

Monday, July 18

Program

17h50 19h00	<b>Registration</b> Congres Center Hall
19h00 21h00	<b>Welcome reception</b> Congres Center Hall

Tuesday, July 19

Program

8h30 9h00	Opening Ceremony
9h00 10h00	Plenary Talk Chair :Janusz Kacprzyk Room : Auditorium <b>Michal BACZYNSKI</b> Fuzzy implications Functions: Recent Advances
10h00 10h30	<b>Coffee Break</b>
10h30 12h10	<b>S3: Mathematical Fuzzy Logic – I</b> Session Chair : Petr Cintula <p style="text-align: right;">Salon 2</p> <p><b>95 - Riesz MV-algebras and their logic.</b> Antonio Di Nola and Ioana Leustean. <b>107 - Fuzzy logics with truth hedges revisited.</b> Francesc Esteva, Lluís Godo and Carles Noguera. <b>41 - On the variety of equality algebras.</b> Sándor Jenei and László Kórodi. <b>56 - On EQ-Fuzzy Logics with Delta Connective.</b> Martin Dyba and Vilém Novák.</p> <p><b>R2 : Multicriteria Decision Making</b> Session Chair :Olivier Strauss <p style="text-align: right;">Salon 3</p><p><b>94-The Uncertain Generalized Probabilistic Weighted Average and its Application in the Theory of Expertons</b> José M. Merigó and Montserrat Casanovas.</p></p>

**98-Multi-criteria improvement of options.**

Abdelhak Imoussaten, Jacky Montmain, François Troussel and Christophe Labreuche.

**99-Improving performances in a company when collective strategy comes up against individual interests.**

Abdelhak Imoussaten, François Troussel and Jacky Montmain.

**110-A MCDM approach for evaluating company's environmental practices.**

Rocio de Andrés Calle, Teresa González-Arteaga and Luis Martínez López.

**168-A Unified Model for Fuzzy Aggregation Operators and its Application in Group Decision Making.**

José M. Merigó.

**S7 : Fuzzy Logic and Image Processing - I**

**Session Chair : Pedro Melo-Pinto**

**Salon 4**

**8-Fuzzy Inference System based Contrast Enhancement.**

Balasubramaniam Jayaram, Narayana Kakarla and Vetrivel V.

**18-Towards an objective edge detection algorithm based on discrete t-norms.**

Manuel González-Hidalgo and Sebastià Massanet.

**123-Generation of fuzzy edge images using trapezoidal membership functions.**

Carlos Lopez-Molina, Humberto Bustince, Javier Fernandez and Bernard De Baets.

**127-Two different approaches to handle landmark location uncertainty in skull-face overlay: coevolution vs fuzzy landmarks.**

Óscar Ibáñez, Óscar Cordon and Sergio Damas.

**143-Determining the accuracy in image supervised classification problems.**

Daniel Gómez and Javier Montero.

**R4 : Fuzzy Inference Systems**

**Session Chair : Michio Sugeno**

**Salon 5**

**53-Two Order Sliding Fuzzy Type-2 Control Based on Integral Sliding Mode for MIMO Systems.**

Malik Manceur, Najib Essounbouli and Abdelaziz Hamzaoui.

**73-Models-based Optimization Methods for the Specification of Fuzzy Inference Systems in Discrete Event Simulation.**

Paul-Antoine Bisgambiglia, Bastien Poggi and Céline Nicolai.

**96-Redundancies in systems of fuzzy/linguistic IF-THEN rules.**

Antonín Dvořák, Martin Štěpnička and Lenka Vavříčková.

**134-Fuzzy inference systems for synthetic monthly inflow time series generation.**

Ivette Luna, Rosangela Ballini, Secundino Soares and Donato Da Silva Filho.

**165-Completing rule bases in symbolic domains by analogy making.**

Henri Prade and Steven Schockaert.

14h40  
16h00

**S3: Mathematical Fuzzy Logic – II**

Session Chair : Thomas Vetterlein

Salon 2

**16-Axiomatic Extensions of Hohle's Monoidal Logic.**

Esko Turunen.

**140-Filters in algebras of fuzzy logics.**

Martin Vítá and Petr Cintula

**115-Non-deterministic Connectives in Propositional Gödel Logic.**

Ori Lahav and Arnon Avron.

**160-Nilpotent Minimum Fuzzy Description Logics.**

Brunella Gerla and Massimo Dalla Rovere

**S15 :Fuzzy Control Theory - I**

Session Chair : Fernando Matia

Salon 3

**50-Estimating domains of attraction of fuzzy polynomial systems.**

Jose Luis Pitarch, Carlos Ariño and Antonio Sala.

**69-Methodology for adapting the parameters of a fuzzy system using the extended Kalman filter.**

Antonio Javier Barragán Piña, José Manuel Andújar Márquez, Mariano J. Aznar Torres, Agustín Jiménez Avello and Basil M. Al-Hadithi.

	<p><b>70-Application of the Extended Kalman filter to fuzzy modeling: Algorithms and practical implementation.</b> Antonio Javier Barragán Piña, José Manuel Andújar, Mariano J. Aznar Torres, Agustin Jimenez and Basil M. Al-Hadithi.</p> <p><b>87-Decision Analysis Using the Benefit-Cost-Deficit model.</b> Karima Sedki, Philippe Polet and Frédéric Vanderhaegen.</p>
	<p>S7 : Fuzzy Logic and Image Processing - II Session Chair : Edurne Barrenechea</p> <p style="text-align: right;">Salon 4</p>
	<p><b>60-Fuzzy based subcutaneous fat assessment in real time ultrasound images.</b> Pedro Couto, Severiano Silva, Edurne Barrenechea, Ana Santos and Pedro Melo-Pinto.</p> <p><b>61-Closing and Opening based on discrete t-norms. Applications to natural Image Analysis.</b> Manuel González-Hidalgo and Sebastià Massanet.</p> <p><b>129-One Image Reduction Algorithm for RGB Color Images.</b> Daniel Paternain, Aranzazu Jurio, Miguel Pagola, Humberto Bustince and Gleb Beliakov.</p>
	<p>S12 : Language - Thinking – Meaning - I Session Chair : Rudolf Seising</p> <p style="text-align: right;">Salon 5</p>
	<p><b>116-Language, Thinking, Meaning – and Fuzzy Logic.</b> Rudolf Seising.</p> <p><b>13-Varieties of Vagueness, Fuzziness and a few foundational (and ontological) questions.</b> Marco Elio Tabacchi and Settimo Termini.</p> <p><b>101-Wisdom - the blurry top of human cognition in the DIKW-model?</b> Anett Hoppe, Rudolf Seising, Andreas Nürnberger and Constanze Wenzel.</p> <p><b>100-The Fuzziness of Verbal Response Scales: The STAL-T Questionnaire.</b> Franziska Bocklisch, Steffen F. Bocklisch and Josef F. Krems.</p>
<p>16h00 16h30</p>	<p><b>Coffee Break</b></p>
<p>16h30</p>	<p>S3: Mathematical Fuzzy Logic – III</p>

17h50	<p>Session Chair : Carles Noguera</p> <p style="text-align: right;">Salon 2</p>
	<p><b>63-Fuzzy Type Theory, Descriptions, and Partial Functions.</b> Vilém Novák.</p> <p><b>44-A logic of the similarity with prototypes and its relationship to fuzzy logic.</b> Thomas Vetterlein.</p> <p><b>40-Fuzzy attribute logic with model constraints.</b> Radim Belohlavek and Vilem Vychodil.</p> <p><b>148-Computation with fuzzy quantities.</b> Mirko Navara.</p>
	<p>S15 :Fuzzy Control Applications - II</p> <p>Session Chair : Jose Manuel Andujar</p> <p style="text-align: right;">Salon 3</p>
	<p><b>52-A low cost intelligent localization system based on a camera and an inertial measurement unit (IMU).</b> O. Casanova, G. N. Marichal, J.L. González Mora and A. Hernández.</p> <p><b>74-Fuzzy logic as a useful tool for managing resources in multi-energy buildings.</b> Benjamin Paris, Julien Eynard, Michaël Salvador and Stéphane Grieu.</p> <p><b>97-Control of permanent magnet synchronous generator wind turbine for stand-alone system using fuzzy logic.</b> Huynh Quang Minh, Nollet Frédéric, Essounbouli Najib and Hamzaoui Abdelaziz.</p> <p><b>177-Intelligent Control of an Inverted Pendulum by Self-Tunable Fuzzy PI-type Controller.</b> Djamel Eddine Chaouch and Hichem Maaref.</p>
17h50	<p>R9 : Fuzzy Relations</p> <p>Session Chair : Marie-Jeanne Lesot</p> <p style="text-align: right;">Salon 4</p>
	<p><b>51-Study of the solutions to the equation (---) associated with a fuzzy tolerance (---) by means of the L-fuzzy Concept Theory.</b> Cristina Alcalde, Ana Burusco and Ramón Fuentes-González.</p> <p><b>72-Intersection and union of type-2 fuzzy sets and connection to-double (---) cuts.</b></p>

Zdenko Takáč.

**92-A fuzzy definition of the spatial relation « surround » - Application to complex shapes.**

Maria Carolina Vanegas, Isabelle Bloch and Jordi Inglada.

S12 : Language - Thinking – Meaning - II

Session Chair : Rudolf Seising

Salon 5

**79 Unended Reflections on Family Resemblance and Predicates Linguistic Migration.**

Itziar García-Honrado and Enric Trillas.

**111-Some preliminary reflections on the epistemology of Computational Theory of Perceptions**

Clara Barroso and Gracian Trivino.

**112-Relational structures for measures of ignorance.**

Camilo Franco De Los Ríos, Javier Montero and J. Tinguaro Rodríguez.

**146-Computational Models of Affect and Fuzzy Logic.**

Albert Van Der Heide, Daniel Sánchez and Gracian Trivino.

Wednesday, July 20

Program

9h00 10h00	<p>Plenary Talk Chair :Laurent Foulloy Room : Auditorium</p> <p><b>Auke Jan IJSPEERT</b> Control of locomotion: from biology to robotics</p>
10h00 10h30	<p><b>Coffee Break</b></p>
10h30 12h10	<p>S1:Aggregation functions - I Session Chair :Humberto Bustince</p> <p style="text-align: right;">Salon 2</p> <p><b>27-Induced Unbalanced Linguistic Ordered Weighted Average.</b> Lucas Marin, José M. Merigó, Aida Valls, Antonio Moreno and David Isern.</p> <p><b>28-On generalizations of weighted means and OWA operators.</b> Bonifacio Llamazares.</p> <p><b>48-The Type-1 OWA Operator and the Centroid of Type-2 Fuzzy Sets.</b> Francisco Chiclana and Shang-Ming Zhou.</p> <p><b>136-On another view of aggregation of fuzzy relations.</b> Olga Grigorenko and Julija Lebedinska.</p> <p><b>137-On extension of fuzzy measures to aggregation functions.</b> Anna Kolesárová, Andrea Stupňanová and Juliana Beganová.</p> <p>S10 : Fuzzy relations, functions and transforms: applications in data processing - I Session Chair : Irina Perfilieva, Salvatore Sessa.</p> <p style="text-align: right;">Salon 3</p> <p><b>36-Fuzzy Transforms and Fragile Watermarking Tamper Detection on Coded Images.</b> Ferdinando Di Martino and Salvatore Sessa.</p>



**105-Fuzzy and Fourier Transforms.**

Irina Perfilieva and Petra Hod'áková.

**109-Imprecise linear filtering: a second step.**

Olivier Strauss and Agnès Rico.

**46-Forecasting seasonal time series with computational intelligence: contribution of a combination of distinct methods.**

Martin Štěpnička, Juan Peralta Donate, Paulo Cortez, Lenka Vavříčková and German Gutierrez.

**91-Statistical analysis of a smoothing filter based on fuzzy transform.**

Michal Holčapek and Tomáš Tichý.

S11 : Theory and applications of intuitionistic fuzzy sets - I

Session Chair :Eulalia Szmidt

Salon 4

**76-Quasi-arithmetic means and OWA functions in interval-valued and Atanassov's intuitionistic fuzzy set theory.**

Glad Deschrijver.

**131-Weighted Voting Method Using Atanassov's Intuitionistic Fuzzy Preference Relations and Ignorance Functions.**

Daniel Paternain, Aranzazu Jurio, Edurne Barrenechea, Humberto Bustince, Benjamin Bedregal and Eulalia Szmidt.

**43-The Spearman and Kendall rank correlation coefficients between intuitionistic fuzzy sets**

Eulalia Szmidt and Janusz Kacprzyk.

**21-Intuitionistic fuzzy preference relations.**

Urszula Dudziak and Barbara Pękala

**34-Probability on Effect Algebras.**

Mája Kuková, Alžbeta Michalíková and Belo Riečan.

R1 : Fuzzy Measures

Session Chair :Radko Mesiar

Salon 5

**3-Axiomatizations of the discrete Choquet integral and extensions.**

Miguel Couceiro and Jean-Luc Marichal.

**11-On the convergence of HLMS Algorithm.**

Murillo Javier, Serge Guillaume, Elizabeth Tapia and Bulacio Pilar

**45-On the connection between probability boxes and possibility measures.**

Matthias C. M. Troffaes, Enrique Miranda and Sebastien Destercke.

**176-Choquistic Regression: Generalizing Logistic Regression using the Choquet Integral.**

Ali Fallah Tehrani, Weiwei Cheng and Eyke Hüllermeier.

**180-Fuzzy measures on finite scales as families of possibility measures.**  
Didier Dubois.

14h00 15h00	Plenary Talk Chair :Bernadette Bouchon-Meunier Room : Auditorium
	<b>Michio SUGENO</b> What Kinds of Uncertainty Are We Aware of? – Categories and Modalities of Uncertainty –

15h00 16h20	S16 : Fuzzy Numbers and their Applications - I Session Chair : Przemyslaw Grzegorzewski Salon 2
	<b>93-Approximation of fuzzy numbers by nonlinear Bernstein operators of max-product kind.</b> Lucian Coroianu, Sorin G. Gal and Barnabas Bede. <b>159- Translation invariance and scale invariance of approximations of fuzzy numbers.</b> Adrian Ban and Lucian Coroianu. <b>175-Trapezoidal approximations of fuzzy numbers with restrictions on the support and core.</b> Przemyslaw Grzegorzewski and Karolina Pasternak-Winiarska. <b>178-Model Inversion using Extended Gradual Intervals Arithmetic.</b> Boukezzoula Reda, Foulloy Laurent and Galichet Sylvie.
	S10 : Fuzzy relations, functions and transforms: applications in data processing – II Session Chair : Martin Štěpnička Salon 3

**65-Fuzzy Function: Theoretical and Practical Point of View.**

Irina Perfilieva.

**17-Monotonicity of fuzzy rule bases: On differences between graded and non-graded approaches.**

Martina Daňková, Martin Štěpnička and Bernard De Baets.

**49-Transitive Openings.**

Dionis Boixader and Jordi Recasens.

**139-Some dependencies among attributes given by fuzzy confirmation measures.**

Jiří Kupka and Iva Tomanová.

**S17 :Fuzzy Systems**

Session Chair : Ahmed El Hajjaji

Salon 4

**57-A Fuzzy Approach for Sensor Fault-Tolerant Control of wind energy conversion Systems**

Elkhatib Ibrahim, Abdel Aitouche and Mireille Bayart.

**83-Control-oriented modeling of hydrostatic power-split CVTs using Takagi-Sugeno fuzzy models.**

Horst Schulte and Patrick Gerland.

**89-Actuator Fault estimation with pole placement constraints for Takagi-Sugeno fuzzy systems with interval time varying delay: An LMI approach.**

Hamdi Gassara, Ahmed El Hajjaji and Mohamed Chaabane.

**122-Design of unknown input fuzzy observer for vehicle dynamics estimation with road geometry consideration.**

Hamid Dahmani, Mohammed Chadli, Abdelhamid Rabhi and Ahmed El Hajjaji.

**S4 : Fuzzy Implications: Theory and Applications - I**

Session Chair :Michal Baczyński

Salon 5

**12-A new method of generating fuzzy implications from given ones.**

Sebastià Massanet and Joan Torrens.

**39-R-implications and the Exchange Principle: A Complete Characterization.**

Balasubramaniam Jayaram, Michal Baczyński and Radko Mesiar.

**90-Dependencies between fuzzy conjunctions and implications.**

	<p>Anna Król.  <b>64-Obtaining representable coimplications from aggregation and dual operators.</b>  Renata Reiser and Benjamin Bedregal.</p>
16h20 16h50	<b>Coffee Break</b>
16h50 18h10	<p>R8 : Information Uncertainty  Session Chair :Emmanuel Ramasso</p> <p style="text-align: right;">Salon 2</p> <p><b>108-Towards an Axiomatization for the Generalization of the Kullback-Leibler Divergence to Belief Functions.</b>  Hélène Soubaras.  <b>167-F-boxes for filtering.</b>  Olivier Strauss and Sébastien Destercke.  <b>181-Proposition of a semi-automatic possibilistic information scoring process.</b>  Marie Jeanne Lesot, Thomas Delavallade, Frédéric Pichon, Herman Akdag, Bernadette Bouchon-Meunier and Philippe Capet.</p> <p>S8 : On-Line Fuzzy Modelling and Pattern Recognition  Session Chair : Edwin Lughofer, Moamar Sayed-Mouchawed</p> <p style="text-align: right;">Salon 3</p> <p><b>117-All-Pairs Evolving Fuzzy Classifiers for On-line Multi-Class Classification Problems.</b>  Edwin Lughofer.  <b>118-On-line Redundancy Elimination in Evolving Fuzzy Regression Models using a Fuzzy Inclusion Measure.</b>  Edwin Lughofer and Eyke Hüllermeier.  <b>121-Incorporating Dynamic Uncertainties into a Fuzzy Classifier.</b>  Jens Hülsmann, Andreas Buschermöhle and Werner Brockmann.  <b>172-Learning in dynamic environments: application to the diagnosis of evolving systems.</b>  Moamar Sayed-Mouchaweh, Omar Ayad and Nouredine Malki.</p> <p style="text-align: right;">Salon 4</p>

S4 : Fuzzy Implications: Theory and Applications - II  
Session Chair :Balasubramaniam Jayaram

Salon 5

**102-Distributive equation of implications based on continuous triangular norms.**

Feng Qin, Michal Baczyński and Aifang Xie.

**125- Probabilistic Implications.**

Przemyslaw Grzegorzewski.

**14 Fuzzy implications defined on the set of discrete fuzzy numbers.**

Juan Vicente Riera and Joan Torrens.

**156-On lattice structure and implications on ordered fuzzy numbers.**

Magdalena Kacprzak and Witold Kosiński.

Thursday, July 21

Program

9h00 10h00	<p>Plenary Talk Chair :Didier Dubois Room : Auditorium</p> <p><b>Alain APPRIOU</b> Belief Functions in Information Fusion Processes</p>
10h00 10h30	<p><b>Coffee Break</b></p>
10h30 12h10	<p>S1:Aggregation functions - II Session Chair :Radko Mesiar</p> <p style="text-align: right;">Salon 2</p> <p><b>23-The Gini index and the consistent measurement of inequality among the poor.</b> Oihana Aristondo, José Luis García-Lapresta, Casilda Lasso De La Vega and Ricardo Alberto Marques Pereira.</p> <p><b>58-Biconic aggregation functions with a given diagonal or opposite diagonal section.</b> Tarad Jwaid, Bernard De Baets and Hans De Meyer.</p> <p><b>145-Functionally Expressible Multidistances.</b> Javier Martín, Gaspar Mayor and Oscar Valero.</p> <p><b>149-General aggregation operators acting on the L-fuzzy real line.</b> Pavels Orlovs.</p> <p><b>166-Axiomatic characterizations of (quasi-) L-statistics and S-statistics and the Producer Assessment Problem.</b> Marek Gagolewski and Przemysław Grzegorzewski.</p> <p>S11 : Theory and applications of intuitionistic fuzzy sets - II Session Chair :Janusz Kacprzyk</p> <p style="text-align: right;">Salon 3</p>

**128-On the distributive equation for t-representable t-norms generated from nilpotent and strict t-norms.**

Michal Baczyński.

**162-An axiomatic definition of divergence for intuitionistic fuzzy sets.**

Ignacio Montes, Vladimir Janiš and Susana Montes.

**164-Preservation of Intuitionistic Fuzzy Preference Relations.**

Paweł Drygaś.

**26-The Inclusion-Exclusion Principle On the Set of IF-sets.**

Jana Kelemenová.

**119-Linear programming with Triangular Intuitionistic Fuzzy Number.**

Dipti Dubey and Aparna Mehra.

**R6 : Fuzzy Intervals And Optimization**

Session Chair : Sébastien Destercke

Salon 4

**32-Combination of interval analysis and PSO for optimization.**

Clément Solau, Bruno Marhic, Laurent Delahoche, Arnaud Clémentin, Anne-Marie Jolly-Desodt and David Menga.

**133-Evaluating Operational Risk Exposure Using Fuzzy Number Approach to Scenario Analysis.**

Antonina Durfee and Alexey Tselykh.

**153-Combining the Alpha-Plane Representation with an Interval Defuzzification Method.**

Sarah Greenfield and Francisco Chiclana.

**184-A new method coupling simulation and a hybrid metaheuristic to solve a multiobjective hybrid flowshop scheduling problem.**

Xiaohui Li, Hicham Chehade, Farouk Yalaoui and Lionel Amodeo.

**S5 :Fuzzy Logic in machine learning**

**S6 :Data Mining**

Session Chair : Eyke Hüllermeier, Anne Laurent

Salon 5

**141-A Fuzzy Rule Mining Approach involving Absent Items.**

Miguel Delgado, María-Dolores Ruiz, Daniel Sánchez and José-María Serrano.

**142-Membership-based clustering of heterogeneous fuzzy data.**

Gernot Herbst, Arne-Jens Hempel, Rainer Fletling and Steffen F. Bocklisch.

**154-Cluster Tendency Assessment for Fuzzy Clustering of Incomplete Data.**

Ludmila Himmelspach, Daniel Hommers and Stefan Conrad.

**170-M-Estimator induced Fuzzy Clustering Algorithms.**

Roland Winkler, Frank Klawonn and Rudolf Kruse.

**183-Genetic Programming for Optimizing Fuzzy Gradual Pattern Discovery.**

Sarra Ayouni, Sadok Ben Yahia, Anne Laurent and Pascal Poncelet.

14h40  
16h00

S13 :Fuzzy logic approaches for Socio-technical systems - I  
Session Chair : Raymond Houe

Salon 2

**29-Multi-criteria Group Decision Supplier Selection Problem using Fuzzy TOPSIS Based Approach.**

Akram Zouggari and Lyes Benyoucef.

**179-Management decision-aiding with a fuzzy integral based Performance Measurement System.**

Lamia Berrah, Jacky Montmain, Vincent Clivillé and Gilles Mauris.

**54-Fuzzy assessment of test results.**

Oleksandr Sokolov and Olga Molchanova.

**113-Fuzzy logic in competence management.**

Raymond Houé, Bernard Grabot and Germaine Tchuente.

S9 :Fuzzy Information Retrieval and Database Systems - I  
Session Chair : Guy De Pré

Salon 3

**55-Searching for a compromise between satisfaction and diversity in database fuzzy querying.**

Olivier Pivert, Allel Hadjali and Grégory Smits.

**62-Bipolarity in ear biometrics.**

Joachim Nielandt, Antoon Bronselaer, Tom Matthé and Guy De Tré.



	<p><b>68-Linguistic Summarization of Time Series Data using Genetic Algorithms.</b> Rita Castillo-Ortega, Nicolás Marín, Daniel Sánchez and Andrea G. B. Tettamanzi.</p> <p><b>81-Bipolarity and the relational division.</b> Nouredine Tamani, Ludovic Liétard and Daniel Rocacher.</p>
	<p>S2 :Fuzzy Measures and Integrals - I Session Chair : Michel Grabisch, Christophe Labreuche</p> <p style="text-align: right;">Salon 4</p>
	<p><b>6-Construction of a Choquet integral and the value functions without any commensurateness assumption in multi-criteria decision making.</b> Christophe Labreuche.</p> <p><b>19-On Convergence of Fuzzy Integrals over Complete Residuated Lattices.</b> Antonin Dvorak and Michal Holcapek.</p> <p><b>20-Concave Measures and the Fuzzy Core of Exchange Economies with Heterogeneous Divisible Commodities.</b> Farhad Husseinov and Nobusumi Sagara.</p> <p><b>24-Evaluating Consulting Firms Using a Centroid Ranking Approach based Fuzzy MCDM Method.</b> Ta-Chung Chu.</p>
	<p>S16 : Fuzzy Numbers and their Applications - II Session Chair :Luciano Stefanini</p> <p style="text-align: right;">Salon 5</p>
	<p><b>59-Ranking fuzzy numbers using fuzzy maximizing-minimizing points.</b> S. Salahshour, S. Abbasbandy and T. Allahviranloo.</p> <p><b>130-Ranking of fuzzy numbers based on <math>\alpha</math>-distance .</b> Saeid Khezerloo, Tofigh Allahviranloo and Masoume Khezerloo.</p> <p><b>152-Dynamical properties in the space of fuzzy numbers.</b> Jiri Kupka.</p> <p><b>163-Solution of fuzzy differential equations with generalized differentiability using LU-parametric representation.</b> Barnabas Bede and Luciano Stefanini.</p>
<p>16h00 16h30</p>	<p><b>Coffee Break</b></p>

16h30 17h30	<p>S13 :Fuzzy logic approaches for Socio-technical systems - II Session Chair : Raymond Houe</p> <p style="text-align: right;">Salon 2</p>
	<p><b>114-Fuzzy Rules for Events Perception and Emotions in an Agent Architecture.</b> Hazaël Jones, Julien Saunier and Domitile Lourdeaux.</p> <p><b>120-A GA-based fuzzy resource leveling optimization for helicopter maintenance activity.</b> Malek Masmoudi and Alain Haït.</p> <p><b>47-MRP with imprecise demand and uncertain lead time.</b> Romain Guillaume, Caroline Thierry and Bernard Grabot.</p>
	<p>S9 :Fuzzy Information Retrieval and Database Systems - II Session Chair : Olivier Pivert</p> <p style="text-align: right;">Salon 3</p>
	<p><b>138-Different interpretations of fuzzy gradual-inclusion-based IR models.</b> Laurent Ughetto and Vincent Claveau.</p> <p><b>171-Fuzzy methods for database protection.</b> Vicenç Torra, Daniel Abril and Guillermo Navarro-Arribas.</p>
	<p>S2 :Fuzzy Measures and Integrals - II Session Chair : Michel Grabisch, Christophe Labreuche</p> <p style="text-align: right;">Salon 4</p>
	<p><b>84-Dealing with inconsistencies in the representation of ordinal information by a 2-additive Choquet integral.</b> Brice Mayag, Michel Grabisch and Christophe Labreuche.</p> <p><b>150-L-fuzzy valued measure and integral.</b> Vecislavs Ruza and Svetlana Asmuss.</p> <p><b>155-Parameter identification in Choquet Integral by the Kullback-Leibler divergence on continuous densities with application to classification fusion.</b> Emmanuel Ramasso and Sylvie Jullien.</p>
	<p>R7 : Data Aggregation Session Chair : Alain Appriou</p>

**77-Aggregation of Health Assessment Indicators of Industrial Systems.**

Ludovic Rizzolo, Bouthaina Abichou, Alexandre Voisin and Naïm Kosayyer.

**144-Modelling and aggregation of heterogeneous fuzzy data.**

Arne-Jens Hempel, Gernot Herbst and Steffen F. Bocklisch.

**169-A proposal of using fuzzy system to integrate scores of health and environment: a case study at Brazil.**

Daniel Canavese and Neli Ortega.

Friday, July 22

Program

9h00 10h00	<p>Plenary Talk Chair :Javier Montero Room : Auditorium</p> <p><b>Oscar CORDON</b> An automatic method for forensic identification based on soft computing techniques</p>
10h00 10h30	<p><b>Coffee Break</b></p>
10h30 12h10	<p>S1:Aggregation functions - III Session Chair : Javier Fernandez</p> <p style="text-align: right;">Salon 2</p> <p><b>15-Uninorms and nullnorms on the set of discrete fuzzy numbers.</b> Juan Vicente Riera and Joan Torrens.</p> <p><b>80-Aggregation operators of general aimed information.</b> Doretta Vivona and Maria Divari.</p> <p><b>104-Restricted dissimilarity functions and penalty functions.</b> Humberto Bustince, Javier Fernandez, Radko Mesiar, Ana Pradera and Gleb Beliakov.</p> <p><b>151-Aggregation Functionals on Complete Lattices.</b> Marta Cardin.</p> <p>R3: Clustering Session Chair : Oscar Cordon</p> <p style="text-align: right;">Salon 3</p> <p><b>71-A numerical distance based on fuzzy partitions.</b> Serge Guillaume, Brigitte Charnomordic and Patrice Loisel.</p> <p><b>106-Mobile Phone User Identification with Fuzzy Fingerprints.</b></p>

Nuno Homem and Joao Paulo Carvalho.

**173-On the usefulness of fuzzy SVMs and the extraction of fuzzy rules from SVMs.**

Christian Moewes and Rudolf Kruse.

**174-A fast fuzzy c-means algorithm for color image segmentation.**

Hoel Le Capitaine and Frelicot Carl.

**182-CEVCLUS: Constrained evidential clustering of proximity data.**

Violaine Antoine, Benjamin Quost, Mylène Masson and Thierry Denoeux.

R5 :Fuzzy Mathematics Notions

Session Chair : Bernard De Baets

Salon 4

**42-Categories Related to Topology Viewed as Soft Sets.**

Banu Pazar Varol, Alexander Shostak and Halis Aygün.

**78-On the transitive closure of reciprocal  $[0,1]$ -valued relations.**

Steven Freson, Hans De Meyer and Bernard De Baets.

**86-Solving fuzzy Volterra integro-differential equation by fuzzy differential transform method.**

Nasser Mikaeilvand, Sakineh Khakrangin and Tofigh Allahviranloo.

**88-Supplementarity measures on fuzzy sets.**

Susana Cubillo, Elena E. Castiñeira and Wilmer Montilla.

**126-Fuzzy fractional differential equations with Nagumo and Krasnoselskii-Krein conditions.**

Tofigh Allahviranloo, Saeid Abbasbandy and Soheil Salahshour.

Session Chair :

Salon 5

12h10

14h00