

Ministry of Education and Science of the Russian Federation

Lobachevsky State University of Nizhny Novgorod
National Research University

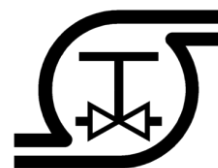
Russian Science Foundation

PROGRAM

of the 11th International Conference

LEARNING AND INTELLIGENT

OPTIMIZATION



Nizhny Novgorod, 2017, June 19–21

LION11 PROGRAM (June 18 – 21, 2017)

June 18, Sunday (Arrival day)

17.00 - 19.00	<i>Registration</i>
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June 19, Monday

9.00 – 9.30	<i>Registration</i>
9.30 – 10.00	<i>Opening: R. Battiti, S. Odorizzi, Ya. Sergeyev, R. Strongin</i>
10.00 – 11.00	Plenary Lecture: P. Pardalos “Quantification of network dissimilarities and its practical implications” Chairman: R. Strongin
	<i>Coffee break</i>
11.20 – 12.20	Plenary Lecture: J. Žilinskas “Deterministic algorithms for black box global optimization” Chairman: P. Pardalos
12.20 – 13.20	Tutorial: M. Guarracino “Laplacian-based semi supervised learning” Chairman: P. Pardalos
13.20 – 13.30	<i>Conference photo</i>
13.30 – 14.30	<i>Lunch</i>
14.30 – 17.00	Parallel streams (MA1, MA2, MA3)
17.00 – 19.30	Excursion

June 20, Tuesday

9.00 – 10.00	Tutorial: Ya. Sergeyev “Numerical computations with infinities and infinitesimals” Chairman: J. Žilinskas
10.00 – 11.00	Plenary Lecture: R. De Leone “The use of grossone in optimization: a survey and some recent results” Chairman: J. Žilinskas
	<i>Coffee break</i>
11.20 – 13.20	Parallel streams (TM1, TM2, TM3)
13.20 – 14.30	<i>Lunch</i>
14.30 – 15.00	Transfer to the boat
15.00 – 18.00	<i>Boat tour</i>
18.00 – 18.30	Transfer to the restaurant
18.30 – 22.00	<i>Official Dinner</i>

June 21, Wednesday

9.00 – 10.00	Plenary Lecture: N. Mladenovic “Less is more approach in heuristic optimization” Chairman: R. Battiti
9.00 – 11.00	Tutorial: A. Erzin “Some optimization problems in the wireless sensor networks” Chairman: R. Battiti
	<i>Coffee break</i>
11.20 – 13.20	Parallel streams (WM1, WM2, WM3)
13.20 – 14.30	<i>Lunch</i>
14.30 – 16.30	Parallel streams (WA1, WA2, WA3)
	<i>Coffee break</i>
16.50	<i>Closing</i>

LION11 PARALLEL STREAMS: MONDAY AFTERNOON

June 19, Monday afternoon (14.30): Hall 1 – Stream MA1

Chairman: Yu. Evtushenko	
14.30 – 15.00	K. Barkalov, R. Strongin "Test problems for the parallel algorithms of constrained global optimization"
15.00 – 15.30	I. Konnov "Decomposition descent method for non-stationary optimization problems"
15.30 – 16.00	O.V. Khamisov "Objective function decomposition in global optimization"
15.00 – 15.30	E. Nurminski "Sharp penalty mappings for variational inequality problem"
16.30 – 17.00	F. Franchini, M. Serafini "CFD Optimization of a new concept heat pump: increase performance and reduce noise by means of Response Surface Methodology"

June 19, Monday afternoon (14.30): Hall 2 – Stream MA2

Chairman: R. Battiti	
14.30 – 15.00	S. Kadioglu, M. Sellmann, M. Wagner "Learning a reactive restart strategy to improve stochastic search"
15.00 – 15.30	L. Pérez Càceres, M. López-Ibàñez, H. Hoos, T. Stützle "An experimental study of adaptive capping in irace"
15.30 – 16.00	S. Adriaensen, F. Moons, A. Nowé "An importance sampling approach to the estimation of algorithm performance in automated algorithm design"
16.00 – 16.30	F. Romito "Hybridization and discretization techniques to speed up genetic algorithm and solve GENOPT problems"
16.30 – 17.00	D. Cinalli, L. Marti, N. Sanchez-Pi, A. C. Bicharra Garcia "Extending collective intelligence evolutionary algorithms: a facility location problem application"

June 19, Monday afternoon (14.30): Hall 3 – Stream MA3

Chairman: A. Erzin	
14.30 – 15.00	O. Prokopyev, J. Borrero, D. Saure "Sequential max-min bilevel programming with incomplete information and learning"
15.00 – 15.30	A. Orlov "A nonconvex optimization approach to quadratic bilevel problems"
15.30 – 16.00	C. Kao, S.-T. Liu "Linear programming with interval data: A two-level programming approach"
16.00 – 16.30	G. Fasano, M. Roma, A. Caliciotti, M. Al-Baali "Improving efficiency for nonlinear conjugate gradient methods, by exploiting quasi-newton based preconditioning and damped quasi-newton schemes"

LION11 PARALLEL STREAMS: TUESDAY MORNING

June 20, Tuesday morning (11.20): Hall 1 – Stream TM1

Chairman: A. Zhigljavsky	
11.20 – 11.50	A. Albu, Yu. Evtushenko, V. Zubov "Identification of discontinuous thermal conductivity coefficient using fast automatic differentiation"
11.50 – 12.20	R. De Leone, G. Fasano, Ya. Sergeyev "Planar methods, projective geometry and grossone for the conjugate gradient breakdown in nonlinear programming"
12.20 – 12.50	E. Nurminski, D. Zhilenkov "Active Set QP versus Specialized Projection Routine"
12.50 – 13.20	M. Gaudioso, G. Giallombardo, M. Mukhametzhanov "On the use of numerical infinitesimal in convex nonsmooth optimization via the diagonal bundle method"

June 20, Tuesday morning (11.20): Hall 2 – Stream TM2

Chairman: S. Sidorov	
11.20 – 11.50	A. Gretsista, E. Burke "An Iterative local search framework with adaptive operator selection for nurse rostering"
11.50 – 12.20	O. Wang, L. Liberti "Controlling some statistical properties of business rules programs"
12.20 – 12.50	C. Kloimüller, G. Raidl "Hierarchical clustering and multilevel refinement for the bike-sharing station planning problem"
12.50 – 13.20	W. Li "Solution attractor of local search"

June 20, Tuesday morning (11.20): Hall 3 – Stream TM3

Chairman: M. Guarracino	
11.20 – 11.50	D. Karapetyan, A. Vernitski "Efficient adaptive implementation of the serial schedule generation scheme using preprocessing and Bloom filters"
11.50 – 12.20	E. Berglund "Towards a universal modeller of chaotic systems"
12.20 – 12.50	M. Reznikov, Yu. Fedosenko "The models of massively parallel calculations for hard tasks of scheduling in transportation systems"
12.50 – 13.20	A. Korotchenko, V. Smoryakova "On the estimates of the error of extremum seeking algorithm in classes of functions defined by piecewise linear majorant"

LION11 PARALLEL STREAMS: WEDNESDAY MORNING

June 21, Wednesday morning (11.20): Hall 1 – Stream WM1

Chairman: V. Gergel	
11.20 – 11.50	A. Candelieri, I. Giordani, F. Archetti "Automatic configuration of kernel-based clustering: An optimization approach"
11.50 – 12.20	A. Zhigljavsky, A. Pepelyshev, V. Kornikov "Statistical estimation in global random search algorithms in case of large dimensions"
12.20 – 12.50	V. Grishagin "Nested schemes of global optimization and non-linear constraints"
12.50 – 13.20	K. Barkalov, I. Lebedev "Comparing two approaches for solving constrained global optimization problems"

June 21, Wednesday morning (11.20): Hall 2 – Stream WM2

Chairman: A. Erzin	
11.20 – 11.50	F. Dell'Accio, D. Kvasov "On some approximation techniques for numerical optimization"
11.50 – 12.20	O.O. Khamisov, V. Stennikov "Interior point and newton methods in solving high dimensional flow distribution problems for pipe networks"
12.20 – 12.50	A. Senov "Accelerating gradient descent with projective response surface methodology"
12.50 – 13.20	A. Astorino, A. Fuduli, M. Gaudioso "A Lagrangean heuristic approach for binary multiple instance classification"

June 21, Wednesday morning (11.20): Hall 3 – Stream WM3

Chairman: N. Mladenovic	
11.20 – 11.50	S. Sidorov, S. Mironov "Duality gap analysis of weak relaxed greedy algorithms"
11.50 – 12.20	A. Krylatov, A. Shirokolobova "Projection approach versus gradient descent for network's flows assignment problem"
12.20 – 12.50	G. Felici, D. Ferone, P. Festa, A. Napolitano, T. Pastore "A GRASP for the minimum cost SAT problem"
12.50 – 13.20	D. Ferone, P. Festa, A. Napolitano, M. Resende "A new local search for the p-center problem based on the critical vertex concept"

LION11 PARALLEL STREAMS: WEDNESDAY AFTERNOON

June 21, Wednesday afternoon (14.30): Hall 1 – Stream WA1

Chairman: F. Archetti	
14.30 – 15.00	V. Gergel "An approach for generating test problems of constrained global optimization"
15.00 – 15.30	J. Gillard, A. Zhigljavsky "Global optimization challenges in structured low rank approximation"
15.30 – 16.00	V. Gergel, A. Goryachih "Global optimization using numerical approximations of derivatives"
16.00 – 16.30	Ya. Sergeev, D. Kvasov, M. Mukhametzhanov "Emmental-type GKLS-based multiextremal smooth test problems with non-linear constraints"

June 21, Wednesday afternoon (14.30): Hall 2 – Stream WA2

Chairman: I. Konnov	
14.30 – 15.00	H. Kotthaus, J. Richter, A. Lang, J. Thomas, B. Bischl, P. Marwedel, J. Rahnenfuhrer, M. Lang "RAMBO: Resource-Aware Model-Based Optimization with scheduling for heterogeneous runtimes and a comparison with asynchronous model-based optimization"
15.00 – 15.30	T. Gruzdeva, A. Strekalovskiy "A D.C. programming approach to fractional problems"
15.30 – 16.00	D. Nhat Phan, H. An Le Thi "A DC programming approach for group variable selection and application to optimal scoring"
16.00 – 16.30	A. Mosavi, T. Rabczuk "Learning and intelligent optimization for computational materials design innovation"

June 21, Wednesday afternoon (14.30): Hall 3 – Stream WA3

Chairman: C. Kloimüller	
14.30 – 15.00	M. Cunha "Towards a theory of practice in heuristics design for water systems management"
15.00 – 15.30	A. Antunes, J. Cavadas "Computational study of a hybrid simulated-annealing cross-entropy algorithm for facility location problems"
15.30 – 16.00	A. Kononov, Yu. Kovalenko "An approximation algorithm for preemptive speed scaling scheduling of parallel jobs with migration"
16.00 – 16.30	L. Mousin, M.-E. Kessaci-Marmion, C. Dhaenens "A new constructive heuristic for the no-wait flowshop scheduling problem"