

# Algebras & Clones FEST 2014

## Conference Program

Main lectures are scheduled for 50 minutes + 5 minutes discussion.  
Contributed talks are scheduled for 20 minutes + 5 minutes discussion.

### SUNDAY June 29

18:00-22:00 **REGISTRATION** & dinner, beer etc., **pub U Schnellů**  
(Tomášská 27, at the corner of Malostranské nám., across the square from the conference place)

### MONDAY June 30 – The Universal Algebra Classic DAY

8:00-9:00, 10:40-11:10 **REGISTRATION** in aula

#### Aula

|       |                              |                                                                        |
|-------|------------------------------|------------------------------------------------------------------------|
| 9:00  |                              | <i>Welcome blahblahs</i>                                               |
|       | <i>chair: Matt Valeriote</i> |                                                                        |
| 9:10  | Peter Mayr                   | Finitely generated varieties with edge term                            |
| 10:10 | Marcel Jackson               | Complexity of variety membership                                       |
| 10:40 |                              | <i>coffee and beer break</i>                                           |
|       | <i>chair: Libor Barto</i>    |                                                                        |
| 11:10 | Emil Kiss                    | The growth rate of solvable algebras                                   |
| 12:10 | László Zádori                | The structure of polynomial operations associated with smooth digraphs |

#### Room S9

|       |                               |                                                                                                      |
|-------|-------------------------------|------------------------------------------------------------------------------------------------------|
|       | <i>chair: Emil Kiss</i>       |                                                                                                      |
| 14:30 | Matt Valeriote                | On the complexity of testing for Jónsson terms                                                       |
|       |                               | Operator properties of congruence permutable varieties with strongly definable principal congruences |
| 15:00 | Boza Tasić                    |                                                                                                      |
| 15:30 | Markus Steindl                | On the subpower membership problem for semigroups                                                    |
| 16:00 |                               | <i>coffee and beer break</i>                                                                         |
|       | <i>chair: Anna Romanowska</i> |                                                                                                      |
| 16:30 | Michał Stronkowski            | Structural completeness for discriminator varieties                                                  |
| 17:00 | Jelena Jovanović              | On optimal Mal'cev conditions for congruence meet-semidistributivity                                 |
| 17:30 | Agata Pilitowska              | Entropicity and generalized entropic property in idempotent $n$ -semigroups                          |

## TUESDAY July 1 – The Universal Algebra Beyond Limits DAY

### Aula

|       |                               |                                                    |
|-------|-------------------------------|----------------------------------------------------|
|       | <i>chair: Michael Kinyon</i>  |                                                    |
| 9:00  | Petr Vojtěchovský             | The term $x^{1/2}yx^{1/2}$                         |
| 10:00 | Jonathan Smith                | Poset loops                                        |
| 10:30 |                               | <i>coffee and beer break</i>                       |
|       | <i>chair: Manuel Bodirsky</i> |                                                    |
| 11:00 | Stanislav Živný               | Valued CSPs and weighted clones                    |
| 12:00 | Andrei Krokhin                | Algebras and constant-factor approximable Min CSPs |

### Room S9

|       |                              |                                                             |
|-------|------------------------------|-------------------------------------------------------------|
|       | <i>chair: Andrei Krokhin</i> |                                                             |
| 14:30 | Alexandr Kazda               | Linear Datalog and $k$ -permutability = symmetric Datalog   |
| 15:00 | Dejan Delić                  | Maltsev constraints via LFP+Rank                            |
| 15:30 | Petar Marković               | Quantified constraint satisfaction on semicomplete digraphs |
| 16:00 |                              | <i>coffee and beer break</i>                                |
|       | <i>chair: Jonathan Smith</i> |                                                             |
| 16:30 | Anna Romanowska              | Duality for some classes of convex sets                     |
| 17:00 | Anna Zamojska-Dzienio        | The structure of medial quandles                            |

17:30 – a walk through Prague Castle to Bubeneč

18:30 – **dinner at Pelléova vila**

## WEDNESDAY July 2 – The Clowns DAY

### Aula

|       |                               |                                                                           |
|-------|-------------------------------|---------------------------------------------------------------------------|
|       | <i>chair: Stanislav Živný</i> |                                                                           |
| 9:00  | Dmitriy Zhuk                  | On key relations preserved by a weak near unanimity operation             |
| 10:00 | Michael Pinsker               | Clones on Ramsey structures                                               |
|       |                               | <i>coffee and beer break</i>                                              |
|       | <i>chair: László Zádori</i>   |                                                                           |
| 11:00 | Manuel Bodirsky               | Homomorphisms to the clone of projections                                 |
| 12:00 | András Pongrácz               | Reconstructing the topology of the polymorphism clone of the random graph |

### Room S9

|       |                               |                                                                                 |
|-------|-------------------------------|---------------------------------------------------------------------------------|
|       | <i>chair: Michael Pinsker</i> |                                                                                 |
| 14:30 | Maja Pech                     | On automatic homeomorphicity for topological monoids                            |
| 15:00 | Christian Pech                | On universal homogeneous polymorphisms and automatic homeomorphicity for clones |
| 15:30 | Erkko Lehtonen                | Finite characterizability of equational classes of threshold functions          |
| 16:00 |                               | <i>coffee and beer break</i>                                                    |
|       | <i>chair: Dmitriy Zhuk</i>    |                                                                                 |
| 16:30 | Mike Behrisch                 | Centraliser clones on finite domains                                            |
| 17:00 | Hajime Machida                | Some observations on centralizing monoids and minimal clones                    |
| 17:30 | Edith M. Vargas-García        | On the cardinality of the C-clone lattice                                       |
| 18:00 | Worakrit Supaporn             | Category equivalences of clones                                                 |

## THURSDAY July 3 – The Associative Algebra DAY

### Room S9

|       |                              |                                                               |
|-------|------------------------------|---------------------------------------------------------------|
|       | <i>chair: Alexandr Kazda</i> |                                                               |
| 9:00  | Nareupanat Lekkoksung        | On regular ordered ternary semigroups                         |
| 9:30  | Somnuek Worawiset            | Presentation for semigroups satisfying $x=x^k$ , $k>2$        |
| 10:00 | Oleg Košík                   | Term-equivalence of semigroups                                |
| 10:30 |                              | <i>coffee and beer break</i>                                  |
|       | <i>chair: Peter Mayr</i>     |                                                               |
| 11:00 | László Márki                 | Commutators for near-rings                                    |
| 11:30 | Abdollah Alhevaz             | Some results on near-rings of skew polynomials over nil rings |
| 12:00 | Anna Mućka                   | The lattice of quasivarieties of modules over a Dedekind ring |

### Aula

|       |                                 |                                                                  |
|-------|---------------------------------|------------------------------------------------------------------|
|       | <i>chair: Petr Vojtěchovský</i> |                                                                  |
| 14:30 | Michael Kinyon                  | Forbidden subalgebra theorems in semigroup theory                |
| 15:30 | Libor Polák                     | On syntactic structures                                          |
|       |                                 | <i>coffee and beer break</i>                                     |
|       | <i>chair: David Stanovský</i>   |                                                                  |
| 16:30 | Boris Vernikov                  | Special elements of the lattice of epigroup varieties            |
| 17:00 | Miroslav Ploščica               | Uncountable critical point for congruence distributive varieties |
| 17:30 |                                 | <i>Remembering Jarda</i>                                         |
| 18:00 |                                 | <i>Byebye blahblahs and snacks and drinks</i>                    |