

## PAPERS IN THE PROCEEDINGS OF CONFERENCES (Conferences with international PC)

1. **V. Mitrana**: Networks of picture processors. *Eighth Workshop on Non-Classical Models of Automata and Applications NCMA 2016*: 47-60.
2. F. Arroyo, S. Gómez Canaval, **V. Mitrana**, S. Popescu: Networks of Polarized Evolutionary Processors Are Computationally Complete. *International Conference on Language and Automata Theory and Applications LATA 2014*, LNCS 8370, Springer Verlag, 2014, 101-112.
3. M. Dumitran, J. Gil, F. Manea, **V. Mitrana**: Bounded Prefix-Suffix Duplication. *Implementation and Application of Automata - 19th International Conference, CIAA 2014*, LNCS 8587, Springer Verlag, 2014, 176-187.
4. H. Bordihn, P. Bottoni, A. Labella, **V. Mitrana**: Solving 2D-Pattern Matching with Networks of Picture Processors. *Theory and Practice of Natural Computing, TPNC 2014*, LNCS 8890, Springer Verlag, 2014, 157-168.
5. F. Arroyo, J. Castellanos, **V. Mitrana**: Uniform Distributed Pushdown Automata Systems. *Descriptive Complexity of Formal Systems - 14th International Workshop, DCFS 2012*, LNCS 7386, Springer Verlag, 2012, 64-75.
6. P. Pablo Alarcón, F. Arroyo, **V. Mitrana**: Networks of Polarized Evolutionary Processors as Problem Solvers, *Advances in Knowledge-Based and Intelligent Information and Engineering Systems - 16th Annual KES Conference*, Frontiers in Artificial Intelligence and Applications, IOS Press, 2012, 807-815.
7. J. Castellanos, **V. Mitrana**, E. Santos: Splicing systems: Accepting versus Generating, *Models of Computation in Context, 7th Computability in Europe, CiE 2011*, LNCS 6735 Springer Verlag 2011, 41-51.
8. J. Castellanos, **V. Mitrana**, E. Santos, J. Sempere: Simulating ANEPs with filtered connections by accepting evolutionary P systems, *Proceedings of the International Work-Conference on Artificial and Natural Neural Networks IWINAC 2011*, LNCS 6686, Springer Verlag 2011, 295-302.
9. F. Arroyo, J. Castellanos, **V. Mitrana**: On the degree of team cooperation in grammar systems, *Proceedings of 12th International Workshop on Descriptive Complexity of Formal Systems DCFS 2011*, LNCS 6808, Springer Verlag 2011, 68-79.
10. F. Manea, C. Martín-Vide, **V. Mitrana**: Hairpin Lengthening, *Programs, Proofs, Processes, 6th Conference on Computability in Europe, CiE 2010*, LNCS 6158 Springer Verlag 2010, 296-306.
11. M. Ito, P. Leupold, **V. Mitrana**: Bounded hairpin completion, *Proc. 3rd International Conference on Language and Automata Theory and Applications LATA 2009*, LNCS 5457, Springer Verlag 2009, 434-445.
12. **V. Mitrana**, B. Truthe: On accepting networks of evolutionary processors with at most two types of nodes, *Proc. 3rd International Conference on Language and Automata Theory and Applications LATA 2009*, LNCS 5457, Springer Verlag 2009, 588-600.
13. F. Manea, **V. Mitrana**, J. Sempere: Some remarks on superposition based on Watson-Crick-like complementarity, *13th International Conference on Developments in Language Theory DLT 2009*, LNCS 5583, Springer Verlag 2009, 372-383.
14. P. Bottoni, A. Labella, F. Manea, **V. Mitrana**, J. Sempere: Filter position in networks of evolutionary processors does not matter, *The 15th International Meeting on DNA Computing and Molecular Programming DNA 15*, LNCS 5877, Springer Verlag 2009, 1-11.
15. F. Manea, **V. Mitrana**: Accepting networks of evolutionary processors: complexity aspects - recent results and new challenges. *Proceedings of the International Conference on Agents and Artificial Intelligence ICAART 2009*, INSTICC Press, 2009, 597-604.

16. V. Diekert, S. Kopecki, **V. Mitrana**: On the hairpin completion of regular languages. *Theoretical Aspects of Computing ICTAC 2009*, LNCS 5684, Springer Verlag 2009, 170-184.
17. P. Bottoni, A. Labella, F. Manea, **V. Mitrana**, J. M. Sempere: Networks of evolutionary picture processors with filtered connections. *8th International Conference on Unconventional Computation, UC 2009*, LNCS 5715, Springer Verlag 2009, 70-84.
18. R. Loos, F. Manea, **V. Mitrana**: Small universal accepting networks of evolutionary processors with filtered connections. *Proceedings 11th International Workshop on Descriptive Complexity of Formal Systems DCFS 2009*, Electronic Proceedings in Theoretical Computer Science EPTCS 3, 173-183.
19. F. Manea, **V. Mitrana**, T. Yokomori: Some remarks on the hairpin completion, In E. Csuhaj-Varju, Z. Esik (eds.) *Proc. 12th International Conference on Automata and Formal Languages, AFL 2008*, Computer and Automation Research Institute, Hungarian Academy of Science, 302-313.
20. F. Manea, **V. Mitrana**: Hairpin completion versus hairpin reduction, *Computation in Europe CiE 2007*, LNCS 4497, Springer Verlag 2007, 532-541.
21. J. Castellanos, F. Manea, L. F. de Mingo Lopez, **V. Mitrana**: Accepting networks of splicing processors with filtered connections, *Machines, Computability, Universality, MCU 2007*, LNCS 4664, Springer Verlag 2007, 218-229.
22. F. Manea, C. Martin-Vide, **V. Mitrana**: All NP-Problems can be solved in polynomial time by ANSP of constant size, *DNA Based Computers DNA 12*, LNCS 4287, Springer Verlag 2006, 47-57.
23. R. Loos, C. Martin-Vide, **V. Mitrana**: Solving SAT and HPP with accepting splicing systems, *Parallel Problem Solving from Nature PPSN IX*, LNCS 4193, Springer Verlag 2006, 771-777.
24. J. Castellanos, L.F. de Mingo Lopez, **V. Mitrana**: Solving SAT by accepting networks of splicing processors with filtered connections, *15th International Conference on Computing CIC 2006*, IEEE Computer Society, 2006, 260-265.
25. F. Manea, C. Martin-Vide, **V. Mitrana**: On some algorithmic problems regarding the hairpin completion, *Optimal Discrete Structures and Algorithms ODSA 2006*, Electronic Notes in Discrete Mathematics ENDM 172.
26. D. Cheptea, C. Martin-Vide, **V. Mitrana**: A new operation on words suggested by DNA biochemistry: hairpin completion, *Transgressive Computing*, University of Granada, Spain, 2006, 216-228.
27. F. Manea, C. Martin-Vide, **V. Mitrana**: A universal accepting hybrid network of evolutionary processors, *First International Workshop on Developments in Computational Models, DCM '05*, Electronic Notes in Theoretical Computer Science ENTCS 93 (2006), 15-24.
28. F. Manea, C. Martin-Vide, **V. Mitrana**: Accepting networks of splicing processors, *Computation in Europe CiE 2005*, LNCS 3526 Springer Verlag 2005, 300-309.
29. C. Martin-Vide, **V. Mitrana**: Contextual information systems, *CONTEXT '05*, LNAI 3554, Springer Verlag 2005, 304-315.
30. C. Martin-Vide, **V. Mitrana**: Remarks on multiple pattern interpretations, *Automata and Formal Languages AFL05*, University of Szeged, Hungary, 2005, 200-212.
31. C. Martin-Vide, **V. Mitrana**: Further properties of path-controlled grammars, *Formal Grammars/Mathematics of Languages, FG-MOL10*, CSLI Publications 2005, 139-150.
32. C. Martin-Vide, **V. Mitrana**: Descriptive and computational aspects of generating and accepting hybrid networks of evolutionary processors, *Proc. Conference on Algebraic Informatics CAI'05*, Aristotle University of Thessaloniki, Greece, 2005, 207-220.
33. C. Martin-Vide, **V. Mitrana**: A new uniform translocation distance, *Structural, Syntactic, and Statistical Pattern Recognition SSPR 2004*, LNCS 3138, Springer Verlag 2004, 278-286.

34. M. Margenstern, **V. Mitrana**, M. Perez-Jimenez: Accepting hybrid networks of evolutionary systems, *Proc. DNA Based Computers DNA 10*, LNCS 3384 Springer Verlag 2005, 235-246.
35. M. A. Grando, **V. Mitrana**: Can PC grammar systems benefit from concurrent programming?, *Grammar System Week*, Budapest, Hungarian Academy of Sciences, 2004, 200-211.
36. F. Manea, C. Martin-Vide, **V. Mitrana**: Solving 3CNF-SAT in linear time with WWW, *Machines, Computability, Universality, MCU 2004*, LNCS 3354, Springer Verlag 2005, 269-280.
37. A. Atanasiu, C. Martin-Vide, **V. Mitrana**: On the sentence valuations in a semiring, (Invited lecture) *Proc. International Conference Words, Languages and Combinatorics III*, World Scientific, Singapore, 2003, 22-39.
38. E. Csuhaj-Varju, **V. Mitrana**, G. Vaszil: Distributed automata systems: computational power, *Developments in Language Theory (DLT 2003)*, LNCS 2710, Springer Verlag, Berlin, 2003, 218-229.
39. C. Martin-Vide, **V. Mitrana**, M.J. Perez-Jimenez, F. Sancho-Caparrini: Hybrid networks of evolutionary processors, *Genetic and Evolutionary Computation Conference (GECCO 2003)*, LNCS 2723, Springer Verlag, Berlin, 2003, 401-412.
40. M. Gheorghe, C. Martin-Vide, **V. Mitrana**, M.J. Perez-Jimenez: An agent based approach of collective foraging, *International Work-Conference on Artificial and Natural Neural Networks (IWANN 2003)*, LNCS 2686, Springer Verlag, Berlin, 2003, 638-645.
41. M. ter Beek, E. Csuhaj-Varju, **V. Mitrana**: Teams of pushdown automata, *International Conference on Perspectives of System Informatics (PSI 2003)*, LNCS 2890, Springer-Verlag, Berlin, 2003, 329-337.
42. I. Ardelean, M. Gheorghe, C. Martin-Vide, **V. Mitrana**: A computational model for cell differentiation, *Workshop Pre-Proceedings, IPCAT2003*, Lausanne, Switzerland, 2003, 275-287.
43. C. Martin-Vide, **V. Mitrana**: Some remarks on multiple pattern interpretations, *Proceeding of Mathematics of Languages (MOL 8)*, 2003, 105-117.
44. **V. Mitrana**: Some complexity aspects of hybrid networks of evolutionary processors, *Proc. Descriptive Complexity of Formal Systems (DCFS 2003)* (Invited plenary lecture), 2003, 5-20.
45. E. Csuhaj-Varju, C. Martin-Vide, **V. Mitrana**: Parallel communicating finite transducer systems, *Computational Linguistics in the Netherlands (CLIN 2002)*, Language and Computers: Studies in Practical Linguistics, Rodopi, Amsterdam-NY, 2003, 9-24.
46. C. Martin-Vide, **V. Mitrana**, R. Stiebe: Weighted grammars and automata with maximum interpretation, *Weighted Automata: Theory and Applications 2002*, TUD-FI 20-02, 32-35.
47. M. Kudlek, **V. Mitrana**: Considerations on a multiset model for membrane computing, *Proc. Workshop in Membrane Computing (WMC 2002)*, LNCS 2597, Springer Verlag, Berlin, 2003, 352-358.
48. J. Castellanos, C. Martin-Vide, **V. Mitrana**, J. Sempere: Solving NP-complete problems with networks of evolutionary processors, *Proc. of the 6th International Work-Conference on Artificial and Natural Neural Networks, IWANN 2001*, LNCS 2048, Springer Verlag, Berlin, 2001, 621-628.
49. E. Csuhaj-Varju, C. Martin-Vide, **V. Mitrana**: Multiset automata, *Multiset Processing*, LNCS 2235, Springer Verlag 2001, 69-84.
50. M. Ito, C. Martin-Vide, **V. Mitrana**: Chomsky-Schutzenberger type characterizations of poly-slender and Parikh slender context-free languages, *Proceedings of Formal Grammars/Mathematics of Languages FGMOL '01*, 2001, 104-112.
51. M. Kudlek, **V. Mitrana**: Normal forms for multiset grammars, *Multiset Processing*, LNCS Springer Verlag, 2235, 2001, 135-146.

52. C. Martin-Vide, **V. Mitrana**: Grammars with bounded-life resources, *Proc. Descriptive Complexity of Automata, Grammars and Related Structures*, DCAGRS '01, 2001, 214-222.
53. S. Marcus, C. Martin-Vide, **V. Mitrana**, Gh. Paun: A new-old class of linguistically motivated regulated grammars, *7th International Conference on Computational Linguistics in Netherlands, CLIN 2001*, Rodopi, Amsterdam, 2001, 111-125.
54. M. Kudlek, **V. Mitrana**: Closure properties of multiset languages, *Workshop on Membrane Computing, WMC2001*, Curtea de Arges, August 20-25, 2001, 157-168.
55. C. Martin-Vide, **V. Mitrana**: P Systems with valuations, *Proceedings of the Second International Conference on Unconventional Models of Computation UMC '2K*, Springer Verlag, London, 2000, 154-166.
56. **V. Mitrana**: Parallel communicating finite automata systems, *Proc. of Algebraic Systems, Formal Languages and Computations, RIMS Kokyuroku*, 2000, 178-191.
57. C. Martin-Vide, **V. Mitrana**: Uniquely parsable CD grammar systems, *Sixth Intern. Workshop on Parsing Technologies IWPT 2000*, 2000, 313-315.
58. **V. Mitrana**: Parsability approaches in CD grammar systems, *Proceedings of the Workshop in Grammar Systems*, Bad Ischl, 2000, 165-185.
59. **V. Mitrana**, R. Stiebe: Extended finite automata over groups. *Proc. of the 1st Conference on Semigroups and Algebraic Engineering*, Aizu, World Scientific, 1999, 317-329.
60. **V. Mitrana**: On the degree of communication in parallel communicating finite automata, *Workshop on Descriptive Complexity of Automata, Grammars and Related Structures*, Otto-von-Guericke Universitat, 155-165, 1999.
61. J. Dassow, **V. Mitrana**: The degree of parallelism in contextual grammars with the strategy of minimal competence. In *Mathematical and Computational Analysis of Natural Language*, Studies in Functional and Structural Linguistics 45, John Benjamins, Amsterdam, 1998, 3-16.
62. C. Martin-Vide, **V. Mitrana**: Cooperation in contextual grammars. In *MFCS '98 Workshop on Grammar Systems. Proceedings*, Silesian University, Institute of Computer Science, 1998, 289-302.
63. A. Atanasiu, **V. Mitrana**: Distributed encryption systems. In *Proc. of ROSYCS '98*, 1998, 47-56.
64. C. Martin-Vide, **V. Mitrana**: An algebraic model of synonymy. In *MFCS '98 Workshop on Mathematical Linguistics. Proceedings*, University of Hamburg, Fachbereich Informatik, Bericht 213/1998, 107-115.
65. J. Dassow, **V. Mitrana**: Evolutionary grammars: a grammatical model for genome evolution. *Bioinformatics. Proceedings of GCB '96*, LNCS 1278, Springer-Verlag, 1997, 199-209.
66. J. Dassow, **V. Mitrana**: On some operations suggested by the genome evolution. *Pacific Symposium on Biocomputing '97*, Hawaii, 1997, 97-108.
67. J. Dassow, **V. Mitrana**, G. Paun: Point mutations in context-free languages. *Proc. of DLT '97*, 1997, 429-446.
68. **V. Mitrana**: Binary self-adding sequences. *Developments in Language Theory. At the Crossroads of Mathematics, Computer Science and Biology*, World Scientific Publishing, 1996, 62-68.
69. L. Ilie, **V. Mitrana**: Crossing-over on languages. A formal representation of the recombination of genes in a chromosome. *German Conference on Bioinformatics GCB '96*, Leipzig, Germany, 1996, 87-93.
70. **V. Mitrana**: On some classes of grammar systems. *Developments in Theoretical Computer Science, Proc. of the 7th IMYCS '92*, Gordon and Breach Science Publishers, 1994, 153-162.
71. A. Atanasiu, **V. Mitrana**: Substitution on words and languages. *Developments in language theory. At the Crossroads of Mathematics, Computer Science and Biology* (A.Salomaa, G.Rozenberg, eds.), World Scientific Publishing, 1994, 51-60.

72. A. Atanasiu, **V. Mitrana**: Formal cryptation systems. *Proc. of COMP-Sec '94*, Technical Military Academy of Romania, 1995, 29-36.
73. A. Atanasiu, **V. Mitrana**: Parallel substitution on words and languages. *Proc. of the 9th ROSYCS '93*, Iasi, 1993, 24-30.

## **PAPERS IN THE PROCEEDINGS OF CONFERENCES (Conferences with national PC)**

1. **V. Mitrana**: On grammatical interpretation. *Proc. of the Third Colloquium on Logics, Languages, Math. Linguistics*, Brasov, Romania, 1991, 86-93.
2. **V. Mitrana**: Leftmost derivation in modular grammars, *Proc. of the 7th National Symp. "Info-Iasi"*, Iasi, Romania, 1989, 83-88.
3. A. Atanasiu, **V. Mitrana**: Queue automata. Decisions problems. *Proc. of the Second Colloquium on Logics, Languages, Math. Linguistics*, Brasov, Romania, 1988, 1-6.
4. A. Atanasiu, **V. Mitrana**: Modular grammars. Generative power and properties of closure. *Proc. of the Second Colloquium on Logics, Languages, Math. Linguistics*, Brasov, Romania, 1988, 161-168.
5. A. Atanasiu, **V. Mitrana**: A convergent structure on the power series space, *Proc. of the 6th National Symp. "Info-Iasi"*, Iasi, Romania, 1987, 41-49.