luboš Brim, Jozef Gruska, and

- Jiří Zlatuška, editors, *Proceedings of the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998)*, volume 1450 of *LNCS*, pages 607–615. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.
- [82] Jiří Wiedermann. Towards algorithmic explanation of mind evolution and functioning. In Luboš Brim, Jozef Gruska, and Jiří Zlatuška, editors, *Proceedings of the 23rd International Symposium on Mathematical Foundations of Computer Science, MFCS'98 (Brno, Czech Republic, August 24-28, 1998)*, volume 1450 of *LNCS*, pages 152–166. Springer-Verlag, Berlin-Heidelberg-New York-Barcelona-Budapest-Hong Kong-London-Milan-Paris-Singapore-Tokyo, 1998.