## AAA84 Conference Programme

Arbeitstagung Allgemeine Algebra — Workshop on General Algebra June 7–10, 2012, Dresden University of Technology

Since 1971 the AAA Workshop on General Algebra (merged with the "Konferenz Algebra und Grenzgebiete" in 1991 and with the "Konferenz junger Algebraiker" in 1995) is being held semi-annually in Germany, its neighbouring countries and later also in other European countries. This 84th workshop is organized by the Dresden Institute of Algebra.

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The organizing committee Bernhard Ganter, Reinhard Pöschel

(final version, June 10, 2012)

## AAA84: Thursday, June 7

 $17^{00} - 20^{30}$  Get-together and Registration, conference building Willersbau C207

(there will be something to eat and to drink)

AAA84: Friday, June 8 (final version, June 10, 2012)			
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Lecture Hall A317	Lecture Hall C129	Lecture Hall A120	Seminar Room C206
Registration in room C207			
opening (by Dean)			
invited lecture chair: Pöschel, Reinhard			
Volkov, Mikhail			
A Quest for Short Identities - Which questions does automata theory ask algebra over and over again (but gets no answers so far)?			
coffee break (C207)			
chair: Pálfy, Péter P.	chair: <b>Márki, László</b>	chair: Aichinger, Erhard	
Ploscica, Miroslav Congruence-maximal varieties	Auinger, Karl The finite basis problem for matrix semi- groups with involution	Pilz, Günter Infinite planar near-rings	
Mudrinski, Nebojsa Are all finite congruence uniform Mal'cev algebras expanded groups?	Lehtonen, Erkko Generalized entropy in algebras with neutral element and in inverse semigroups	Davidov, Sergey Nucleus of Linear Invertible Algebras	
Dormán, Miklós Finite monoidal intervals	Dimitrova, Ilinka On the monoid of all partial order- preserving extensive transformations	Hrbek, Michal Modules with a minimal generating set	
Kerkhoff, Sebastian On how duality theory enables us to use elementary topology for the benefit of clone theory	Pervukhina, Tatiana Structure of finite monoids satisfying $R = H$	Ruzicka, Pavel Abelian groups with a minimal generating set	
	chair: Pöschel, Reinhard invited lecture  Volkov, Mikhail  A Quest for Short Identities - Which questions does automata theory ask algebra over and over again (but gets no answers so far)?  chair: Pálfy, Péter P.  Ploscica, Miroslav Congruence-maximal varieties  Mudrinski, Nebojsa Are all finite congruence uniform Mal'cev al- gebras expanded groups?  Dormán, Miklós Finite monoidal intervals  Kerkhoff, Sebastian On how duality theory enables us to use el- ementary topology for the benefit of clone	Lecture Hall A317  Registration i  opening (by Dean)  chair: Pöschel, Reinhard invited lecture  Volkov, Mikhail  A Quest for Short Identities - Which questions does automata theory ask algebra over and over again (but gets no answers so far)?  Coffee break (  chair: Pálfy, Péter P.  Ploscica, Miroslav Congruence-maximal varieties  Mudrinski, Nebojsa Are all finite congruence uniform Mal'cev al- gebras expanded groups?  Dormán, Miklós Finite monoidal intervals  Kerkhoff, Sebastian On how duality theory enables us to use el- ementary topology for the benefit of clone  Registration i  Registration i  Registration i  Auinger, Karl The finite basis problem for matrix semi- groups with involution  Lehtonen, Erkko Generalized entropy in algebras with neutral element and in inverse semigroups  Dimitrova, Ilinka On the monoid of all partial order- preserving extensive transformations  Pervukhina, Tatiana Structure of finite monoids satisfying R = H	Registration in room C207  opening (by Dean)  chair: Pöschel, Reinhard invited lecture  Volkov, Mikhail  A Quest for Short Identities - Which questions does automata theory ask algebra over and over again (but gets no answers so far)?  chair: Pálfy, Péter P.  Ploscica, Miroslav Congruence-maximal varieties  Mudrinski, Nebojsa Are all finite congruence uniform Mal'cev algebras expanded groups?  Dormán, Miklós Finite monoidal intervals  Nerkhoff, Sebastian On how duality theory enables us to use elementary topology for the benefit of clone  Registration in room C207  Chair: Pálfy, Péter P.  chair: Márki, László  Auinger, Karl The finite basis problem for matrix semigroups with involution  Lehtonen, Erkko Generalized entropy in algebras with neutral element and in inverse semigroups  Dimitrova, Ilinka On the monoid of all partial order-preserving extensive transformations  Registration in room C207  chair: Aichinger, Erhard Pilz, Günter Infinite planar near-rings  Davidov, Sergey Nucleus of Linear Invertible Algebras element and in inverse semigroups  Bruzicka, Pavel Abelian groups with a minimal generating set

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	The room C207 can be used for breaks and discussions, too			
	Lecture Hall A317	Lecture Hall C129	Lecture Hall A120	Seminar Room C206
	invited lecture chair: Szendrei, Agnes			
$\frac{13^{45} - 14^{35}}{$	Masulovic, Dragan Classifying homomorphism-homogeneous structures			
	chair: Eigenthaler, Günther	chair: Koppitz, Jörg	chair: Madarasz, Rozalia	
$14^{45} - 15^{00}$	Jakubíková-Studenovská, Danica On formations of finite monounary algebras	-	Marczak, Adam Some remarks on Cantor identities	This room may be used for discussions
$15^{05} - 15^{20}$	Chajda, Ivan Groupoids assigned to relational systems	Behrisch, Mike On a characterisation of categorical equivalence of finite semigroups	Mućka, Anna Homomorphic images of subdirectly irreducible many-sorted algebras	
	coffee break (C207)			
	chair: Pinsker, Michael	chair: Czédli, Gábor	chair: Liskovets, Valery	
$16^{05} - 16^{20}$	Paseka, Jan On realization of generalized effect algebras	Kondo, Michiro States on bounded commutative residuated lattices	Krapez, Aleksandar Explicit formulas for solutions of quadratic quasigroup equations	This room may be used for discussions
$16^{25} - 16^{40}$	Hyčko, Marek  Pre pseudo-effect algebras - generalizations and finite models	Nurakunov, Anvar Notice on classes closed under subdirect products	Plotkin, Tanya Skeletons of knowledge bases	
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	chair: Ploscica, Miroslav	chair: Plotkin, Eugene	chair: Pech, Christian	
$16^{50} - 17^{05}$	Botur, Michal State Morphism Algebra - General Approach	Radeleczki, Sándor Tolerance lattice of tolerance factors	Movsisyan, Yuri Hyperidentities of the variety of De Morgan algebras	This room may be used for discussions
$17^{10} - 17^{25}$	Kühr, Jan Triple construction of BCK-algebras	Guo, Lankun A representation of completely distributive algebraic lattices by formal contexts	Muzychuk, Mikhail A solution of an equivalence problem for semisimple cyclic codes	
$17^{30} - 17^{45}$	Halaš, Radomír Non-associative BL-algebras and quantum structures	Sacarea, Christian On some categorical aspects of topological and pseudometric contexts	-	
$17^{50} - 18^{05}$	-	-	-	
$19^{00}$ – $22$	Conference dinner in the building "Alte Mensa" (Main entrance, Mommsenstrasse 13)			

	AAA84: Saturday, June 9 (final version, June 10, 2012)			
	Lecture Hall B321	Lecture Hall C129	Lecture Hall C133	Seminar Room C206
	chair: Müller, Winfried invited lecture			
$9^{10}$ – $10^{00}$	Kearnes, Keith			
0 10	Dualizable algebras in congruence modular varieties			
	coffee break (C207)			
	chair: Chajda, Ivan	chair: Muzychuk, Mikhail	chair: Pilitowska, Agata	
$10^{45} - 11^{00}$	Márki, László Strong Morita equivalence for semigroups with local units	Pálfy, Péter P. New results on CI-groups	Grasegger, Georg An explicit polynomial equivalence of the rings $Z_{p^2}$ and $Z_p[t]/(t^2)$	This room may be used for discussions
$11^{05} - 11^{20}$	Koppitz, Jörg Coregular Semigroups of special types	Klin, Mikhail Construction of infinite families of non-Schurian association schemes of order $2p^2$ , $p$ an odd prime	Horváth, Gábor Polynomial equivalence of the rings $\mathbb{Z}_{p^n}$ and $\mathbb{Z}_p[t]/(t^n)$ ?	
$11^{25} - 11^{40}$	Shtrakov, Slavcho Stable varieties of semigroups	Reichard, Sven Constructive classification of coherent configurations	Romanowska, Anna Classifying the intervals of the line $Z[1/p]$	
$11^{45} - 12^{00}$	Vincekova, Elena A note on abelian extensions of partial monoids	Kovács, István Characterization of cyclic Schur groups	Abutalipova, Shynar  The subgroups of tame automorphisms of the automorphism groups of free metabelian Lie algebras of rank greater than or equal to 4	
	lunch break			

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	Lecture Hall B321	Lecture Hall C129	Lecture Hall C133	Seminar Room C206
	chair: Pilz, Günter invited lecture			
$13^{45} - 14^{35}$	Aichinger, Erhard			
	Polynomial completeness properties of algebras with Mal'cev terms			
	chair: Lehtonen, Erkko	chair: Paseka, Jan	chair: Jakubíková-Studenovská, Danica	
$14^{45} - 15^{00}$	Vargas Garcia, Edith M.	Pelea, Cosmin	Kaleta, Joanna	This room may be used for discussions
	Which maximal clones can be maximal $C$ -clones	Multialgebras, factor multialgebras and universal algebras	Some two-generated directly indecompos- able entropic quasigroups with quasi- identity	
$15^{05} - 15^{20}$	Supaporn, Worakrit	Pinus, Alexsandr	Madarasz, Rozalia	
	Category Equivalences of $Pol_AQ$	Algebraic Geometry of Universal Algebras, Infinite Quasiidentities and Implicit Opera- tions on Universal Algebras	Retraction closure property and entropicity	
	coffee break (C207)			
	chair: Cirulis, Janis	chair: Plotkin, Tanya	chair: Vargas Garcia, Edith M.	
$16^{00} - 16^{15}$	Zamojska-Dzienio, Anna On idempotent factors of power algebras	Plotkin, Eugene Equations over algebras: how the logical geometry appears (Part I)	Anantpinitwatna, Apinant Special m-hyperidentities in (x(yz))z with loop graph varieties of type (2,0)	This room may be used for discussions
$16^{20} - 16^{35}$	Ameri, Reza	Plotkin, Eugene	Anantpinitwatna, Amporn	
	P-fuzzy Congruences of Multialgebras	Equations over algebras: how the logical geometry appears (Part II)	The classes of triregular leftmost without loop and reverse arc graph varieties of type (2,0)	
$16^{40} - 16^{55}$	-	Ali, Majid	Goracinova-Ilieva, Lidija	
		Multiplication modules and Flat modules	Mendelsohn designs arising from quasi- groups of varieties with the property (2,q)	

some special advices for the evening:

Theater:

Schauspielhaus: Meister und Margarita 19:30

Kleines Haus: Hedda Gabler 18:00

20:45 (inside and at terasse): Football European cup -

broadcast live (Germany: Portugal)

link see AAA84 web site

Opera (SEMPEROPER): L'elisir d'amor (Der Liebestrank) 19:00

link see AAA84 web site

Church Frauenkirche:

Vokal international: Vesselina Kasarova 20:00

PHILHARMONIE: 9. Zyklus-Konzert 19:30

EUROPEAN CUP: live broadcast on campus of TU Dresden

	${f AAA84:\ Sunday,\ June\ 10}$ (final version, June 10, 2012)			
	Lecture Hall B321	Lecture Hall C129	Lecture Hall C133	Seminar Room C206
	chair: Romanowska, Anna	chair: Radeleczki, Sándor	chair: Klin, Mikhail	
9 <sup>10</sup> _9 <sup>25</sup>	Pilitowska, Agata Commuting operations in aggregation	Pinsker, Michael Lattices of subgroups of the symmetric group	Liskovets, Valery Balanced modular edge labellings of graphs, systems of linear congruences and chromatic polynomials	
$9^{30} - 9^{45}$	Pech, Maja  The age of homomorphism-homogeneous relational structures	Czédli, Gábor Semimodular lattices determined by permutations	Kisielewicz, Andrzej Progress in the Černý Conjecture	This room may be used for discussions
$9^{50} - 10^{05}$	Pech, Christian From ages to generic structures - A journey through different types of homogeneity	Cirulis, Janis On quasi-orthomodular posets	Kazda, Alexandr Polymorphisms of conservative digraphs	
$10^{10} - 10^{25}$	Grech, Mariusz Definability of permutative varieties	Pongrácz, András Structures definable from the generic partial order	Krähmann, Daniel When does a sequence of finite groups yield an expander-sequence?	
	coffee break (C207)			
	$\frac{\text{chair: Volkov, Mikhail}}{\text{invited lecture}}$			
$11^{05} – 11^{55}$	Turhan, Anni-Yasmin Reasoning in Description Logics – the case of $\mathcal{EL}$			
$11^{55}$ – $12^{00}$	closing			