

FSTA 2012 preliminary program

Monday - January 30, 2012

- 09:00 – 09:15 OPENING OF THE CONFERENCE
- 09:15 – 10:05 H. Bustince: Extensions of fuzzy sets in knowledge representation
- 10:05 – 10:30 *Coffee break*
- 10:30 – 11:20 D. Dubois: The structure of qualitative capacities
- 11:20 – 12:10 J. Fodor: Migrative type functional equations for triangular norms
- 12:15 *Lunch*
- 16:00 – 16:20 *Coffee break*

Section A

- 16:20 – 16:40 J. Niederle, J. Paseka: Musings about Triple Representation Theorem for effect algebras
- 16:40 – 17:00 F. Chovanec: Distributive MV-algebra pastings
- 17:00 – 17:20 J.M. Gabriëls: Shall we find normal forms in orthomodular lattices?
- 17:20 – 17:40 M. Hyčko: Pre-pseudoeffect algebras
- 17:40 – 18:00 M. Kalina: On completion of Archimedean atomic lattice effect algebras

Section B

- 16:20 - 16:40 E. De Amo et al.: Duality of aggregation operators and the explicit expression of k-negations
- 16:40 - 17:00 E.P. Klement, R. Mesiar: Aggregation functions and ultramodularity
- 17:00 - 17:20 A. Kolesárová, A. Stupňanová: Non-standard Möbius transform-based extensions of boolean utility functions
- 17:20 - 17:40 A. Stupňanová, A. Kolesárová: Aggregation functions and the associativity in the sense of Post
- 17:40 - 18:00 J. Fernandez et al.: Internal operators: Application to image fusion
- 18:05 *Dinner*
- 19:30 LaTeX WORKSHOP

Tuesday - January 31, 2012

08:40 - 09:30 R. Ghiselli Ricci: Foundations of aggregation functions theory

09:30 - 10:00 *Coffee break*

Section A

10:00 - 10:20 S. Jenei: Uninorms – state of the art with recent results

10:20 - 10:40 P. Drygaś: Some problems for uninorms

10:40 - 11:00 J. Dombi: Modifiers based on connectives

11:00 - 11:20 E. Rak: Some properties of increasing binary operations

11:20 - 11:40 V. Biba et al.: Implicators generated by increasing functions

11:40 - 12:00 V. Janiš et al.: Convexity based on a t-norm

Section B

10:00 - 10:20 M. Daňková, I. Perfilieva: Advances in fuzzy transform based image fusion

10:20 - 10:40 I. Perfilieva, M. Daňková: Two approaches to image fusion

10:40 - 11:00 I. Vavilcenkova, S. Asmuss: On spline based fuzzy transforms

11:00 - 11:20 M. Bohdalová, M. Greguš: Aggregation and portfolio diversification

11:20 - 11:40 M. Klimo, O. Šuch: Idea of memristor based computer

11:40 - 12:00 L. Šipeky: Computerized real time tuning

12:05 *Lunch*

16:00 - 16:20 *Coffee break*

Section A

16:20 - 16:40 M. Ćirić et al.: Eigen fuzzy sets equations and related inequalities

16:40 - 17:00 M. Ćirić et al.: Fuzzy relation equations and fuzzy automata

17:00 - 17:20 B. Budimirović et al.: Fuzzy identities and fuzzy equational classes

17:20 - 17:40 O. Grigorenko: Fuzzy orders for solving MOLP problems

17:40 - 18:00 M. Holčápek: Relations between graded equipollence and fuzzy c-measures of finite fuzzy sets

Section B

16:20 - 16:40 R. Mesiar, P. Sarkoci: Vertical mixtures of copulas

16:40 - 17:00 T. Bacigál: On some copula related software tools

17:00 - 17:20 M. Sabo: Uncertainty in clustering

17:20 - 17:40 A. Petričková: Copula approach to modeling of ARMA and GARCH models residuals

17:40 - 18:00 D. Szőkeová, S. Kohnová: Multiregime SETAR models with regime switching by means of the aggregation function value

18:05 *Dinner*

19:30 OPEN PROBLEMS SESSION

Wednesday - February 1, 2012

Section A

- 08:40 – 09:00 A. Dvurečenskij: State-morphism MV-algebras and their generalizations
- 09:00 – 09:20 A. Jenčová et al.: Observables on sigma-MV algebras and sigma-lattice effect algebras
- 09:20 – 09:40 M. Kuková: Strong law of large numbers on the Kôpka D-posets

Section B

- 08:40 – 09:00 S. Greco, F. Rindone: Robust integrals
- 09:00 – 09:20 E.P. Klement, R. Mesiar: An axiomatic approach to some fuzzy integrals
- 09:20 – 09:40 V. Ruza, S. Asmuss: On estimation of approximation error on fuzzy sets by means of fuzzy valued integral
- 09:40 - 10:10 *Coffee break*

Section A

- 10:10 - 10:30 J. Ignjatović et al.: Equations and inequalities defined by residuated functions
- 10:30 - 10:50 Z. Takáč: On subethood measure of type-2 fuzzy sets
- 10:50 - 11:10 B. Šešelja et al.: Various versions of weak reflexivity of fuzzy relations and applications
- 11:10 - 11:30 U. Dudziak: On aggregation of graded properties of fuzzy relations
- 11:30 - 11:50 Z. Matusiewicz, J. Drewniak: Increasing, continuous operations in fuzzy max-* equations and inequalities

Section B

- 10:10 - 10:30 T. Vetterlein: Fuzzy logic and the similarity-based interpretation of fuzzy sets
- 10:30 - 10:50 L. Běhounek: Plurivaluationistic models of vagueness in logic-based fuzzy mathematics
- 10:50 - 11:10 P. Murinová, V. Novák: Analysis of generalized square of opposition with intermediate quantifiers
- 11:10 - 11:30 D. Čimoka, A. Šostaks: On L-fuzzy syntopogeneous structures
- 11:30 - 11:50 I. Uljane, A. Šostaks: L-valued bornologies generated by fuzzy metrics
- 12:00 *Lunch*
- 13:30 SOCIAL EVENT
- 18:00 *Dinner*
- 19:30 CONCERT OF CONFERENCE PARTICIPANTS AND THEIR GUESTS

Thursday - February 2, 2012

08:40 – 09:30 M. Navara: Computation in orthomodular lattices

09:30 – 10:00 *Coffee break*

Section A

10:00 - 10:20 P. Pazhoheshfar et al.: Penalized trimmed squares and quadratic mixed integer programming for deleting outliers in fuzzy linear programming

10:20 - 10:40 S.H. Choi, J.H. Yoon: Fuzzy regression based on non-parametric methods

10:40 - 11:00 D. Dance: On multi-objective linear programming approach for solving fuzzy matrix games

11:00 - 11:20 P. Orlovs, O. Montvida: An aggregation operator designed for solving bilevel linear programming problems

11:20 - 11:40 P. Moradi et al.: Using of fuzzy APH based multi criteria weighting scheme for GIS routing in National Iranian Gas

11:40 - 12:00 O. Nánásiová, M. Bohdalová, M.Kalina.: A note to stochastic processes

Section B

10:00 - 10:20 R. Frič, M. Papčo: Domains of fuzzy probability I

10:20 - 10:40 R. Frič, M. Papčo: Domains of fuzzy probability II

10:40 - 11:00 J. Kupka: Similarities and differences of induced (set-valued and fuzzy) discrete dynamical systems

11:00 - 11:20 B. Riečan: Strong Poincaré recurrence theorem without weak distributivity

11:20 - 11:40 L. Halčinová: On probabilistic submeasures

11:40 - 12:00 O. Hutník: Triangular norms based submeasures

12:05 *Lunch*

16:00 - 16:20 *Coffee break*

Section A

16:20 - 16:40 A. Eljkins, A. Šostaks: Rough sets generated by a pair of monoidal type structures

16:40 - 17:00 G. Jenča: Ortholattices from graphs

17:00 - 17:20 R. Madarász: Algebras of fuzzy sets

17:20 - 17:40 L. Antoni, S. Krajči: Quality measure of fuzzy formal concepts

Section B

16:20 - 16:40 M. Baczyński: Distributivity of implications over t-representable operations in interval-valued fuzzy sets theory

16:40 - 17:00 R. Hanesová: The theory of functions on IF-sets

17:00 - 17:20 P. Král', M. Renčová: Specificity measures and cardinalities of interval-valued fuzzy sets

17:20 - 17:40 J. Špírková, V. Hladlovský: Copula models in life insurance

19:30 BANQUET

Friday - February 3, 2012

- 09:00 – 09:50 M. Štěpnička: On implicative fuzzy models and their mathematical properties
- 09:50 – 10:20 *Coffee break*
- 10:20 - 11:10 J. Vejnarová: Multidimensional possibilistic models
- 11:10 - 12:00 J. Talašová et al.: A framework for fuzzy models of multiple-criteria evaluation
- 12:00 - 12:05 CLOSING OF THE CONFERENCE
- 12:05 *Lunch*