

# Programme

Thursday, May 20, 2010

Venue

Friday, May 21, 2010

12.30 – 13.15 Registration  
13.15 – 13.30 Opening  
13.30 – 14.15

*Karol Mikula*: Mathematical methods for 4D image analysis in biology and medicine

14.30 – 16.00

## Section A

(chair: Karol Mikula)

*Dana Kotorová*: Discrete duality finite volume scheme for the curvature driven level set equation

*Radka Malíková*: On Helmholtz-like Forms

*Radka Poláková*: Constrained problems Solved by Competitive Differential Evolution

*Ivan Prcúch*: Finite Element Method on Surfaces

*Martina Stolařová*: Perpendicular pursuit motion as a model of nonholonomic mechanical system

*Kamila Vopatová*: Kernel choosing with respect to the bandwidth in kernel density estimates

## Section B

(chair: Radko Mesiar)

*Iveta Bebčáková, Jana Talašová*: On the application of the fuzzified Choquet integral to multiple criteria decision making

*Pavel Holeček and Jana Talašová*: Software for Multiple Criteria Evaluation Support - The Aggregation of Partial Evaluations by Choquet Integral

*Martin Takáč*: Mathematical analysis of a class of path-dependent options

*Jan Stoklasa, Jana Talašová*: A Fuzzy Model Of Academic Staff Evaluation

*Lucia Vavříková*: Assessment of University departments based on multicriteria decision making and aggregation operators

*Blanka Zemková, Jana Talašová*: Fuzzy Sets in HR Management

## Section C

(chair: Oľga Nánásiová)

*Ahmed Al-adilee*: Properties of Common Cause in Quantum Logic

*Vladimír Jágr*: Extreme-Value Copulas

*Monika Juráňová*: On two classes of generated copulas

*Erich Peter Klement, Maddalena Manzi, Radko Mesiar*: Ultramodular aggregation functions and a new construction method for copulas

*Milan Petrik and Peter Sarkoci*: Visual characterisation of associativity of triangular norms

*Štefánia Václavíková, Oľga Nánásiová, Elena Pastuchová*: Classification of association coefficients and its application

16.00 – 16.30 Cofee break

16.30 – 18.00

**Section A**

(chair: Martin Štepnička)

*Michal Janošek*: ALCore - Artificial life simulator

*Miroslav Langer*: On Positioned Eco-grammar Systems

*Libor Pučok*: Linguistic Fuzzy Control of Magnetic Levitation

*Iva Tomanová*: Another approach to mining of linguistic associations

*Katarína Cechlárová and Eva Pillárová*: A near equitable 2-person cake cutting algorithm

**Section B**

(chair: Jana Talašová)

*Eduarne Falcó, José Luis García-Lapresta*: A distance-based extension of the Majority Judgement voting system

*José Luis García-Lapresta, Bonifacio Llamazares, Patrizia Pérez-Asurmendi*: Avoiding inconsistencies in majority decisions

*Robert Bystrický*: Voting systems under the scrutiny of aggregations operators

*Petr Krajča*: Parallel Algorithms for Formal Concept Analysis

*Juraj Macko*: Valued formal concept analysis

*Petr Osička*: Algorithm for approximate decomposition of boolean matrices using their conceptual structure

**Section C**

(chair: Babak Daneshvar)

*Çağrı Alpak, Halil Ceylan, Babak Daneshvar Rouyendegh, Turan Erman Erkan*: A study about Analytic Hierarchy Process (AHP) Implementations for Internal Processes and Supplier Selection Process at Procurement Department of a university in Turkey

*Babak Daneshvar Rouyendegh and Mahdi Bagherzadeh Asl Miyandoab*: Selecting the High - Performing Departments within Universities Applying the Fuzzy ELECTRE Method

*Babak Daneshvar Royendegh, Turan Erman Erkan, Ayşe Kılıç*: Personnel Selection Using Fuzzy Analytic Hierarchy Process (FAHP): An Application

*Sertaç Olgun, Serpil Erol, Babak Daneshvar Rouyendegh*: An Application about Performance of Air Cargo Carriers via DEA AND AHP Methods

*Veysel Emre Tuncer, Babak Daneshvar Rouyendegh, Turan Erman Erkan*: A Data Envelopment Analysis-Fuzzy Analytic Hierarchy Process Combined Methodology To Evaluate The Performance Of International Airports In Turkey

*Ahmet Maraşlıgil, Babak Daneshvar Rouyendegh, Turan Erman Erkan*: A Study Of The Relative Efficiency Of Supermarkets; A Pilot Application In Turkey Using Data Envelopment Analysis

18.15

Festive dinner

Saturday, May 22, 2010

9.00 – 10.15

**Section A**

(chair: Tomáš Bacigál)

*Pavla Dokoupilová*: A Confidence Interval for the Probability Difference of Overall Treatment Effects - Simulation Study

*Jana Kelemenová and Mária Kuková*: Central limit theorem on MV-algebras

*Anna Petričková*: Modelling of dependence structure of the regime-switching models

residuals using autocopulas

*Jana Lenčuchová*: Testing of Markov assumptions based on the dynamic specification test

*C. Lopez-Molina, H. Bustince, B. De Baets*: On the parameterization of Baddeley's error metric

### **Section B**

(chair: Daniel Ševčovič)

*Karina Chudá*: S(2,1)-labeling of graphs with cyclic structure

*Mária Ždímalová*: A note on large Cayley graphs of diameter two and given degree

*Martin Lauko and Daniel Ševčovič*: Comparison of numerical and analytical approximations of the early exercise boundary of the American put option

*Petra Medved'ová*: Dynamic Model of a Small Open Economy Under Flexible Exchange Rates

*Batyrkhan Omarov*: Solution of applied tasks with parallel programming

10.15 – 10.45 Coffee break

10.45 – 12.00

### **Section A**

(chair: Balasubramaniam Jayaram)

*A. Jurio, D. Paternain, J. Fernandez, C. Lopez-Molina*: Construction of Interval-Valued Intuitionistic Fuzzy Sets from Fuzzy Sets. Some Operators

*D. Paternain, A. Jurio, E. Barrenechea, H. Bustince*: Construction of Atanassov's Intuitionistic Fuzzy Sets from Fuzzy Sets. Some operators

*J. Sanz, D. Jurío, A. Fernández, F. Herrera, H. Bustince*: Using Similarity Measures in Fuzzy Rule-Based Classification Systems with Interval-Valued Fuzzy Sets

*M. Galar, J. Sanz, M. Pagola, G. Beliakov, H. Bustince*: On the use of Interval-Valued Fuzzy Sets in Stereo Matching problem

*Vladislav Biba*: Fuzzy preference structures based on generated implications

### **Section B**

(chair: Martina Danková)

*Irina Perfilieva, Hoďáková Petra, Michaela Wrublová*: Graphical Support of Similarity Based Fuzzy Interpolation

*Tomas Kuhr*: Confluence and Termination of Fuzzy Relations: A Survey of Results

*Lenka Vavříčková*: Perception-based Logical Deduction and the Problem of Redundant Fuzzy Rules

*Martin Dyba and Vilém Novák*: EQ-logics: logics developed on the basis of fuzzy equality

*Jan Konečný*: Relational Galois Connections in the Fuzzy Setting

12.15 Lunch

Sunday, May 23, 2010

Departure