# AAA 83

*The 83rd Workshop on General Algebra*
*& the 27th Conference of Young Algebraists*

*83. Arbeitstagung allgemeine Algebra*
*& 27. Tagung junger Algebraiker*

*Novi Sad, Serbia, March 15-18, 2012*

# PROGRAM

**Wednesday, March 14 (arrival day)**

14:00 – 20:30   Registration (Room 16 – Department of Mathematics and Informatics, ground floor)

# Thursday, March 15

8:30 – 9:15   Registration (Room 16)

| | Amphitheatre I | Amphitheatre V |
|---|---|---|
| 9:30 – 9:45 | Opening ceremony | |
| | **SESSION 1** (Chair: Dragan Mašulović) | |
| 9:45 – 10:35 | **Manfred Droste:** *Automorphism groups of ordered sets and the Bergman property* | |
| 10:40 – 11:10 | *COFFEE BREAK* | |
| 11:10 – 12:00 | **John K. Truss:** *Homogeneous multipartite graphs* | |
| 12:05 – 14:30 | *LUNCH BREAK* | |
| | **SESSION 2** (Chair: Marcin Kozik) | |
| 14:30 – 15:20 | **Libor Barto:** *Robust algorithms for CSPs* | |
| 15:25 – 15:55 | **Erhard Aichinger:** *On the direct decomposition of nilpotent expanded groups* | |
| 16:00 – 16:30 | *COFFEE BREAK* | |
| | **SESSION 3A** (Chair: Erhard Aichinger) | **SESSION 3B** (Chair: Manfred Droste) |
| 16:30 – 16:50 | **Gábor Czédli:** *The asymptotic number of ways to intersect two composition series* | **Anna Mućka:** *Many-sorted and single-sorted algebras* |
| 16:55 – 17:15 | **Peeter Puusemp:** *Unary polynomial functions on a class of finite groups* | **Anna Romanowska:** *Generalized convexity and closure conditions* |
| 17:20 – 17:40 | **Nebojša Mudrinski:** *How many higher commutator operations can we define on the congruence lattice of a given Mal'cev algebra?* | **Anna Zamojska-Dzienio:** *Representing lattices by lattices of subclasses* |
| 17:45 – 18:05 | **Erkko Lehtonen:** *Generalized entropy in algebras with neutral element and in inverse semigroups* | **Vanja Stepanović:** *Weak congruence representability of lattices and related Delta-suitability of their elements* |

# Friday, March 16

| | Amphitheatre I | Amphitheatre V |
|---|---|---|
| | **SESSION 4** (Chair: Igor Dolinka) | |
| 9:00 – 9:50 | **Nikola Ruškuc:** *Generating direct powers* | |
| 9:55– 10:25 | **Mark Kambites:** *Multiplication and geometry of tropical matrices* | |
| 10:30 – 11:00 | *COFFEE BREAK* | |
| | **SESSION 5A** (Chair: Mark Kambites) | **SESSION 5B** (Chair: Maja Pech) |
| 11:00 – 11:20 | **Marianne Johnson:** *Idempotent tropical matrices and their (tropical) geometry* | **Karsten Schölzel:** *The minimal clones generated by semiprojections on a four-element set* |
| 11:25 – 11:45 | **Kamilla Kátai-Urbán:** *Piecewise testable languages and the word problem* | **Hajime Machida:** *Centralizing monoids on a three-element set* |
| 11:50 – 12:10 | **Jörg Koppitz:** *New maximal subsemigroups of the semigroup of all transformations on a countable set* | **Sebastian Kerkhoff:** *Essential variables of cooperations and the consequences for operations* |
| 12:15 – 14:30 | *LUNCH BREAK* | |
| | **SESSION 6** (Chair: Nebojša Mudrinski) | |
| 14:30 – 15:20 | **Miguel Couceiro:** *Lattice polynomial functions and their use in qualitative decision making* | |
| 15:25 – 15:55 | **Reinhard Pöschel:** *Galois connections between group actions and functions - some results and problems* | |
| 16:00 – 16:30 | *COFFEE BREAK* | |
| | **SESSION 7A** (Chair: Libor Barto) | **SESSION 7B** (Chair: Miguel Couceiro) |
| 16:30 – 16:50 | **Dejan Delić:** *CSP dichotomy and H-bipartite digraphs* | **Tamás Waldhauser:** *Local monotonicities and lattice derivatives of Boolean and pseudo-Boolean functions* |
| 16:55 – 17:15 | **Jakub Bulín:** *CSP dichotomy for special oriented trees* | **Eszter K. Horváth:** *On symmetry groups of Boolean and other functions* |

19:00 - … Conference dinner ("Plava frajla" restaurant)

# Saturday, March 17 - Morning

| | Amphitheatre I | Amphitheatre V | Amphitheatre VII |
|---|---|---|---|
| | **SESSION 8** (Chair: R. D. Gray) | | |
| 9:00 – 9:50 | **Manuel Bodirsky:** *Topological Birkhoff* | | |
| 9:55 – 10:25 | **John C. Meakin:** *Inverse semigroups: some open problems* | | |
| 10:30 – 11:00 | *COFFEE BREAK* | | |
| | **SESSION 9A** (Chair: M. Bodirsky) | **SESSION 9B** (Chair: M. B. Szendrei) | **SESSION 9C** (Chair: A. Zamojska-Dz.) |
| 11:00 – 11:20 | **Mike Behrisch:** *Decomposing distributive lattices up to polynomial equivalence using RST* | **Yeni Susanti:** *Semigroups of n-ary operations on finite sets* | **Oleg Košik:** *Categorical equivalence of semilattices and lattices* |
| 11:25 – 11:45 | **Friedrich Martin Schneider:** *A relational localisation theory for topological algebras* | **Alexander Jende:** *Maximal coregular semigroups of K(n,2)* | **Michał Stronkowski:** *Almost structural completeness; an algebraic approach* |
| 11:50 – 12:10 | **Wolfram F. Bentz:** *An "easy" problem by McNulty* | **Alex Bailey:** *Stably weakly coreflective subcategories of the category of acts over a monoid* | **Bojan Bašić:** *Palindromic defect and highly potential words* |
| 12:15 – 14:30 | *LUNCH BREAK* | | |

# Saturday, March 17 - Afternoon

| | Amphitheatre I | Amphitheatre V | Amphitheatre VII |
|---|---|---|---|
| | **SESSION 10** (Chair: J. C. Meakin) | | |
| 14:30 – 15:20 | **Robert D. Gray:** *Free idempotent generated semigroups over the full linear monoid* | | |
| 15:25 – 15:45 | *SHORT COFFEE BREAK* | | |
| | **SESSION 11A** (Chair: J. K. Truss) | **SESSION 11B** (Chair: M. Johnson) | **SESSION 11C** (Chair: P. Đapić) |
| 15:45 – 16:05 | **Christian Pech:** *Universal homogeneous constraint structures and the hom-equivalence classes of weakly oligomorphic structures* | **Evgenii L. Bashkirov:** *On linear groups of degree 2 over a finite-dimensional algebra over a finite field* | **Přemysl Jedlička:** *Equational theory of left divisible left distributive groupoids* |
| 16:10 – 16:30 | **Dragan Mašulović:** *Properties of the automorphism group and a probabilistic construction of a class of countable labeled structures* | **Wolfgang Leeb:** *Linear complexity of extensions of Fermat quotients* | **Vesna Celakoska-Jordanova:** *Monoids of powers in varieties of f-idempotent groupoids* |
| 16:35 – 16:55 | **Predrag Tanović:** *On Kueker's conjecture* | **Ayan Mahalanobis:** *The discrete logarithm problem in semisimple group algebras* | **Valentina Miovska:** *Generalized (m+k,m)-bands* |
| 17:00 – 17:20 | *SHORT COFFEE BREAK* | | |
| | **SESSION 12** (Chair: N. Ruškuc) | | |
| 17:20 – 18:10 | **Peter Mayr:** *Almost all finite semigroups are finitely related* | | |

# Sunday, March 18

| | Amphitheatre I |
|---|---|
| | **SESSION 13** (Chair: Reinhard Pöschel) |
| 9:00 – 9:50 | **Marcin Kozik:**<br>*Mal'cev conditions derived from hereditary properties (and other algebraic malfunctions)* |
| 9:55 – 10:25 | **Petar Marković:**<br>*CSP dichotomy on small structures* |
| 10:30 – 11:00 | ***COFFEE BREAK*** |
| 11:00 – 11:50 | **Catarina A. Carvalho:**<br>*Algebra, graphs and dualities* |
| 11:55 – 12:10 | Closing |