# BRICS Research Series, 2002

March 26, 2004

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## References

[RS-02-53] **Abstract**, *PostScript*, *PDF*, *DVI*.
Olivier Danvy. *A Lambda-Revelation of the SECD Machine*. December 2003. 15 pp. Superseeded by the BRICS report RS-03-33.

[RS-02-52] **Abstract**, *PostScript*, *PDF*, *DVI*.
Olivier Danvy. *A New One-Pass Transformation into Monadic Normal Form*. December 2002. 16 pp. Appears in Hedin, editor, *Compiler Construction, 12th International Conference*, CC '03 Proceedings, LNCS 2622, 2003, pages 77–89.

[RS-02-51] **Abstract**, *PostScript*, *PDF*, *DVI*.
Gerth Stlting Brodal, Rolf Fagerberg, Anna stlin, Christian N. S. Pedersen, and S. Srinivasa Rao. *Computing Refined Buneman Trees in Cubic Time*. December 2002. 14 pp.

[RS-02-50] **Abstract**, *PostScript*, *PDF*.
Kristoffer Arnsfelt Hansen, Peter Bro Miltersen, and V. Vinay. *Circuits on Cylinders*. December 2002. 16 pp.

[RS-02-49] **Abstract**, *PostScript*, *PDF*, *DVI*.
Mikkel Nygaard and Glynn Winskel. *HOPLA—A Higher-Order Process Language*. December 2002. 18 pp. Appears in Brim, Jančar, Křetnský and Antonín, editors, *Concurrency Theory: 13th International Conference*, CONCUR '02 Proceedings, LNCS 2421, 2002, pages 434–448.

[RS-02-48] **Abstract**, *PostScript*, *PDF*, *DVI*.
Mikkel Nygaard and Glynn Winskel. *Linearity in Process Languages*. December 2002. 27 pp. Appears in Plotkin, editor, *Seventeenth Annual IEEE Symposium on Logic in Computer Science*, Lics '02 Proceedings, 2002, pages 433–446.

[RS-02-47] **Abstract**, *PostScript*, *PDF*, *DVI*.
Zoltn sik. *Extended Temporal Logic on Finite Words and Wreath Product of Monoids with Distinguished Generators*. December 2002. 16 pp. To appear in *6th International Conference, Developments in Language Theory*, DLT '02 Revised Papers, LNCS, 2002.

[RS-02-46] **Abstract**, *PostScript*, *PDF*, *DVI*.
Zoltn sik and Hans Lei. *Greibach Normal Form in Algebraically Complete Semirings*. December 2002. 43 pp. An extended abstract appears in Bradfield, editor, *European Association for Computer Science Logic: 16th International Workshop*, CSL '02 Proceedings, LNCS 2471, 2002, pages 135–150.

[RS-02-45] **Abstract**, *PostScript*, *PDF*.
Jesper Makholm Byskov. *Chromatic Number in Time $O(2.4023^n)$ Using Maximal Independent Sets*. December 2002. 6 pp.

[RS-02-44] **Abstract**, *PostScript*, *PDF*.
Zoltn sik and Zoltn L. Nmeth. *Higher Dimensional Automata*. November 2002. 32 pp. A preliminary version appears under the title *Automata on Series-Parallel Biposets* in Kuich, Rozenberg and Salomaa, editors, *5th International Conference, Developments in Language Theory*, DLT '01 Revised Papers, LNCS 2295, 2002, pages 217–227. This report supersedes the earlier BRICS report RS-01-24.

[RS-02-43] **Abstract**, *PostScript*, *PDF*.
Mikkel Christiansen and Emmanuel Fleury. *Using IDDs for Packet Filtering*. October 2002. 25 pp.

[RS-02-42] **Abstract**, *PostScript*, *PDF*.
Luca Aceto, Jens Alsted Hansen, Anna Inglfsdttir, Jacob Johnsen, and John Knudsen. *Checking Consistency of Pedigree Information is NP-complete (Preliminary Report)*. October 2002. 16 pp.

[RS-02-41] **Abstract**, *PostScript*, *PDF*, *DVI*.
Stephen L. Bloom and Zoltn sik. *Axiomatizing Omega and Omega-op Powers of Words*. October 2002. 16 pp.

[RS-02-40] **Abstract**, *PostScript*, *PDF*, *DVI*.
Luca Aceto, Willem Jan Fokkink, and Anna Inglfsdttir. *A Note on an Expressiveness Hierarchy for Multi-exit Iteration*. September 2002. 8 pp. To appear in Information Processing Letters, Elsevier.

[RS-02-39] **Abstract**, *PostScript*, *PDF*.
Stephen L. Bloom and Zoltn sik. *Some Remarks on Regular Words*. September 2002. 27 pp.

[RS-02-38] **Abstract**, *PostScript*, *PDF*.
Daniele Varacca. *The Powerdomain of Indexed Valuations*. September 2002. 54 pp. Short version appears in Plotkin, editor, *Seventeenth Annual IEEE Symposium on Logic in Computer Science*, Lics '02 Proceedings, 2002, pages 299–308.

[RS-02-37] **Abstract**, *PostScript*, *PDF*, *DVI*.
Mads Sig Ager, Olivier Danvy, and Mayer Goldberg. *A Symmetric Approach to Compilation and Decompilation*. August 2002. 45 pp. Appears in Mogensen, Schmidt and Sudborough, editors, *The Essence of Computation: Complexity, Analysis*, Transformation, LNCS 2556, 2002, pages 296–331.

[RS-02-36] **Abstract**, *PostScript*, *PDF*, *DVI*.
Daniel Damian and Olivier Danvy. *CPS Transformation of Flow Information, Part II: Administrative Reductions.* August 2002. 9 pp. To appear in the *Journal of Functional Programming*. This report supersedes the earlier BRICS report RS-01-40.

[RS-02-35] **Abstract**, *PostScript*, *PDF*, *DVI*.
Patricia Bouyer. *Timed Automata May Cause Some Troubles.* August 2002. 44 pp.

[RS-02-34] **Abstract**, *PostScript*, *PDF*, *DVI*.
Morten Rhiger. *A Foundation for Embedded Languages.* August 2002. 29 pp. To appear in *TOPLAS, ACM Transactions on Programming Languages and Systems*.

[RS-02-33] **Abstract**, *PostScript*, *PDF*.
Vincent Balat and Olivier Danvy. *Memoization in Type-Directed Partial Evaluation.* July 2002. 18 pp. Appears in Batory, Consel and Taha, editors, *ACM SIGPLAN/SIGSOFT Conference on Generative Programming and Component Engineering*, GPCE '02 Proceedings, LNCS 2487, 2002, pages 78–92.

[RS-02-32] **Abstract**, *PostScript*, *PDF*, *DVI*.
Mads Sig Ager, Olivier Danvy, and Henning Korsholm Rohde. *On Obtaining Knuth, Morris, and Pratt's String Matcher by Partial Evaluation.* July 2002. 43 pp. Appears in Chin, editor, *ACM SIGPLAN ASIAN Symposium on Partial Evaluation and Semantics-Based Program Manipulation*, ASIA-PEPM '02 Proceedings, 2002, pages 32–46.

[RS-02-31] **Abstract**, *PostScript*, *PDF*, *DVI*.
Ulrich Kohlenbach and Paulo B. Oliva. *Proof Mining: A Systematic Way of Analysing Proofs in Mathematics.* June 2002. 47 pp. To appear in *Proceedings of the Steklov Institute of Mathematics*.

[RS-02-30] Olivier Danvy and Ulrik P. Schultz. *Lambda-Lifting in Quadratic Time.* June 2002. 17 pp. Appears in Hu and Rodrguez-Artalejo, editors, *Sixth International Symposium on Functional and Logic Programming*, FLOPS '02 Proceedings, LNCS 2441, 2002, pages 134–151. Superseeded by the BRICS report RS-03-26.

[RS-02-29] **Abstract**, *PostScript*, *PDF*.
Christian N. S. Pedersen and Tejs Scharling. *Comparative Methods for Gene Structure Prediction in Homologous Sequences.* June 2002. 20 pp. Appears in Guig and Gusfield, editors, *Algorithms in Bioinformatics: 2nd International Workshop*, WABI '02 Proceedings, LNCS 2452, 2002, pages 220–234.

[RS-02-28] **Abstract**, *PostScript*, *PDF*, *DVI*.
Ulrich Kohlenbach and Laurenţiu Leuştean. *Mann Iterates of Directionally Nonexpansive Mappings in Hyperbolic Spaces.* June 2002. 33 pp. To appear in *Abstract and Applied Analysis*.

[RS-02-27] **Abstract**, *PostScript*, *PDF*, *DVI*.
Anna stlin and Rasmus Pagh. *Simulating Uniform Hashing in Constant Time and Optimal Space*. 2002. 11 pp.

[RS-02-26] **Abstract**, *PostScript*, *PDF*, *DVI*.
Margarita Korovina. *Fixed Points on Abstract Structures without the Equality Test*. June 2002. 14 pp. Appears in sik and Inglfsdttir, editors, *Preliminary Proceedings of the Workshop on Fixed Points in Computer Science, FICS '02,* (Copenhagen, Denmark, July 20 and 21*, 2002)*, BRICS Notes Series NS-02-2, 2002, pages 58–61.

[RS-02-25] **Abstract**, *PostScript*, *PDF*, *DVI*.
Hans Httel. *Deciding Framed Bisimilarity*. May 2002. 20 pp. Appears in Antonn and Mayr, editors, *4th International Workshop on Verification of Infinite-State Systems*, INFINITY '02 Proceedings, ENTCS 68(6), 2002, 18 pp.

[RS-02-24] **Abstract**, *PostScript*, *PDF*.
Aske Simon Christensen, Anders Mller, and Michael I. Schwartzbach. *Static Analysis for Dynamic XML*. May 2002. 13 pp.

[RS-02-23] **Abstract**, *PostScript*, *PDF*, *DVI*.
Antonio Di Nola and Laurenţiu Leuştean. *Compact Representations of BL-Algebras*. May 2002. 25 pp.

[RS-02-22] **Abstract**, *PostScript*, *PDF*.
Mogens Nielsen, Catuscia Palamidessi, and Frank D. Valencia. *On the Expressive Power of Concurrent Constraint Programming Languages*. May 2002. 34 pp. Appears in Pfenning, editor, *4th International Conference on Principles and Practice of Declarative Programming*, PPDP '02 Proceedings, 2002, pages 156–157.

[RS-02-21] **Abstract**, *PostScript*, *PDF*, *DVI*.
Zoltn sik and Werner Kuich. *Formal Tree Series*. April 2002. 66 pp.

[RS-02-20] **Abstract**.
Zoltn sik and Kim G. Larsen. *Regular Languages Definable by Lindstrm Quantifiers (Preliminary Version)*. April 2002. 56 pp. Superseeded by the BRICS report RS-03-28.

[RS-02-19] **Abstract**, *PostScript*, *PDF*, *DVI*.
Stephen L. Bloom and Zoltn sik. *An Extension Theorem with an Application to Formal Tree Series*. April 2002. 51 pp. Appears in Blute and Selinger, editors, *Category Theory and Computer Science: 9th International Conference*, CTCS '02 Proceedings, ENTCS 69, 2003 under the title *Unique Guarded Fixed Points in an Additive Setting*.

[RS-02-18] Gerth Stlting Brodal and Rolf Fagerberg. *Cache Oblivious Distribution Sweeping*. April 2002. Appears in Widmayer, Triguero, Morales, Hennessy, Eidenbenz and Conejo, editors, *29th International Colloquium on Automata, Languages, and Programming,* ICALP '02 Proceedings, LNCS 2380, 2002, pages 426–438.

[RS-02-17] **Abstract**, *PostScript*, *PDF*.
Bolette Ammitzbll Madsen, Jesper Makholm Nielsen, and Bjarke Skjernaa. *On the Number of Maximal Bipartite Subgraphs of a Graph*. April 2002. 7 pp.

[RS-02-16] **Abstract**, *PostScript*, *PDF*, *DVI*.
Jiř Srba. *Strong Bisimilarity of Simple Process Algebras: Complexity Lower Bounds*. April 2002. 33 pp. To appear in *Acta Informatica*.

[RS-02-15] **Abstract**, *PostScript*, *PDF*, *DVI*.
Jesper Makholm Nielsen. *On the Number of Maximal Independent Sets in a Graph*. April 2002. 10 pp.

[RS-02-14] **Abstract**, *PostScript*, *PDF*, *DVI*.
Ulrich Berger and Paulo B. Oliva. *Modified Bar Recursion*. April 2002. 23 pp. To appear in *Lecture Notes in Logic*.

[RS-02-13] **Abstract**, *PostScript*, *PDF*, *DVI*.
Gerth Stlting Brodal, Rune B. Lyngs, Anna stlin, and Christian N. S. Pedersen. *Solving the String Statistics Problem in Time $O(n \log n)$*. March 2002. 28 pp. Shorter version appears in Widmayer, Triguero, Morales, Hennessy, Eidenbenz and Conejo, editors, *29th International Colloquium on Automata, Languages, and Programming*, ICALP '02 Proceedings, LNCS 2380, 2002, pages 728–739.

[RS-02-12] **Abstract**, *PostScript*, *PDF*, *DVI*.
Olivier Danvy and Mayer Goldberg. *There and Back Again*. March 2002. ii+11 pp. Appears in Peyton Jones, editor, *Proceedings of the 7th ACM SIGPLAN International Conference on Functional Programming*, 2002, pages 230–234. This report supersedes the earlier report BRICS RS-01-39.

[RS-02-11] **Abstract**, *PostScript*, *PDF*.
Aske Simon Christensen, Anders Mller, and Michael I. Schwartzbach. *Extending Java for High-Level Web Service Construction*. March 2002. 54 pp. To appear in *ACM Transactions on Programming Languages and Systems*.

[RS-02-10] **Abstract**, *PostScript*, *PDF*, *DVI*.
Ulrich Kohlenbach. *Uniform Asymptotic Regularity for Mann Iterates*. March 2002. 17 pp. Appears in *Journal of Mathematical Analysis and Applications*, 279(2):531–544, 2003.

[RS-02-9] **Abstract**, *PostScript*, *PDF*, *DVI*.
Anna stlin and Rasmus Pagh. *One-Probe Search*. February 2002. 17 pp. Appears in Widmayer, Triguero, Morales, Hennessy, Eidenbenz and Conejo, editors, *29th International Colloquium on Automata, Languages, and Programming*, ICALP '02 Proceedings, LNCS 2380, 2002, pages 439–450.

[RS-02-8] **Abstract**, *PostScript*, *PDF*, *DVI*.
Ronald Cramer and Serge Fehr. *Optimal Black-Box Secret Sharing over Arbitrary Abelian Groups*. February 2002. 19 pp. Appears in

Yung, editor, *Advances in Cryptology: 22nd Annual International Cryptology Conference*, CRYPTO '02 Proceedings, LNCS 2442, 2002, pages 272–287.

[RS-02-7] **Abstract**, *PostScript*, *PDF*.
Anna Inglfsdttir, Anders Lyhne Christensen, Jens Alsted Hansen, Jacob Johnsen, John Knudsen, and Jacob Illum Rasmussen. *A Formalization of Linkage Analysis*. February 2002. vi+109 pp.

[RS-02-6] **Abstract**, *PostScript*, *PDF*, *DVI*.
Luca Aceto, Zoltn sik, and Anna Inglfsdttir. *Equational Axioms for Probabilistic Bisimilarity (Preliminary Report)*. February 2002. 22 pp. Appears in Kirchner and Ringeissen, editors, *Algebraic Methodology and Software Technology: 9th International Conference*, AMAST '02 Proceedings, LNCS 2422, 2002, pages 239–253.

[RS-02-5] **Abstract**, *PostScript*, *PDF*, *DVI*.
Federico Crazzolara and Glynn Winskel. *Composing Strand Spaces*. February 2002. 30 pp.

[RS-02-4] **Abstract**, *PostScript*, *PDF*, *DVI*.
Olivier Danvy and Lasse R. Nielsen. *Syntactic Theories in Practice*. January 2002. 34 pp. This revised report supersedes the earlier BRICS report RS-01-31.

[RS-02-3] **Abstract**, *PostScript*, *PDF*, *DVI*.
Olivier Danvy and Lasse R. Nielsen. *On One-Pass CPS Transformations*. January 2002. 18 pp.

[RS-02-2] **Abstract**, *PostScript*, *PDF*, *DVI*.
Lasse R. Nielsen. *A Simple Correctness Proof of the Direct-Style Transformation*. January 2002. 11 pp.

[RS-02-1] **Abstract**, *PostScript*, *PDF*.
Claus Brabrand, Anders Mller, and Michael I. Schwartzbach. *The* `<bigwig>` *Project*. January 2002. 36 pp. This revised report supersedes the earlier BRICS report RS-00-42.