

Program of the
13th European Symposium
on Computational Intelligence and Mathematics
including Workshop DigForASP
October 3rd - 6th 2021. Budapest, Hungary



DIGFORASP

MONDAY 4 th	
Location: Mercure Budapest Castle Hill	
8:30	Open Registration Desk
9:30–10:00	Inauguration
10:00–11:00	Keynote Speaker - Vilém Novák Title: On fuzzy natural logic and its applications Chairperson: Jesús Medina Venue: Mercure Budapest Castle Hill
11:00–11:20	Coffee break
11:20–12:30	Session S1. Chairperson: Vilém Novák Venue: Mercure Budapest Castle Hill
	<i>Decidability of real-valued S_4 Gödel logic</i> Martín Diéguez and David Fernández-Duque
	<i>Basic logic versus multi-adjoint logic</i> María Eugenia Cornejo-Piñero, Luis Fariñas del Cerro and Jesús Medina
	<i>Fuzzy logic programming with generalized quantifiers</i> Jesús Medina and José Antonio Torné-Zambrano
12:30–13:30	Session S2. Chairperson: Jesús Medina Venue: Mercure Budapest Castle Hill
	<i>Fuzzy relations: the fundament for fuzzy rough approximation, fuzzy concept analysis and fuzzy mathematical morphology</i> Alexaner Šostak and Ingrida Uljane
	<i>On the Measuring of Definiteness of Rough Real Functions</i> Zoltán Ernő Csajbók
	<i>Information bireducts and its relationship with reducts</i> Fernando Chacón-Gómez, María Eugenia Cornejo-Piñero, Jesús Medina and Eloísa Ramírez-Poussa
13:30–14:40	Lunch
14:40–15:40	Keynote Speaker - María Eugenia Cornejo Title: Adjoint algebras. Theory and applications. Chairperson: László T. Kóczy Venue: Mercure Budapest Castle Hill
15:40–16:00	Coffee break
16:00–17:30	Session S3. Chairperson: María Eugenia Cornejo Venue: Mercure Budapest Castle Hill
	<i>On the applicability of fuzzy lines in circular Hough transform in lesion segmentation on liver CT images</i> Melinda Kovács and Szilvia Nagy
	<i>Directional properties of semi-aggregation functions</i> Andrea Stupnanova
	<i>Generalized Phi-Transform of Aggregation Functions on Bounded Lattices</i> Martin Kalina
	<i>Sugeno Integral for Atanassov Intuitionistic Fuzzy Sets</i> Ondrej Kridlo and Manuel Ojeda-Aciego
19:00	Welcome reception

TUESDAY 5th**Location: Mercure Budapest Castle Hill**

9:00–9:50	Keynote Speaker - Radko Mesiar Title: Outliers-based aggregation Chairperson: Jesús Medina Venue: Mercure Budapest Castle Hill
9:50–11:00	Session S4. Chairperson: Radko Mesiar Venue: Mercure Budapest Castle Hill
	<i>Facilitating the simulation of domestic energy systems through linguistic representations</i> Luis Rodríguez-Benítez, Pablo Palomino-Gamoez, Luis Jiménez-Linares, Juan Moreno Garcia and Jun Liu
	<i>Experiments with the Discrete Bacterial Memetic Evolutionary Algorithm for solving the Cumulative Capacitated Vehicle Routing Problem</i> Boldizsár Tüű-Szabó, Peter Foldesi and László T. Kóczy
	<i>Fuzzy Inference System-like Aggregation Operator (FISAO) for Fuzzy Signatures</i> Ferenc Lilik, Ádám Bukovics and László T. Kóczy
11:00–11:30	Coffee break
11:30–13:30	Session S5. Chairperson: László T. Kóczy Venue: Mercure Budapest Castle Hill
	<i>Looking for fuzzy extensions of closure operators</i> Manuel Ojeda-Hernández, Inma P. Cabrera, Pablo Cordero and Emilio Muñoz-Velasco
	<i>Context of a local congruence concept reduction</i> Roberto García-Aragón, Jesús Medina and Eloísa Ramírez-Poussa
	<i>One-sided concept lattices by blocks</i> María José Benítez Caballero and Jesús Medina
	<i>Discrete universal fuzzy integrals</i> Anna Kolesárová and Radko Mesiar
	<i>Energy determined membership function of viscoelastic models</i> Mária Minárová
13:30–15:00	Lunch
16:30–19:30	Budapest tour
19:30	Gala dinner

WEDNESDAY 6th
Workshop DigForASP

Location: Mercure Budapest Castle Hill

10:00–11:00	Keynote Speaker - Irina Perfilieva Title: Data-Driven Fuzzy Modeling Inspired by Manifolds Chairperson: László T. Kóczy Venue: Mercure Budapest Castle Hill
11:00–11:20	Coffee break
11:20–13:30	Session S6. Chairperson: Irina Perfilieva Venue: Mercure Budapest Castle Hill
	<i>Advances in forgery detection of driving licences using truthfulness degrees</i> Manuel Ojeda-Aciego and Jose Manuel Rodríguez-Jiménez
	<i>A formal method for driver identification</i> Roberto G. Aragón, María Eugenia Cornejo-Piñero, Jesús Medina and Clemente Rubio-Manzano
	<i>Analysis and identification of forensic events using non-parametric density estimation</i> Piotr A. Kowalski, Karol Kocierz and Maciej Kusy
	<i>Fuzzy signature based model in material handling management</i> Balázs Ferenczi, Ferenc Lilik and László T. Kóczy
	<i>On Choquet integral in ranking crimes</i> María Eugenia Cornejo-Piñero, Jesús Medina, Ivana Stajner-Papuga and Andreja Tepavcevic
	<i>The Effects of Knowledge Extraction Approaches on Cryptanalysis Studies and Analysis of the Success of Chaos-Based Countermeasures</i> Yücel Bürhan and Fatih Özkaynak
13:30–15:00	Closing Session

Social Events	
SUNDAY 3rd	
09:00	Tour around Budapest: Nádasdy Castle, Majki Kamalduli hermitage, Eszterházy Castle, etc.
MONDAY 4th	
19:00	Welcome reception
TUESDAY 5th	
16:30–19:30	Budapest tour
19:30	Gala dinner
WEDNESDAY 6th	
13:30–15:00	Closing Session