International Symposium on Fuzzy Sets

Uncertainty Modelling

ISFS 2023

Programme

May 19-21, 2023

University of Rzeszów, Poland

Building: A0

Assembly hall: Ball

Programme

May 19

Plenary lectures	**Chair:** Barbara Pękala
10:15 – 10:55	R. Mesiar *Aggregation functions*
10:55 – 11:35	S. Montes *Subsethood and embedding measures for interval-valued fuzzy sets: Similarities and differences*

	Chair: Urszula Bentkowska
12:05 – 12:25	M. Baczyński, H. Zhou *On the characterizations of the Reichenbach implication by functional equations*
12:25 – 12:45	P. Grzegorzewski, M. Zacharczuk, K. Zdon *Nonparametric tests for fuzzy data*
12:45 – 13:05	M. Bruteničová, V. Janiš *Postmodifiers preserving monotony*
13:05 – 13:25	V. Kobza *Some approaches for divergence measures between fuzzy sets*
13:25 – 13:45	B. Yatsalo *Fuzzy Multi-Criteria Decision Analysis: Myth or Reality?*

	Chair: Anna Król
15:15 – 15:35	M. Kalina *A generalization of Bi-polar OWA operators to the continuous case*
15:35 – 15:55	J. Špirková *Generalized mixture D-mean*
15:55 – 16:15	M. Boczek, O. Hutník, M. Kleinová *The Choquet integral in the language of bases and transforms*
16:15 – 16:35	L. Coroianu, R. Fullér, I. Á. Harmati *Solution methods for some constrained OWA aggregation problems*

	Chair: Wiesław Paja
17:05 – 17:25	H. Sadłowska, P. Korczak, A. Kochański, B. Płonka, P. Grzegorzewski *Regression models for optimizing the aluminum extrusion process under isothermal conditions*
17:25 – 17:45	K. Dyczkowski *AI and Sport Data Analysis in Football*
17:45 – 18:05	J. Wieczynski, J. Sartori, G. Lucca, G. Dimuro, C. Guerra, A. Cruz, J. Fernandez, H. Bustince *Choquet integral as a Substitute for Multiplication in Vision Transformers*
18:05 – 18:25	K. Kmita, K. Kaczmarek-Majer, O. Hryniewicz *The non-linear impact of the scaling factor α on the outcomes of Semi-Supervised Fuzzy CMeans*

18:30 Welcome coctail (dinner), Building: A0, hall

May 20

Plenary lectures	**Chair:** Michał Baczyński
09:30 – 10:10	J. Kacprzyk *De novo type approaches in fuzzy decision making, optimization and control: Towards optimal system design*
10:10 – 10:50	J. Drewniak *Algebra of fuzzy relations*

10:50 – 11:20 Coffee break

	Poster Session – A0, hall
11:20 – 12:50	1) S. Basarik, J. Borzová, L. Halčinová, J. Šupina *The generalized Choquet integral computation in discrete space* 2) B. Hennelová, O. Hutník *Generalized integrals applied to scientometric indices* 3) J. Kalafut, A. Mesiarová-Zemánková *Pseudo-uninorms with Archimedean underlying functions* 4) K. Miś *Consistency of linguistic summaries* 5) A. Kozak *Building Trust in Machine Learning: The Role of Explainable AI* 6) A. Urio-Larrea, G. Lucca, C. Guerra, J. Fernandez, G. Dimuro, H. Bustince

Fuzzy Rule comparison system and its application to select the best method for the Generalized Modus Ponens

7) M. Ojaghi, V. Janiš

Relational modifiers for L-valued mappings

8) A. Jastrzębska

Fuzzy Concept-Based Time Series Models: Time Series Similarity, Clustering, and Classification

9) U. Bentkowska, W. Gałka, M. Mrukowicz

Ensemble regression model based on aggregation functions

10) P. Drygaś, A. Król

On threshold generated fuzzy implications

11) D. Gil, T. Mroczek, B. Pękala

Missing Data completing employing a Hybrid FuzzyRough Approach in a Posture Detection System

12) E. Rak, J. Sarzyński, A. Szczur

Classifiers Aggregation method based on the Distributivity Law (CADL)

12:50 – 14:20 Lunch, Building: A0, hall

Chair: Paweł Drygaś

14:20 – 14:40	A. Rutkowska, K. Kaczmarek-Majer *Inflation expectation analysis with evolving membership functions*
14:40 – 15:00	P. Murinová *Position of "A few" and "Several" in Graded Peterson's Hexagon of Opposition*
15:00 – 15:20	A. Cena, I. Balagura *The importance of keywords in bibliometrics*
15:20 – 15:40	K. Čunderlíková *A note about almost uniformly convergence and a variation on the Egorov's theorem*
15:40 – 16:00	J. L. García-Lapresta, R. González del Pozo *Scoring functions on ordered qualitative scales*
16:00 – 16:20	J. Szkoła, B. Pękala *The learning method of regression using interval-valued spline functions*

16:20 Closure the scientific part of the Symposium

Walk to the city center (in nice weather)

May 21

09:30 – 18:00 Excursion to the mine in Bochnia (meet in the hall of building A0)