Wednesday September 7, 2005

Time	
8:00-8:30	**Registration**
8:30-9:00	**Inauguration – "Sala de Actos" - Vertex Building**
9:00-9:50	**Plenary Session I: Bernadette Bouchon. "Sala de Actos" - Vertex Building**
9:50-10:10	**Coffee Break**
10:10-12:10	**Parallel Sessions**
	S104: Fuzzy Methods in Learning and Data Mining. Chair: E. Hüllermeier
10:10	**S104-01:** *Inductive Learning of Fuzzy Regression Trees.* M. Drobics.
10:30	**S104-02:** *Noise Clustering via Dynamic Data Assigning Assessment..* O. Georgieva, F. Klawonn, K. Tschumitschew.
10:50	**S104-03:** *Improving the interpretability of data-driven evolving fuzzy systems.* E. Lughofer, E. Hüllermeier, E.P.Klement.
11:10	**S104-04:** *Towards the use of OWA operators for record linkage.* J. Nin, V. Torra.
11:30	**S104-05:** *Use of combined Takagi-Sugeno Fuzzy Models for the Prediction of Particle Sink Rates.* A. Seeliger, M. Wagenknecht, R. Hampel.
11:50	**S104-06:** *Learning Complexity-Bounded Rule-Based Classifiers by Combining. Association Analysis and Genetic Algorithms.* Y. Yi, E. Huellermeier
	Real World Applications: JEL132, 144, 153, 159, 199, 219. Chair: V. Profillidis
10:10	**JEL132:** *Fuzzy Models and Cointegration Analysis for the Forecast of Tourist Demand.* V. Profillidis, G. Botzoris, P. Lathiras.
10:30	**JEL144:** *High interpretability using a fuzzy system in a manufacturing process inspection.* P. Mariño, V. Pastoriza, M. Santamaría, E. Martínez
10:50	**JEL153:** *A Fuzzy Buyer Agent for an Automatic Negotiation Framework on E-Commerce.* R. Manjavacas, J.J. Castro-Sanchez.
11:10	**JEL159:** *An Adaptable Fuzzy Emotion Model for Emotion Recognition.* N. Esau, L. Kleinjohann, B. Kleinjohann.
11:30	**JEL199:** *Chaotic behavior of Fuzzy Recurrent Models.* A. Sokolov, M. Wagenknecht.
11:50	**JEL219:** *Measuring poverty using fuzzy set theory: Turkish case.* M. A. Basaran, S. Gunay, A. B. Yereli, A. Basaran.
	Fuzzy Modeling: JEL103, 108, 164, 239, 224, 244. Chair: C. Mencar
10:10	**JEL103:** *Applying Fuzzy Logic to Operations Management Research.* D. Arias, J.M. Sánchez, J.M. Zurita.
10:30	**JEL108:** *Computed answer based on fuzzy knowledgebase– a model for handling uncertain information –.* A. Achs.
10:50	**JEL164:** *Some Fundamental Interpretability Issues in Fuzzy Modeling.* C. Mencar, G. Castellano, A. M. Fanelli.
11:10	**JEL224:** *About the Use of Ontologies for Fuzzy Knowledge Representation.* I. J. Blanco, N. Martín, C.Martínez-Cruz, M.A. Vila.
11:30	**JEL239:** *Fuzzy Modeling in the Agro-Climatic Domain.* M. Valdés, J. A. Botía, A. F. Gómez-Skarmeta.
11:50	**JEL244:** *The fuzzy sets in maintenance process.* Mª S.García, Mª T. Lamata.

	S140-I: Fuzzy and Soft Computing Tools in Economy, Business and Management. Chair: E. López-Gonzalez
10:10	**S140-01:** *A Formal Framework and New Related Methods when Facing with Granularity in Unsupervised Learning.* V. Georgescu.
10:30	**S140-02:** *Logical Management Tools: Strategic Oriented Fuzzy Systems.* R. Espin, M. Hernández, M.E. Albert, D. Alfonso, J. Marx-Gómez, O. von Guericke, M.I. Lecich.
10:50	**S140-03:** *Decision Making And Fuzzy Inference: A New Linked Approach.* R. Espin-Andrade, J. Marx-Gómez, M. I. Lecich.
11:10	**S140-04:** *A Genetic Fuzzy System for the New Products Development.* C. Mendaña-Cuervo, E. López-González, B. González-Pérez.
11:30	**S140-05:** *A Fuzzy Model For Work Performance Assessment.* M. Delgado, F. Cofré.
11:50	**S140-06:** *Knowledge Mobilization through Re-addressable Ontologies.* M. Delgado, R. Pérez-Pérez, I. Requena.

	Theory of Fuzzy Sets-I: 111, 124, 128, 143, 179, 208. Chair: E. Trillas
10:10	**JEL111:** *On the Characterization of Sels-dual Aggregation Operators.* K. Maes, S. Saminger, B. De Baets.
10:30	**JEL124:** *Aggregation and Non-Contradiction.* A. Pradera, E. Trillas.
10:50	**JEL128:** *Analysis of a mean operator for data fusion.* R. Emilion, A. Doncescu, S. Regis, A. Meril.
11:10	**JEL143:** *On Some New Forms of Cycle-Transitivity and Their Relation to Commutative Copulas.* B. De Schuymer, H. De Meyer, B. De Baets.
11:30	**JEL179:** *A generalization of the OWA operator to evaluate non monotonic quantifiers.* L. Lietard, D. Rocacher.
11:50	**JEL208:** *XAO Operators – The interval universe.* J. Lázaro, T. Calvo.

12:10-13-30	***Parallel Sessions***

	Fuzzy Cardinality, Measures and Integrals I: JEL116, 131, 133, 165. Chair: P. Meyer
12:10	**JEL116:** *New axiomatizations of the Shapley interaction index for bi-capacities.* F. Lange, M. Grabisch.
12:30	**JEL131:** *MYRIAD: a tool suite for MCDA.* C. Labreuche.
12:50	**JEL133:** *On the use of the Choquet integral with fuzzy numbers in Multiple Criteria Decision Aiding.* P. Meyer, M. Roubens.
13:10	**JEL165:** *A maximum quadratic entropy principle for capacity identication.* I. Kojadinovic.

	Fuzzy Control I: JEL 106, 120, 139, 193. Chair: E. Alptekin
12:10	**JEL106:** *Improved Dtc Of Induction Motor With Fuzzy Resistance Estimator.* S. Benaicha, F. Zidani, R. Nait Said, M.S. Nait Said.
12:30	**JEL120:** *Optimization of the Fuzzy Logic Controller for an Autonomous UAV.* J. C. Ervin, S. E. Alptekin, D. J. DeTurris.
12:50	**JEL139:** *Concept of Level-Controlled R-S Fuzzy Memory Circuit..* M. Petrik.
13:10	**JEL193:** *Intelligent coordinated control scheme for improving steam power plant operations during load rejections.* H. Ahcene, Z. Mimoun.

	S105-I: Aggregation Operators: 01, 02, 05, 06. Chair: R. Mesiar	
12:10	**S105-1:** *Construction of RET operators from aggregation functions.* M. Mas, M. Monserrat, J. Torrens.	
12:30	**S105-2:** *The domination relation between continuous t-norms.* S. Saminger, B. De Baets, H. De Meyer.	
12:50	**S105-5:** *Generators of t-norms in interval-valued fuzzy set theory.* G. Deschrijver.	
13:10	**S105-6:** *Additive generators of discrete conjunctive aggregation operations.* G. Mayor, J. Monreal.	
	S103-I: Evolutionary Fuzzy Systems. Chair: J. Casillas	
12:10	**S103-1:** *A Working Hypothesis on the Semantics/Accuracy Synergy.* P. Fazendeiro, J. Valente de Oliveira.	
12:30	**S103-2:** *Predictive Knowledge Discovery by Multiobjective Genetic Fuzzy Systems for Estimating Consumer Behavior Models.* J. Casillas, O. Delgado, F. J. Martinez-Lopez.	
12:50	**S103-3:** *Resolving the Conflict Between Competitive and Cooperative Behavior in Michigan-Type Fuzzy Classifier Systems.* F. P. Haslinger, U. Bodenhofer.	
13:10	**S103-4:** *Multiobjective Formulations of Fuzzy Rule-Based Classification System Design.* H. Ishibuchi, Y. Nojima.	
	S113: Fuzzy Relations I. Chair: J. Jacas	
12:10	**S113-1:** *Stability, Indistinguishability and Small Numbers.* C. Alsina, E. Trillas.	
12:30	**S113-2:** *Strict Fuzzy Orderings in a Similarity-Based Setting.* U. Bodenhofer, M. Demirci.	
12:50	**S113-3:** *Aggregating using T-indistinguishability Operators.* J. Jacas, J. Recasens.	
13:10	**S113-4:** *An algorithm to compute a T-transitive opening of a proximity.* L. Garmendía, A. Salvador.	
13:30-14:50	**Lunch: "Polimenu"**	
14:50-16-30	**Parallel Sessions**	
	S116-I: Fuzzy Sets in Probability and Statistics. Chair: E. Mrowka	
14:50	**S116-1:** *Possibility theory, interval fuzzy sets and imprecise probability.* D. Dubois, H. Prade.	
15:10	**S116-2:** *Probability theory on Lukasiewicz posets.* K. Lendelova.	
15:30	**S116-3:** *Probability theory of fuzzy events.* M. Navara.	
15:50	**S116-4:** *On axiomatic probability theory on IFS events.* B. Riecan.	
16:10	**S116-5:** *From Fuzzy Data to a fuzzy decision function, three equivalent ways.* A. Wüsche.	
	Fuzzy Mathematics and Fuzzy Logics I: JEL 117, 137, 138, 140, 220. Chair: A. Dvorak	
14:50	**JEL117:** *On fuzzy goal programming with piecewise linear satisfaction functions.* M. Jiménez.	
15:10	**JEL137:** *Using Fuzzy Logic Techniques to Simplify a Grading System of Cereals.* M. N. Lakhoua, M. Annabi.	
15:30	**JEL138:** *Towards Formal Theory of Measure on Clans of Fuzzy Sets.* T. Kroupa.	
15:50	~~**JEL140:** *Fuzzy theories with fuzzy equality.* A. Dvorak.~~	
16:10	**JEL220:** *A fuzzy expression processor with modifiers and hedges, conceptual design and tests.* J. A. Martin, T. de Pedro, R. García-Rosa, C.González.	

	S105-II: Aggregation Operators: 03, 07, 08, 09, 16. Chair: R. Mesiar
14:50	**S105-3:** *On compensatory bipolar aggregation operators.* C. Labreuche, M. Grabisch.
15:10	**S105-7:** *Distributive residual implications from uninorms.* D. Ruiz-Aguilera, J. Torrens.
15:30	**S105-8:** *On some properties of reverses of binary operations.* M. Šabo.
15:50	**S105-9:** *Applications of Schur-concave t-norms in pFCSP.* E. Pap, A. Takači.
16:10	**S105-16:** *A note on ordinal sums of t-norms on bounded lattices.* S. Saminger, E.P. Klement, R. Mesiar.
	Theory of Fuzzy Sets II: JEL 107, 134, 135, 201, 246. Chair: C. Alsina
14:50	**JEL107:** *On Iterative Boolean-Like Laws of Fuzzy Sets.* C. Alsina, E. Trillas.
15:10	**JEL134:** *Contour Lines: The Lost World.* K. Maes, B. De Baets.
15:30	**JEL135:** *On computing dominant and absorbent kernels in bipolar valued digraphs.* R. Bisdorff.
15:50	**JEL201:** *Algebraic Transfer Principle in Fuzzy Theory.* M. Kondo.
16:10	**JEL246:** *Calculation and approximate reasoning with ordered fuzzy numbers.* W. Kosinski, P. Prokopowicz, D. Slezak.
	S140-II: Fuzzy and Soft Computing tools in Economy, Business and Management. Chair: M. Delgado
14:50	**S140-07:** *Using dmFSQL For Financial Management.* R. Alberto Carrasco, M. Amparo Vila.
15:10	**S140-08:** *Using Fuzzy Data Cube for Exploratory Analysis in Financial Economy.* C. Molina, M. E. Gómez, J. M. Torre, M. A. Vila.
15:30	**S140-09:** *Comparative study of the Wages in Spain by using ADRI and TFC.* J. Moreno-García, L. Jiménez.
15:50	**S140-10:** *The performance of elements of fixed assets immersed in a context of uncertainty.* A. M. Gil-Lafuente.
16:10	**S140-11:** Predisposition to Auto-Maintenance: Fuzzy Analysis. A.M. Gento, A. Redondo.
16:30-16:50	**Coffee Break**
16:50-17:40	**Plenary Session II: Francesc Esteva. "Sala de Actos" - Vertex Building**

17:40-18:40	**Parallel Sessions**

Intuitionist Fuzzy Sets and Related Concepts: JEL 123, 126, 196.   Chair: J. Kacprzyk

17:40	**JEL123:** *Geometric Interval Type-2 Fuzzy Systems.* S. Coupland, R. John.
18:00	**JEL126:** *Self-Contradiction Degrees in Intuitionistic Fuzzy Logic.* E. Castiñeira, S. Cubillo, C. Torres, V. Zarzosa.
18:20	**JEL196:** *A new measure of entropy and its connection with a similarity measure for intuitionistic fuzzy sets.* E. Szmidt, J. Kacprzyk.

S109-I: Eventology of Random Fuzzy Sets: 02, 03, 04.   Chair: E. Goldenok

17:40	**S109-02:** *Peculiarities Of Application Of Direct And Inverse Eventological Markowitz' Problems.* E. E. Goldenok.
18:00	**S109-03:** *On Inverse Eventological Markowitz' Problem.* S. V. Klochkov.
18:20	**S109-04:** *On new Notion of Eventological Means of Fuzzy Events.* A. O. Vorob'ov.

Evolutionary Fuzzy Systems: JEL 130, 182, 190.   Chair: C. Labreuche

17:40	**JEL130:** *Argumentation of the results of a multi-criteria evaluation model in individual and group decision aiding.* C. Labreuche.
18:00	**JEL182:** *Evolutionary temporal fuzzy control applied to adaptive distributed routing.* M. A. Gadeo, J. R. Velasco.
18:20	**JEL190:** *Incremental optimization of FIS using reinforcement learning.* Pierre-Yves Glorennec.

Fuzzy Neural Networks: JEL 158, 194, 233.   Chair: J. Paulo Carvalho

17:40	**JEL158:** *One step ahead prediction using Fuzzy Boolean Neural Networks.* J. Tomé, J. P. Carvalho.
18:00	**JEL194:** *The Neural Model of Dynamics of Unmanned Underwater Vehicle.* M. B. Zak.
18:20	**JEL233:** *On the technique of linguistic classification based on fuzzy neural network.* V. A. Rybkin, I. S. Soldatenko, T. V. Bandurina.

Fuzzy Heuristics and Rule Bases: JEL 110, 197, 207.   Chair: R. Fuentes-Gonzalez

17:40	**JEL110:** *Treatment of the incomplete information in L-Fuzzy contexts.* C. Alcalde, A. Burusco, R. Fuentes-Gonzalez.
18:00	**JEL197:** *Fuzzy Boxplot-based Induction Rules. Towards automatic generation of classes-interpretations.* K. Gibert, A. Perez-B.
18:20	**JEL207:** *A linguistic fuzzy model with a monotone rule base is not always monotone.* E.Van Broekhoven and B. De Baets.

18:40-20:10	**EUSFLAT MEETING: "Sala de Actos" - Vertex Building**
20:30-22:30	**Reception "La Cup Square"**

Thursday September 8, 2005

Time	
8:15-10:15	*Parallel Sessions*

Fuzzyness Probability and Possibility: JEL 119, 180, 181, 205, 229, 240.   Chair: D. Dubois

8:15	*JEL119: A fuzzy approach to R&D project selection.* C. Carlsson, R. Fuller, P. Majlender.
8:35	*JEL180: Probabilities of Events Induced by Fuzzy Random Variables.* C. Baudrit, I. Couso, D.Dubois.
8:55	*JEL181: A fuzzy approach to capacity constrained MRP systems.* J. Mula, R. Poler, J.P. García-Sabater.
9:15	*JEL205: Probability on L-posets.* K.Lendelova.
9:35	*JEL229: Min-based fusion of possibilistic networks.* S. Benferhat.
9:55	*JEL240: Lexicographic Refinements in the Context of Possibilistic Decision Theory.* L. Godo, A. Zapico.

S107: Soft Computing for Information Access on the Web.   Chair: J. A. Olivas

8:15	*S107-1: e-Bay.Net: Helping Users to Buy in e-commerce Applications.* L.M. de Campos, J.M. Fernandez-Luna J.F. Huete.
8:35	*S107-2: A Reflection on the use of And.* S. Guadarrama, E. Renedo.
8:55	*S107-3: A New Model of Linguistic Weighted Information Retrieval System.* E. Herrera-Viedma, A. G. López-Herrera, C. Porcel.
9:15	*S107-4: Personalized Information Retrieval system in the Framework of Fuzzy Logic.* M. Oussalah, A. Eltigani.
9:35	*S107-5: Using graph-based fuzzy measures for measuring the similarity between words.* V. Torra, Y. Narukawa**.**
9:55	*S107-6: Fuzzy Cognitive Maps application for Web mining.* A. Kakolyris, C. Stylios, V. Georgopoulos.

S116-II: Fuzzy Sets In Probability and Statistics.   Chair: P. Grzegorzewski

8:15	*S116-06: Bootstrap statistical techniques and fuzzy random variables.* M. Montenegro, G. González-R., A. Colubi, M.A. Gil.
8:35	*S116-07: Fuzzy histograms: A Statistical Analysis.* L. Walman, U. Kaymak, S. Van den Berg.
8:55	*S116-08: Sampling inspections by attributes which are based on soft quality Standards.* V. Krätschmer.
9:15	*S116-09: Computing Temporal Trends in Web Documents.* M.Last.
9:35	*S116-10: Two-Sample Median Test for Vague Data.* P. Grzegorzewski.
9:55	*S116-11: The Friedman Test with Missing Observations.* E. Mrowka.

S106: Normal Forms in Fuzzy Approximation and Interpolation.   I. Perfilieva

8:15	*S106-01: Normal forms based fuzzy systems.* M. Dankova.
8:35	*S106-02: Some general considerations on the evaluation of fuzzy rule systems.* S. Gottwald.
8:55	*S106-03: Approximating models based on fuzzy transforms.* I. Perfilieva.
9:15	*S106-04: Genetic algorithms in fuzzy approximation.* M. Dankova, M. Stepnicka.
9:35	*S106-05: Fuzzy relation equations with dual composition.* L. Noskova
9:55	*S106-06: Data compression on the basis of fuzzy transforms.* I. Perfilieva, R. Valasek.

	S120: Fuzzy and Soft Computing Techniques in Image Processing. Chair: J. Chamorro
8:15	**S120-01:** *Possibilistic C-Means in Scene Matching.* O. Sjahputera, J. M. Keller.
8:35	**S120-02:** *An Approach to Image Retrieval on Fuzzy Object-Relational Databases using Dominant Color Descriptors.* J. Chamorro, J. M. Medina, C. Barranco, E. Galán-Perales, J. M. Soto.
8:55	**S120-03:** *On the Fuzzy Texture Spectrum for Natural Microtextures Characterization.* A. Barceló, E. Montseny, P. Sobrevilla.
9:15	**S120-04:** *On Automatic Selection of Fuzzy Homogeneity Measures for Path-based Image Segmentation.* B. Prados-Suárez, J. Chamorro-Martínez, D. Sánchez.
9:35	**S120-05:** *Progressive scan conversion based on edge-dependent interpolation using fuzzy logic.* P.Brox, I. Baturone, S. Sánchez-Solano.
9:55	**S120-06:** *An approach to Color Gradient Vector Argument considering Data Uncertainty.* E. Montseny, B. Prados-Suárez, P. Sobrevilla, S. Romaní.
10:15-10:35	**Coffee Break**
10:40-11:30	**Plenary Session I: James Bezdek. "Sala de Actos" – Vertex Building**
11:30-13:10	**Parallel Sessions**
	S108: Fuzzy Optimization Models in Real Problems. Chair: J.L. Verdegay
11:30	**S108-01:** *Fuzzy Portfolio Selection: a comparative study.* J. D. Bermúdez, V. Liern, J. V. Segura, D. Torres, E. Vercher.
11:50	**S108-02:** *Multiobjective Evolutionary Fuzzy Modelling in Mobile Robotics.* J. M. Lucas, H. Martínez, F. Jiménez.
12:10	**S108-03:** *Fuzzy Optimization Problems in Wavelength Division Multiplexing (WDM) Networks.* B. Melián, J. L. Verdegay.
12:30	**S108-04:** *Heuristics to model the dependencies between Features in Fuzzy Pattern Matching.* J. M. Cadenas, M. C. Garrido, J. J. Hernández.
12:50	**S108-05:** *Soft Computing based Decision Support Systems: Two Prototypes for Combinatorial Optimization Problems.* J. I. Peláez, A. Mesas, D. Pelta.
	S114: Fuzzy Relations II. Chair J. Recasens
11:30	**S114-01:** *Indistinguishability in cooperative games.* E. Hernández, J. Recasens.
11:50	**S114-02:** *The vague sum and product of a finite number of real numbers in vague arithmetic.* M. Demirci.
12:10	**S114-03:** *Multiresolution Analysis and Fuzzy Indistinguishability Operators: a first approach.* A. R. De Soto.
12:30	**S114-04:** *A principled approach to fuzzy rule base interpolation using similarity relations.* B. Bouchon-Meunier, F. Esteva, L. Godo, M. Rifqi, S. Sandri.
12:50	**S114-05:** *A T-transitive approximation of a reflexive and symmetric fuzzy relation.* L. Garmendía, A. Salvador.

	S115: Non Classical Unification and Generalized Logical Models. **Chair: J. Medina**
11:30	**S115-01:** *Reasoning with uncertainty and context-dependent languages.* C. Sossai.
11:50	**S115-02:** *A connection between Similarity Logic Programming and Gödel Modal Logic.* L. Blandi, L. Godo, R. Rodríguez.
12:10	**S115-03:** *Fuzzy logic as an optimization task.* P. Vojtás.
12:30	**S115-04:** *Incomplete Fuzzy Information in Prolog.* S. Muñoz-Hernandez, C. Vaucheret.
12:50	**S115-05:** *Towards compositions of partially ordered monads.* P. Eklund, M. A. Galán, W. Gahler, J. Medina, M. Ojeda-Aciego, A. Valverde.
	S150: Soft Computing for Signal Processing; JEL167, JEL221. **Chair: J. Gutierrez-Rios**
11:30	**S150-01:** *A Fuzzy Logic Approach to Solve Call Admission Control Issues in CDMA Systems.* P. Dini, R. Cusani.
11:50	**S150-02:** *Fuzzy logic and systems for signal separation.* J. Serra, A. Pérez Neira.
12:10	**S150-03:** *Approximation of fuzzy control response by delta-sigma modulation.* J. Gutiérrez-Ríos, F. Fernández Hernández.
12:30	**JEL167:** *Robust Pole Placement for Fuzzy Models with Parametric Uncertainties: An LMI Approach.* W. El Messoussi, O. Pagès, A. El Hajjaji.
12:50	**JEL221:** *EMG-based Finger Movement Classification using transparent Fuzzy System.* A. Zeghbib, F. Palis, Fathi Ben-Ouezdou .
	S109-II: Eventology of Random Fuzzy Events. 109-01, 05, 06, 07, 08. **Chair: O. Vorob'ov**
11:30	**S109-01:** *Eventological Theory Of Random Fuzzy Events.* Oleg Yu. Vorob'ov.
11:50	**S109-05:** *Recurrent Events And Fuzzy Sets.* T. V. Kupriyanova.
12:10	**S109-06:** *Quasi-Entropies Of Eventological Distributions.* D. V. Semenova.
12:30	**S109-07:** *Eventological Models Of Verbal Associations.* A. V. Dedova.
12:50	**S109-08:** *Eventological System Analysis And Its Applications.* G. M. Boldyr.
13:10-14:30	**Lunch: "Polimenu"**
14:30-16-30	**Parallel Sessions**
	T-Norms and Related Concepts: JEL 104, 136, 176, 187, 204. **Chair: F. Esteva**
14:30	**JEL104:** *A note on pseudo-Archimedean and non-cancellative t-norm.* F. Karaçal.
14:50	**JEL136:** *Extending the Monoidal T-norm Based Logic with an Independent Involutive Negation.* T. Flaminio, E. Marchioni.
15:10	**JEL176:** *On varieties generated by Weak Nilpotent Minimum t-norms.* C. Noguera, F. Esteva, J. Gispert.
15:30	**JEL187:** *Extended Triangular Norms on Gaussian Fuzzy Sets.* J. T. Starczewski.
15:50	**JEL204:** *Stronger version of standard completeness theorem for MTL.* R. Horcík.

	Fuzzy Relations and Fuzzy Graphs: JEL 146, 155, 169, 177, 200, 237. Chair: J. Montero	
14:30	*JEL146:* Basics of a formal theory of fuzzy partitions. P. Cintula.
14:50	*JEL155:* Sociometry Analysis System Applying Fuzzy Theory. K. Shinkai.
15:10	*JEL169:* Inclusion of Fuzzy Numbers – The Variable Plateau Case. M. Wagenknecht, V. Schneider.
15:30	*JEL177:* From sensitivity and specificity to confirmation and occurrence. T. Kiseliova, C. Moraga.
15:50	*JEL200:* An Approach to Consensus Reaching in Multiperson Decision Making Problems with Incomplete Information. S. Alonso, E. Herrera-Viedma, F. Chiclana, F. Herrera.
16:10	*JEL237:* A dimension-based representation in multicriteria decision making. D. Gómez, J.Montero, J. Yáñez.
	S105-III: Aggregation Operators. 105-4, 10, 11, 12, 14, JEL156. Chair: T. Calvo	
14:30	*S105-04:* A general construction for unipolar and bipolar interpolative aggregation. M. Grabisch, Ch. Labreuche.
14:50	*S105-10:* Triangular norms and k-Lipschitz property. A. Mesiarová.
15:10	*S105-11:* Discrete copulas – what they are. R. Mesiar.
15:30	*S105-12:* Copulas with given diagonal section: some new results. F. Durante, R. Mesiar, C. Sempi.
15:50	*S105-14:* Identification of general and double aggregation operators using monotone smoothing. G. Beliakov, T. Calvo.
16:10	*JEL156:* A complete description of comparison meaningful functions. J. Luc Marichal, R. Mesiar, T. Rauckschlossov.
	Fuzzy Mathematics and Fuzzy Logics II: JEL 145, 175, 178, 217, 235. Chair: D. Dubois	
14:30	*JEL145:* Towards a formal theory of fuzzy Dedekind reals. L. Behounek.
14:50	*JEL175:* Cost Estimations for Large Scale Engineering Projects under Uncertainties. D. Ruan, D. Maes, H. A. Abderrahim, J. Liu, L. Xu, J.B. Yang.
15:10	*JEL178:* Constructions of Models in Fuzzy Predicate Logics. P. Murinova.
15:30	*JEL217:* Practical use of fuzzy implicative gradual rules in knowledge representation and comparison with Mamdani rules. H. Jones, S. Guillaume, B. Charnomordic, D. Dubois.
15:50	*JEL235:* Fuzzy Logics and Sub-structural Logics without Exchange. M. F. Kawaguchi, O. Watari, M. Miyakoshi.
	Decision Making and Optimization: JEL 113, 163, 166, 209, 238. Chair: H. Prade	
14:30	*JEL113:* Matrix Inference in Fuzzy Decision Trees. S. Aja-Fernández, C. Alberola-López.
14:50	*JEL163:* A decision support system prototype for implementing an interactive fuzzy multiple objective optimization method. F. Wu, J. Lu, G. Zhang.
15:10	*JEL166:* Entropy of bi-capacities. I. Kojadinovic, J.-Luc Marichal.
15:30	*JEL209:* E-business recommendation functionalities: handling uncertainty in a multi-criteria decision-making support system.A. Denguir-Rekik, G. Mauris, J. Montmain.
15:50	*JEL238:* Qualitative evaluation of decisions in an argumentative manner –A general discussion in a unified setting. H. Prade.
16:10-16:30	**Coffee Break**
16:30-17:20	**Plenary Session II: Lotfi A. Zadeh. "Sala de Actos" – Vertex Building**

17:30-18:50	**Parallel Sessions**

S103-II: Evolutionary Fuzzy Systems. 103-05 to 08.   Chair: B. Carse

17:30	**S103-05:** *Hybrid Genetic Algorithms and Clustering.* F. Mota Filho, F. Gomide.
17:50	**S103-06:** *First Results from Further Experimental Comparisons Between Pittsburgh and Michigan Fuzzy Classifier Systems for Mobile Robotics.* A.G. Pipe, B. Carse.
18:10	**S103-07:** *Assessing the differences in accuracy between GFSs with bootstrap tests.* L. Sanchez, J. Otero, J. Alcalá.
18:30	**S103-08:** *Learning compact fuzzy rule-based classification systems with genetic programming.* F. J. Berlanga, Mª J. del Jesús, F. Herrera.

Knowledge-Based Systems: JEL 157, 172, 173, 214.   Chair: L. Magdalena

17:30	**JEL157:** *Fuzzy Chess Tactics.* J. P. Carvalho, N. Cavaco Horta, D. Chang Yan, P. Ramos e Silva.
17:50	**JEL172:** *On Some Characterizations of Complete Fuzzy Preorders.* S. Díaz, B. De Baets, S. Montes.
18:10	**JEL173:** *A Simplification Process of Linguistic Knowledge Bases.* J. M. Alonso, L. Magdalena, S. Guillaume.
18:30	**JEL214:** *Integrating induced knowledge in an expert fuzzy-based system for intelligent motion analysis on ground robots.* J. M. Alonso, L. Magdalena, S. Guillaume, M. A. Sotelo, L. M. Bergasa, M. Ocaña.

Pattern Recognition and Image Processing: JEL 125, 149, 174, 195.   Chair: J. Aguilar

17:30	**JEL125:** *A Fuzzy Clustering for Supervision of Biological Processes by Image Processing.* J.C Atine, A. Doncescu, J. Aguilar-Martin.
17:50	**JEL149:** *Learning Fuzzy If-Then Rules for Pattern Classification with Weighted Training Patterns.* T. Nakashima, Y. Yokota, H. Ishibuchi, G. Schaefer.
18:10	**JEL174:** *Learning from uncertain image data using granular fuzzy sets and bio-mimetic applicability functions.* J. Rossiter, T. Mukai.
18:30	**JEL195:** *On the levels of fuzzy mappings and applications to optimization.* Y. Chalco-Cano, H. Román-Flores, M. A. Rojas-Medar.

S130-I: Intelligent Text and Web Mining and Retrieval Issues. 130-01 to 04.   Chair: M. J. Martín-Bautista

17:30	**S130-01:** *Text mining: intermediate forms on knowledge representation.* C. Justicia, D. Sánchez, M.J. Martín-Bautista, Mª. A. Vila.
17:50	**S130-02:** *RSF - A New Tree Mining Approach with an Ecient Data Structure.* F. Del Razo, A. Laurent, P. Poncelet, M. Teisseire.
18:10	**S130-03:** *Filtering Information with imprecise social criteria: A FOAF-based backlink model.* M.A. Sicilia, D. Palomar, E. García .
18:30	**S130-04:** *On retrieval guided by extracted domain-specific knowledge.* T. Andreasen, R. Knappe, H. Bulskov.

S112: Soft Computing in Bioinformatics.   Chair: D. Pelta

17:30	**S112-01:** *Selecting protein fuzzy contact maps through information and structure measures.* C. Bousoño-Calzón, A. Oropesa-García , N. Krasnogor.
17:50	**S112-02:** *Fuzzy P systems and their applications in computational biology.* J. Casasnovas, F. Rosselló.
18:10	**S112-03:** *Fuzzy Clustering in Biochemical Analysis of Cancer Cells.* X.-Y. Wang, J. M. Garibaldi, B. Bird M.W. George.
18:30	**S112-04:** *Protein Structure Comparison through Fuzzy Contact Maps and the Universal Similarity Metric.* D. Pelta, J. R. Gonzalez, N. Krasnogor.

20:30-24:00	**Banquet**

Friday September 9, 2005

Time	
9:00-10:20	**Parallel Sessions**

	Fuzzy Cardinality Measures and Integrals II: JEL 152, 186, 192, 227. Chair: H. Román-Flores
9:00 **9:20** **9:40** **10:00**	**JEL152:** *An axiomatization of trapezoidal membership functions defined on extensive structures.* T. Marchant. **JEL186:** *Robust skin detection based on the fuzzy integral.* A. Olano, A. Soria-Frisch, R. Verschae. **JEL192:** *Continuity of set defuzzification methods.* H. Román-Flores, Y. Chalco-Cano, A. Flores-Franulic. **JEL227:** *Scalable, Fuzzy, Multiclassifier System.* P. Bulacio, L. Magdalena, E. Tapia.
	Fuzzy Control II: JEL 189, 198, 203, 216. Chair: L.M. San José-Revuelta
9:00 **9:20** **9:40** **10:00**	**JEL189:** *Tuning methodology for a fuzzy PI controller.* Pierre-Yves Glorennec . **JEL198:** *Fuzzy Trajectory Control Design for Underwater Robot.* J. Garus . **JEL203:** *Robust Output Fuzzy Control: Application to Vehicle Lateral Dynamics.* M. Chadli, A. El Hajjaji. **JEL216:** *A Recursive SAM Fuzzy System for the Detection Performance Monitoring in Digital Communications Problems.* L. M. San José-Revuelta.
	Data Bases and Data Mining: JEL 202, 210, 228, 230. Chair: R. Kruse
9:00 **9:20** **9:40** **10:00**	**JEL202:** *About Cardinality-based Possibilistic Queries Against Possibilistic Databases.* P. Bosch, N. Lietard, O. Pivert. **JEL210:** *Information Miner - a Data Analysis Platform.* F. Rügheimer, R. Kruse. **JEL228:** *Towards a XML Fuzzy Structured Query Language.* C. D. Barranco, J. R. Campaña, J. M. Medina. **JEL230:** *Manipulating fuzzy summaries of databases: unary operators and their properties.* L. Naoum, G. Raschia, N. Mouaddib.
	Theory of Fuzzy Sets III: JEL 148, 218, 232, 245. Chair: H. Bustince
9:00 **9:20** **9:40** **10:00**	**JEL148:** *Fitting Piecewise Linear Copulas to Data.* H. De Meyer, B. De Baets. **JEL218:** *On some properties of mixing OWA operators.* R. R. Yager, L. Troiano. **JEL232:** *Fuzzy regression analysis using trapezoidal fuzzy numbers.* S. Charfeddine, K. Zbidi, F. Mora-Camino. **JEL245:** *Proximity Functions. Application to Fuzzy Thresholding.* H.Bustince, V.Mohedano, E. Barrenechea, M. Pagola.
	S130-II: Intelligent Text and Web Mining and Retrieval Issues. 130-05 to 08. J.I. Blanco
9:00 **9:20** **9:40** **10:00**	**S130-05:** *On flexible database querying via extensions to fuzzy sets.* G. De Tré, R. De Caluwe J. Kacprzyk, S. Zadrozny. **S130-06:** *Using an Interlingua for Document Knowledge Representation.* J. Cardeñosa, C. Gallardo, L. Iraola. **S130-07:** *Proposal of a Document Cluster Representation based on Fuzzy Deformable Prototypes.* F.P. Romero, J.A. Olivas, P.J. Garcés. **S130-08:** *Gathering information on the Web using fuzzy linguistic agents and Semantic Web technologies.* E. Herrera-Viedma, E. Peis, J.M. Morales-del-Castillo.

10:30-11:00	*Coffee Break*
11:00-13:00	*Round Table: Technology. Chair: P. Bonisone. "Sala de Actos" – Vertex Building*
13:00-14:30	*Lunch: "Polimenu"*
14:40-15:30	*Plenary Session I: Vilem Novak. "Sala de Actos" – Vertex Building*
15:30-16:50	*Parallel Sessions*
	Fuzzy Clustering and Classification: JEL 147, 171, 185, 206. Chair: V. Patrascu
15:30 **15:50** **16:10** **16:30**	***JEL147:*** *A Generalization of Gustafson-Kessel Algorithm using a New Constraint Parameter.* V. Patrascu. ***JEL171:*** *Fuzzy Logic impact on the determination of the cereal transaction quality.* A. A. Damak, M. Annabi. ***JEL185:*** *Identifying fuzzy systems from numerical data with Xfuzzy.* I. Baturone, F. J. Moreno-Velo, A. Gersnoviez. ***JEL206:*** *Interval semimetric spaces for approximate distances.* C. Coppola, T. Pacelli.
	Information Retrieval and Information access on the Web: JEL 141, 162, 188, 212. Chair: A. HadjAli
15:30 **15:50** **16:10** **16:30**	***JEL141:*** *Improving Document Ranking in Information Retrieval Using Ordered Weighted Aggregation and Leximin Refinement.* M. Boughanem, Y, Loiseau, H. Prade. ***JEL162:*** *Weakening of Fuzzy Relational Queries: an Absolute Proximity Relation-Based Approach.* P. Bosc, A. HadjAli, O. Pivert. ***JEL188:*** *Query Propagation in Possibilistic Information Retrieval Networks.* A. H. Brini, L. M. de Campos, D. Dubois, M. Boughanem. ***JEL212:*** *A fuzzy set approach to concept-based information retrieval.* M. Baziz, M. Boughanem, G. Pasi, H. Prade.
	S105-IV: Aggregation Operators. 105-13, 15, 17, 18. Chair: A. Kolesárová
15:30 **15:50** **16:10** **16:30**	***S105-13:*** *On affine sections of 1-Lipschitz aggregation operators.* A. Kolesárová, E.P.Klement. ***S105-15:*** *Application of aggregation operators in regime-switching models for exchange rates.* J. Komorník, M. Komorníková. ***S105-17:*** *Łukasiewicz filters and their Cartesian products.* M. Kalina. ***S105-18:*** *k-Lipschitz strict triangular norms.* R. Ghiselli-Ricci, R. Mesiar.
	S102: Neural, Neuro-Fuzzy and Statistical Learning Techniques. Chair: J.M. Benitez
15:30 **15:50** **16:10** **16:30**	***S102-01:*** *T-norms and t-conorms in multilayer perceptrons.* C.J.Mantas. ***S102-02:*** *Interpretation of Support Vector Machines by means of Fuzzy Rule-Based Systems.* J.L.Castro, L.D.Flores-Hidalgo, C.J.Mantas. ***S102-03:*** *Neuro-Fuzzy prediction of airborne pollen concentrations.* J.L. Aznarte M., D. Nieto Lugilde, J. M.Benítez, C. De Linares Fernández. ***S102-04:*** *Building Fuzzy Classifiers with Pairwise Multiclass Support Vector Machines.* J. M. Benítez, J. L. Castro, J. M. Puche.
17:00-17:30	*Conference Closing*