

# Programme

## Friday, June 15

### PLENARY SESSION

Chairman:

8:50 – 9:00	OPENING CEREMONY
9:00 – 9:45	Gábor Kassay : <i>The equilibrium problem: a unified approach to optimization, minimax problems (game theory), variational inequalities and other interesting problems</i>
9:45 – 10:30	Tamás Kozsik : <i>Refactoring for parallelization</i>

10:30 – 11:00	COFFEE BREAK
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### SECTION A – Mathematics

Chairman:

11:00 – 11:20	Octavian Agratini : <i>Results on non-multiplicative operators</i>
11:20 – 11:40	Gábor Fábián : <i>Optimization in periodic spline interpolation</i>
11:40 – 12:00	Kristóf Szarvas : <i>Cesaro means in variable dyadic Hardy spaces</i>
12:00 – 12:20	Zsolt Németh : <i>Rational approximations on the unit disk using Zernike–Blaschke functions</i>
12:20 – 12:40	Brigitte E. Breckner : <i>Properties of harmonic functions on self-similar sets</i>
12:40 – 13:00	Adrian Petruşel : <i>Fixed points and coupled fixed point for monotone operators</i>

### SECTION B – Computer Science

Chairman:

11:00 – 11:20	Áron Baráth, Zoltán Porkoláb : <i>Detecting binary incompatible software components using dynamic loader</i>
11:20 – 11:40	András Béleczi, Bálint Molnár, Zoltán Vincellér : <i>Extending a Hypergraph-based Data Modeling Framework for Enterprise Architecture Usage</i>
11:40 – 12:00	Zalán Bodó : <i>A CiteSeer<sup>X</sup>-based dataset for automatic document metadata extraction</i>
12:00 – 12:20	Máté Cserép, Péter Hudoba, Zoltán Vincellér : <i>Object Recognition of Railroad Cables in Rural Areas from Mobile Terrestrial Laser Scanning</i>
12:20 – 12:40	Mátyás Komáromi, István Bozó, Melinda Tóth : <i>An efficient graph visualization framework for RefactorErl</i>
12:40 – 13:00	B06

### SECTION C – Computational Physics

Chairman:

11:00 – 11:20	Titus Adrian Beu, Alexandra Farcaş, Andrada-Elena Ailenei : <i>Atomistic and Coarse-Grained Modelling of Gene Delivery Polymers</i>
11:20 – 11:40	Balázs Király : <i>Ising-type phase transitions in simple evolutionary coordination games</i>
11:40 – 12:00	Wesley Cota, Géza Ódor and Silvio C. Ferreira : <i>Griffiths phases in infinite-dimensional, non-hierarchical modular networks</i>
12:00 – 12:20	A. Bende and V. Toşa : <i>Modeling laser-induced molecule excitations using real-time, time-dependent density functional theory</i>

12:20 – 12:40	A. Farcaş and A. Bende : <i>Modeling laser-induced spin crossover transitions using time-dependent density functional theory</i>
12:40 – 13:00	Botond Molnár, Melinda Varga, Ferenc Molnár, Zoltán Toroczka, Mária Ercsey-Ravasz : <i>Predicting with chaos: dynamical features reveal the global optimum of NP-hard problems</i>

13:00 – 15:00	LUNCH BREAK
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#### PLENARY SESSION

*Chairman:*

15:00 – 15:45	Ferenc Weisz : <i>Variable Hardy and Hardy-Lorentz spaces and applications in Fourier analysis</i>
15:45 – 16:30	Claudius Gros, Frederike Kubandt, Michael Nowak, Tim Koglin, Bulcsú Sándor : <i>Self-organized robots driven by attracting states in the sensorimotor loop</i>

16:30 – 17:00	COFFEE BREAK
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#### SECTION A – Mathematics

*Chairman:*

17:00 – 17:20	Imre Gera, András London : <i>Spanning trees and centrality measures of financial networks</i>
17:20 – 17:40	Lajos Györfy : <i>Tic-Tac-Toe, amoeba (5-in-a-row) and other animals</i>
17:40 – 18:00	Levente Simon, Anna Soós : <i>Fractal analysis on growing graph sequences</i>
18:00 – 18:20	Brigitte E. Breckner and Christian Săcărea : <i>A Topological Representation of Double Boolean Lattices</i>
18:20 – 18:40	László Tóth : <i>Ramanujan expansions of arithmetic functions of several variables</i>
18:40 – 19:00	Gábor Nagy : <i>On non-integer based expansions of real numbers in a special form</i>

#### SECTION B – Computer Science

*Chairman:*

17:00 – 17:20	Zsolt Parragi, Zoltán Porkoláb : <i>Instrumentation of C++ programs using automatic source code transformations</i>
17:20 – 17:40	Péter Podlovics, Boldizsár Németh, Tamás Kozsik : <i>Dead extension elimination for Haskell modules</i>
17:40 – 18:00	Csaba Szabó and Emira Mustafa Moamer Alzeyani : <i>Measuring Energy Efficiency of Selected Working Software</i>
18:00 – 18:20	Máté Tejfel : <i>Formal verification of P4 programs</i>
18:20 – 18:40	Ioan Bădărină and Adrian Ioan Sterca : <i>Analyzing the usefulness of the user's browser history and query history for query suggestions</i>
18:40 – 19:00	B12

#### SECTION C – Computational Physics

*Chairman:*

17:00 – 17:20	Ladislau Nagy, Sándor Borbély and Ferenc Járai-Szabó : <i>Fast charged projectiles - waves or particles?</i>
17:20 – 17:40	Sándor Borbély, Attila Tóth, Károly Tőkési and Ladislau Nagy : <i>Holographic imaging of atoms</i>
17:40 – 18:00	Ferenc Járai-Szabó, Szilárd Boda and Zoltán Néda : <i>On the KJMA lattice model with continuous nucleation</i>
18:00 – 18:20	Levente Varga, Géza Tóth, Zoltán Néda : <i>Commuting patterns: a modified radiation model and supporting data</i>
18:20 – 18:40	Barnabás Nagy, László Grad-Gyenge : <i>The evaluation of semantic modelling techniques for the topic detection task on social media content</i>
18:40 – 19:00	C12

19:00 – 22:00	DINNER AND CULTURAL EVENT
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## Saturday, June 16

### PLENARY SESSION

Chairman:

9:00 – 9:45	Ferenc Kun : <i>Discrete element modelling of the compressive failure of porous rocks</i>
9:45 – 10:30	Laura Dioşan : <i>Adaptation through nature-inspired algorithms</i>

10:30 – 11:00	COFFEE BREAK
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### SECTION C – Computational Physics

Chairman:

11:00 – 11:20	Zoryana Usatenko : <i>Investigation of linear and ring polymer chains in confined geometries: the massive field theory approach</i>
11:20 – 11:40	Tamás S. Bíró and Zoltán Néda : <i>Random growth with reset: complex systems in a new perspective</i>
11:40 – 12:00	K. Dénes , B. Sándor , Z. Néda : <i>Collective modes of identical Kuramoto rotators in a ring-like topology</i>
12:00 – 12:20	I.Papp, M. Afifi, L. Varga, I. Gere and Z. Neda : <i>Nontrivial dynamical scaling in the Internet: experiments and a simple model.</i>
12:20 – 12:40	Bulcsú Sándor, Michael Nowak, Tim Koglin, Claudius Gros : <i>Dynamical systems with multiple attractors: from design to applications</i>
12:40 – 13:00	C18

### SECTION B1 – Young researchers 1

Chairman:

11:00 – 11:20	Mohammed B. M. Kamel, Péter Ligeti, Ádám Nagy : <i>A New Model for Address Discovery in P2P and F2F Networks</i>
11:20 – 11:40	Filep Levente : <i>Prototyping a hybrid P2P computational framework: challenges and benefits</i>
11:40 – 12:00	Réka Kovács, Gábor Horváth : <i>An Initial Prototype of Tiered Constraint Solving in the Clang Static Analyzer</i>

12:00 – 12:20	Arnold Szederjesi-Dragomir : <i>Applications of Soft Computing in Distributed Systems</i>
12:20 – 12:40	András Libál, Horia F. Pop : <i>Fuzzy clustering of active matter</i>
12:40 – 13:00	Dániel Lukács, Melinda Tóth : <i>Translating Erlang state machines to UML using triple graph grammars</i>

## SECTION B2 – Young researchers 2

*Chairman:*

11:00 – 11:20	Alexandru Ion Marinescu, Zoltán Bálint, Laura Dioşan, Anca Andreica : <i>3D Image Segmentation based on Unsupervised Grow Cut</i>
11:20 – 11:40	Tibor Brunner, Péter Szécsi, Zoltán Porkoláb : <i>Ambiguity resolution of symbolic execution bug paths</i>
11:40 – 12:00	Sergiu-George Limboi : <i>Twitter Analysis</i>
12:00 – 12:20	Dániel Leskó, Máté Tejfel : <i>Random program generation via lambda-terms</i>
12:20 – 12:40	Bogdan-Eduard-Mădălin Mursa : <i>Survey on Cellular Automata and Articulation Point applications on graphs and networks</i>
12:40 – 13:00	Mara Renata Petruşel : <i>Machine Learning techniques applied in Recommendation Systems</i>

13:00 – 15:00	LUNCH BREAK
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## PLENARY SESSION

*Chairman:*

15:00 – 15:45	György Szabó : <i>Classification of interactions and behaviours in evolutionary games</i>
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15:45 – 16:00	COFFEE BREAK
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## SECTION A – Mathematics

*Chairman:*

16:00 – 16:20	István Balázs : <i>Global stability for price models with delay</i>
16:20 – 16:40	Călin-Ioan Gheorghiu : <i>Spectral collocation solutions to a class of nonlinear t. p. b. v. p. on the half line.</i>
16:40 – 17:00	Anca Grad : <i>A monotone inclusion problem solved through an inertial algorithm with two backward steps</i>
17:00 – 17:20	Tamás Tekeli : <i>Stability and oscillations of multistage SIS epidemic models</i>
17:20 – 17:40	Sándor Fridli and Gergő Bognár : <i>Pole stability of the rational system for ECG signal processing</i>
17:40 – 18:00	A18

## SECTION B1 – Young researchers 1

*Chairman:*

16:00 – 16:20	Dragoş Dobrea : <i>Mobile software architectures analysis</i>
16:20 – 16:40	Áron Attila Mészáros, Gergely Nagy, István Bozó, Melinda Tóth : <i>Towards green computing in Erlang</i>
16:40 – 17:00	Maria Nuţu: <i>Machine Learning techniques for Model Order Reduction applied in Engineering</i>

17:00 – 17:20	Szabolcs Pável : <i>Distortion estimation with CNNs</i>
17:20 – 17:40	Artúr Poór, Tamás Kozsik, Melinda Tóth, István Bozó : <i>Compiler Front End Fusion: Undo Desugaring in Language Processing Tools</i>
17:40 – 18:00	Csanád Sándor : <i>Compression of convolutional neural networks</i>

SECTION B2 – Young researchers 2

Chairman:

16:00 – 16:20	Gábor Márton, Zoltán Porkoláb : <i>Compile-Time Function Call Interception for Testing in C/C++</i>
16:20 – 16:40	Alina Enescu : <i>Cellular Automa for edge detection</i>
16:40 – 17:00	Daniel Boța : <i>Data Mining methods for malware detection</i>
17:00 – 17:20	Gregory Morse, Dániel Lukács, Melinda Tóth : <i>Incremental Decompilation of Loop-Free Binary Code: Erlang</i>
17:20 – 17:40	Mondoc Alexandra : <i>Improvements for Behavior Based Malware Detection Solutions</i>
17:40 – 18:00	Anna Reale, Péter Kiss , Charles Ferrari, Benedek Kovács, László Szilágyi, Melinda Tóth : <i>Application function placement optimization in a mobile distributed cloud environment</i>

19:00 – 22:00	BANQUETT
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**Sunday, June 17**

TRIP

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