

ISCAMI 2019 — PROGRAM AT GLANCE

Thursday (May 16, 2019)

15:00 – 16:55	Registration	B-106
17:00 – 17:10	Opening of the Conference	C-223
17:10 – 18:10	<i>Invited Lecture I</i> Chair: J. Bobok M. KŘÍŽEK: <i>The Magic of Numbers: From Great Discoveries to Applications</i>	C-223

Friday (May 17, 2019)

9:00 – 10:30	<i>Invited Lecture II</i> Chair: J. Chleboun M. JIRÁSEK: <i>Modeling of Elastic Membranes in Liquid Lenses</i>	C-206
10:30 – 11:00	<u>Coffee Break</u>	
11:00 – 12:40	Session 1	C-206
	Session 2	C-223
13:00 – 14:00	<u>Lunch</u>	
14:30 – 16:10	Session 3	C-206
	Session 4	C-223
16:10 – 16:40	<u>Coffee Break</u>	
16:40 – 18:20	Session 5	C-206
	Session 6	C-223
18:30 – 18:45	<u>Presentation of the Rektorys Awards</u>	C-206
19:00 – 20:30	<u>Dinner</u>	Masaryk Hotel/Hostel

Saturday (May 18, 2019)

- 9:00 – 10:30 *Invited Lecture III* Chair: J. Bobok C-206
E. PELANTOVÁ: *Exotic Representations of Numbers and Their Applications in Computer Science*
- 10:30 – 11:00 Coffee Break
- 11:00 – 12:40 Session 7 C-206
Session 8 C-223
- 13:00 – 14:00 Lunch
- 14:00 – Free Afternoon

Sunday (May 19, 2019)

- 9:00 – 10:30 *Invited Lecture IV* Chair: J. Chleboun C-206
J. NEUSTUPA: *The Navier-Stokes Equations — One of the Seven Millennium Prize Problems*
- 10:30 – 11:00 Coffee Break
- 11:00 – 12:40 Session 9 C-206
Session 10 C-223
- 13:00 – 14:00 Lunch

ISCAMI 2019 — SESSIONS

Friday (May 17, 2019)

- Session 1* Chair: J. Chleboun C-206
- 11:00 – 11:25 C. GAVIOLI: Control and controllability of PDEs with hysteresis
- 11:25 – 11:50 E. IPOCOANA: Breathing as a periodic gas exchange in a porous medium
- 11:50 – 12:15 V. VORÁČEK: Small quantum structures without group-valued measures [Rektorys Competition]
- 12:15 – 12:40 M. LADECKÝ: Acceleration of FFT-based homogenisation by low-rank tensors approximations [Rektorys Competition]
- Session 2* Chair: J. Bobok C-223
- 11:00 – 11:25 P. JÁNOŠ: The McKay-Miller-Širáň bound on large graphs of given degree and diameter two
- 11:25 – 11:50 H. H. LY: A simple linear time algorithm for computing a 1-median on cactus graphs
- 11:50 – 12:15 A. BARTA: Theoretical and simulation results on a network evolution model driven by a branching process
- 12:15 – 12:40 Z. KURÁČ: Transfer-stable means on finite chains
- Session 3* Chair: F. Bubeník C-206
- 14:30 – 14:55 M. TYBUREC: 3D-printed internal structure for composite beams by semidefinite programming [Rektorys Competition]
- 14:55 – 15:20 J. VALÁŠEK: The study of different inlet boundary conditions for fluid-structure interaction problem [Rektorys Competition]
- 15:20 – 15:45 E. KOREC: An improved model for torsion of elastic beams with thin-walled closed cross sections [Rektorys Competition]
- 15:45 – 16:10 L. GAYNUTDINOVA: Accelerated Metropolis-Hastings algorithm for parameter identification [Rektorys Competition]
- Session 4* Chair: J. Kupka C-223
- 14:30 – 14:55 G. MOŠ: Fuzzy implications S -power invariant with respect to continuous, strict and Archimedean t -conorms S
- 14:55 – 15:20 K. MIŠ: On some inference schemas in fuzzy logic
- 15:20 – 15:45 H. ZÁMEČNÍKOVÁ: Nonlocal operators in the space with a fuzzy partition
- 15:45 – 16:10 D. EINŠPIGLOVÁ: Application of intermediate quantifiers in generalised syllogisms
- Session 5* Chair: I. Pultarová C-206
- 16:40 – 17:05 M. BÉREŠ: A comparison of two approaches to the reduced basis construction for stochastic Galerkin matrix equations
- 17:05 – 17:30 S. DOMESOVÁ: Efficient iterative solution of linear system sequences in Bayesian inversion
- 17:30 – 17:55 D. BALLOVÁ: Statistical design of experiments: Optimization of chromic salt adsorption on sheep wool
- 17:55 – 18:20 R. KNOBLOCH: Convergence considerations concerning the modified differential evolution algorithm

- Session 6* Chair: J. Bobok C-223
 16:40 – 17:05 T. ASMUS: General interval-valued overlap functions
 17:05 – 17:30 R. ŠKRABAL: Optimization of automatic memory management based on specialization
 17:30 – 17:55 D. BABICOVÁ: Conditional probability in fuzzified probability theory

Saturday (May 18, 2019)

- Session 7* Chair: R. Mesiar C-206
 11:00 – 11:25 T. ARNÓCZKI: Monogeneity of bicyclic biquadratic number fields
 11:25 – 11:50 L. REMETE: Integral bases of pure fields
 11:50 – 12:15 H. DLOUHÁ: Periodicity of multidimensional continued fractions
 12:15 – 12:40 K. MEDKOVÁ: Derived sequences of Arnoux-Rauzy sequences

- Session 8* Chair: J. Kupka C-223
 11:00 – 11:25 Q. V. BUI: Existence of solutions of set-valued equilibrium problems via Ekeland's variational principle
 11:25 – 11:50 T. V. TRI: Existence of solutions to vector equilibrium problems and its regularized problems
 11:50 – 12:15 Z. ONTKOVIČOVÁ: On discrete f -divergence and its properties
 12:15 – 12:40 A. ŠELIGA: Quintic polynomials as copulas

Sunday (May 19, 2019)

- Session 9* Chair: J. Chleboun C-206
 11:00 – 11:25 O. WINTER: Numerical Approximation of Flow Problems by Discontinuous Galerkin Method
 11:25 – 11:50 P. VACKOVÁ: Regularity of solutions steady Stokes problem with mixed boundary condition
 11:50 – 12:15 D. MOJŽÍŠEK: Community detection with graph neural networks
 12:15 – 12:40 V. MOLEK: Classification of dragonflies with computationally restricted deep neural network

- Session 10* Chair: M. Štěpnička C-223
 11:00 – 11:25 J. HŮLA: Identifying commit patterns with topic modeling
 11:25 – 11:50 J. JANEČEK: Segmentation algorithm inspired by fuzzy transform
 11:50 – 12:15 N. ŠKORUPOVÁ: Calculation of Zadeh's extension of piecewise linear functions
 12:15 – 12:40 S. MIRSHAHI: A fuzzy model for mortality rate analysis and prediction