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Models of natural computation : gene assembly and membrane systems

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Curriculum Vitae

Robert Brijder is geboren in Delft op 5 november 1980. Van 1993 tot 1999 doorliep hij het atheneum (VWO) op het Zandevelt College (ISW) te 's-Gravenzande. In september 1999 begon hij de studie Wiskunde aan de Universiteit Leiden. Na het afleggen van het propedeutisch examen Wiskunde, begon hij in september 2000 aan de studie Informatica aan diezelfde universiteit. In 2001 legde hij het dubbel propedeutisch examen Wiskunde-Informatica af, en in 2003 deed hij een half-jarige stage bij Philips Medical Systems. In april 2004 slaagde hij cum laude voor het doctoraalexamen Informatica met afstudeerrichting Theoretische Informatica. Vanaf september 2004 was hij verbonden aan het Leiden Institute of Advanced Computer Science waar hij zijn promotieonderzoek uitvoerde in het kader van NWO project "VIEWS" en betrokken was bij onderwijs.

Publication List

Patents

[1] *High angular resolution diffusion weighted MRI.*
Inventors: F.G.C. Hoogenraad, R.F.J. Holthuizen, and R. Brijder.
International patent number WO2005076030,
also EP1714164, and CN1918481 (2005).

Journal papers

[1] F. Bernardini, R. Brijder, G. Rozenberg, and C. Zandron. Multiset-based self-assembly of graphs. *Fundamenta Informaticae*, 75(1-4):49–75, 2007.

[2] R. Brijder, M. Cavaliere, A. Riscos-Núñez, G. Rozenberg, and D. Sburlan. Communication membrane systems with active symports. *Journal of Automata, Languages and Combinatorics*, 11(3):241–261, 2006.

[3] R. Brijder, M. Cavaliere, A. Riscos-Núñez, G. Rozenberg, and D. Sburlan. Membrane systems with proteins embedded in membranes. *Theoretical Computer Science*, 404:26–39, 2008.

[4] R. Brijder and H.J. Hoogeboom. Combining overlap and containment for gene assembly in ciliates. Submitted, 2008.

[5] R. Brijder and H.J. Hoogeboom. The fibers and range of reduction graphs in ciliates. *Acta Informatica*, 45:383–402, 2008.

[6] R. Brijder and H.J. Hoogeboom. Perfectly quilted rectangular snake tilings. To appear in *Theoretical Computer Science*, 2008.

[7] R. Brijder, H.J. Hoogeboom, and M. Muskulus. Strategies of loop recombination in ciliates. *Discrete Applied Mathematics*, 156:1736–1753, 2008.

[8] R. Brijder, H.J. Hoogeboom, and G. Rozenberg. Reducibility of gene patterns in ciliates using the breakpoint graph. *Theoretical Computer Science*, 356:26–45, 2006.

[9] R. Brijder, H.J. Hoogeboom, and G. Rozenberg. How overlap determines the macronuclear genes in ciliates. Submitted, also LIACS Technical Report 2007-02, [arXiv:cs.LO/0702171], 2008.

[10] R. Brijder, M. Langille, and I. Petre. Extended strings and graphs for simple gene assembly. To appear in *Theoretical Computer Science*, 2008.

[11] M. Muskulus, D. Besozzi, R. Brijder, P. Cazzaniga, S. Houweling, D. Pescini, and G. Rozenberg. Cycles and communicating classes in membrane systems and molecular dynamics. *Theoretical Computer Science*, 372(2-3):242–266, 2007.

[12] M. Muskulus and R. Brijder. Complexity of bio-computation: symbolic dynamics in membrane systems. *International Journal of Foundations of Computer Science*, 17(1):147–165, 2006.

Peer-reviewed conference and workshop papers

[1] R. Brijder, M. Cavaliere, A. Riscos-Núñez, G. Rozenberg, and D. Sburlan. Membrane systems with external control. In H.J. Hoogeboom, G. Paun, G. Rozenberg, and A. Salomaa, editors, *Workshop on Membrane Computing*, volume 4361 of *Lecture Notes in Computer Science*, pages 215–232. Springer, 2006.

[2] R. Brijder, M. Cavaliere, A. Riscos-Núñez, G. Rozenberg, and D. Sburlan. Membrane systems with marked membranes. *Electronic Notes Theoretical Computer Science*, 171(2):25–36, 2007.

[3] R. Brijder and H.J. Hoogeboom. Applicability of loop recombination in ciliates using the breakpoint graph. In A. Siebes et al., editors, *CompLife '07*, volume 940 of *AIP Conference Proceedings*, pages 50–59, 2007.

[4] R. Brijder and H.J. Hoogeboom. Characterizing reduction graphs for gene assembly in ciliates. In T. Harju, J. Karhumäki, and A. Lepistö, editors, *Developments in Language Theory (DLT) 2007*, volume 4588 of *Lecture Notes in Computer Science*, pages 120–131. Springer, 2007.

[5] R. Brijder and H.J. Hoogeboom. Perfectly quilted rectangular snake tilings. In J. Kari et al., editors, *Proceedings of the Satellite Workshops of DLT 2007, Part 3: Workshop on Tilings and Self-Assembly*, volume 45 of *TUCS General Publication*, 2007.

[6] R. Brijder and H.J. Hoogeboom. Extending the overlap graph for gene assembly in ciliates. In C. Martín-Vide, F. Otto, and H. Fernau, editors, *LATA 2008*, volume 5196 of *Lecture Notes in Computer Science*, pages 137–148. Springer, 2008.

[7] R. Brijder, H.J. Hoogeboom, and M. Muskulus. Applicability of loop recombination in ciliates using the breakpoint graph. In M.R. Berthold et al., editors, *CompLife '06*, volume 4216 of *Lecture Notes in Computer Science*, pages 97–106. Springer, 2006.

[8] R. Brijder, H.J. Hoogeboom, and G. Rozenberg. The breakpoint graph in ciliates. In M.R. Berthold et al., editors, *CompLife '05*, volume 3695 of *Lecture Notes in Computer Science*, pages 128–139. Springer, 2005.

[9] R. Brijder, H.J. Hoogeboom, and G. Rozenberg. From micro to macro: How the overlap graph determines the reduction graph in ciliates. In E. Csuhaj-Varjú and Z. Ésik, editors, *Fundamentals of Computation Theory (FCT) 2007*, volume 4639 of *Lecture Notes in Computer Science*, pages 149–160. Springer, 2007.

[10] R. Brijder, M. Langille, and I. Petre. A string-based model for simple gene assembly. In E. Csuhaj-Varjú and Z. Ésik, editors, *Fundamentals of Computation Theory (FCT) 2007*, volume 4639 of *Lecture Notes in Computer Science*, pages 161–172. Springer, 2007.

[11] M. Muskulus and R. Brijder. First steps towards a geometry of computation. In M.A. Gutiérrez Naranjo et al., editors, *Proceedings of the Third Brainstorming Week on Membrane Computing*, pages 197–218. Fénix Editora, 2005.

[12] M. Muskulus, S. Houweling, G. Rozenberg, D. Besozzi, P. Cazzaniga, D. Pescini, and R. Brijder. Reaction cycles in membrane systems and molecular dynamics. In C. Graciani Diaz et al., editors, *Proceedings of the Fourth Brainstorming Week on Membrane Computing*, volume 2, pages 185–208. Fénix Editora, 2006.

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