

Julkaisuluettelo / List of publications

March 1, 2011

Vesa Halava, docent (FT), born 1972

10 most important articles bolded

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- [3] V. Halava, T. Harju, *Undecidability of the Equivalence of Finite Substitutions on Regular Language*, RAIRO Theoret. Informatics Appl. **33** (1999) 117-124.
- [4] V. Halava, T. Harju, L. Ilie, *Periods and Binary Words*, J. Combin. Theory, Ser. A, **89**, 298-303 (2000).
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- [6] V. Halava, T. Harju, *Some New Results on Post Correspondence Problem and Its Modifications*, Bulletin of EATCS **73** (2001), 131-141.
- [7] V. Halava, M. Hirvensalo, R. de Wolf, *Marked PCP is decidable*, Theor. Comput. Sci. **255** (2001), 193-204.
- [8] V. Halava, T. Harju, *Mortality in Matrix Semigroups*, American Mathematical Monthly, Vol 108 No. 7, (2001), 649-653.
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- [11] V. Halava, T. Harju, *Undecidability in Matrices over Laurent Polynomials*, Adv. in Appl. Math., Vol. 33, Issue 4 (2004), 747-752.
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- [14] V. Halava, T. Harju, H.J. Hoogeboom, M. Latteux, *Valence Languages Generated by Equality Sets*, J. Autom. Lang. Comb. **9** 4 (2004), 399-406.
- [15] V. Halava, *Ratkeavuuden ja ratkeamattomuuden välinen raja ja Postin vastaavuusongelma*, Tietojenkäsittelytiede, **21**, (2004), 8-18 (in Finnish).

- [16] V. Halava, T. Harju, H.J. Hoogeboom, M. Latteux, *Equality Sets for Recursively Enumerable Languages*, Theor. Inform. Appl. Vol. **39** No. 4 (2005), 661-676.
- [17] V. Halava, T. Harju, M. Hirvensalo, *Positivity of Second Order Linear Recurrent Sequences*, Discrete Applied Mathematics **154** (2006), 447-451.
- [18] V. Halava, T. Harju, J. Karhumäki, *Undecidability in ω -Regular Languages*, Fund. Inf. **73** No. 1-2 (2006), 119-125.
- [19] V. Halava, T. Harju, *Undecidability of Infinite Post Correspondence Problem for Instances of Size 9*, Theor. Inform. Appl. Vol. **40**, No. 4, (2006), 551-558.
- [20] V. Halava, T. Harju, J. Karhumäki, *Structure of Infinite Solutions of Marked and Binary Post Correspondence Problems*, Theory Comput. Syst. Vol. **40**, No. 1, (2007), 43-54.
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- [28] V. Halava, T. Harju, M. Hirvensalo, J. Karhumäki, *Post Correspondence Problem for short words*, Inform. Process. Lett. 108 (2008), 115-118.
- [29] P. Bell, V. Halava, T. Harju, J. Karhumäki, I. Potapov, *Matrix Equations and Hilbert's Tenth Problem*, Int. J. of Alg. and Comput. Vol. 18, No. 8 (2008), 1231-1241.
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- [42] V. Halava, T. Harju, H.J. Hoogeboom, M. Latteux, *Languages defined by generalized equality sets*, FCT'2003, Lecture Note in Comput. Sci., vol. 2751 (2003), pp. 355–363.
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- [44] V. Halava, T. Harju, *Post Correspondence Problem – Recent Results*, Current trends in Theoretical Computer Science, vol. 2 (G. Păun, G. Rozenberg, A. Salomaa, eds.), pp. 511-532, World Scientific, 2004.
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- [50] V. Halava, *The Post Correspondence Problem for Marked Morphisms*, Ph.D. Thesis, University of Turku, TUCS Dissertations 37, 2002. ISBN 951-29-2263-0

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- [51] P. Bell, V. Halava, M. Hirvensalo, *On the Joint Spectral Radius for Bounded Matrix Languages*, (journal version), submitted.
- [52] V. Halava, T. Harju, M. Hirvensalo, J. Karhumäki, *Skolem's Problem - On the Boundary between Decidability and Undecidability*, (submitted). (also as TUCS Technical Report No. 683, 2005)
- [53] V. Halava, Š. Holub, *Binary (generalized) Post Correspondence Problem is in P*, TUCS Technical Report No. 785, 2006
- [54] V. Halava, T. Harju and T. Kärki, *On the number of squares in partial words*, Extended abstract in Journées Montoises on Theoretical Computer Science (Mons) 2008. <http://www.jmit.ulg.ac.be/jm2008/> (also as TUCS Technical Report No. 896, 2009).
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- [56] V. Halava, *Finite Substitutions and Integer Weighted Finite Automata*, Licentiate Thesis, Department of Mathematics, University of Turku, September 1998. (also as TUCS Technical Report No. 197, 1998)
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- [59] V. Halava, Š. Holub, *Binary generalized Post correspondence problem is decidable in polynomial time*, Extended abstract in Journées Montoises on Theoretical Computer Science (Montpellier) 2002. <http://www.lirmm.fr/jm2002>
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- [63] V. Halava, T. Harju, *Johdatus laskettavuuteen*, Luentomoniste (Lecture notes for course Introduction to Computability), University of Turku, 2007, 53 pages.(In Finnish)
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- [65] V. Halava, *Tietotekninen algebra*, Luentomoniste (Lecture notes for course Algebra for Computer Scientists), University of Turku, 2008, 65 pages.(In Finnish)
- [66] V. Halava, T. Harju, T. Kärki, *On the Number of Squares in Partial Words*, Extended abstract in 12th Journées Montoises on Theoretical Computer Science 2008, <http://www.jmit.ulg.ac.be/jm2008>.

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