Program of the

14$^{\text{th}}$ European Symposium
on Computational Intelligence and Mathematics
including Workshop DigForASP

October 2$^{\text{nd}}$ - 5$^{\text{th}}$ 2022. Naples, Italy

	MONDAY 3rd
	Location: Hotel Royal Continental
8:30	Open Registration Desk
9:30–10:00	Inauguration
10:00–11:00	**Keynote Speaker - Marek Reformat** Title: Evidence Theory Approach to Determine States of Hierarchical System Chairperson: László T. Kóczy
11:00–11:20	Coffee break
11:20–12:30	**Session S1**. Chairperson: Marek Reformat
	Additional notes on heterogeneous concept-forming operators Peter Eliaš, L'ubomír Antoni, Ondrej Krídlo and Stanislav Krajči
	Possibility theory and thresholds for factorizing multi-adjoint contexts Roberto García-Aragón, Jesús Medina and Eloísa Ramírez-Poussa
	Knowledge Discovery in Malware Datasets using Formal Concept Analysis Angel Mora Bonilla, Domingo López-Rodríguez, Manuel Enciso and Pablo Cordero
12:30–13:30	**Session S2**. Chairperson: Jesús Medina
	Grading the unknown information via intuitionistic approach Francisco Pérez-Gámez, Pablo Cordero, Manuel Enciso, Angel Mora Bonilla and Manuel Ojeda-Aciego
	On the measure of inconsistency of fuzzy relation equations David Lobo, Víctor López-Marchante and Jesús Medina
	Efficiency of fuzzy rough set decision algorithms Fernando Chacón-Gómez, María Eugenia Cornejo, Jesús Medina and Eloísa Ramírez-Poussa
13:30–14:40	Lunch
14:40–15:40	**Round table. Interactions between computational intelligence and mathematics in the framework of SEA-EU 2.0** Chairperson: László T. Kóczy. Panelists: Manuel Ojeda-Aciego, Luigi Romano, Raffaele Olivieri, María Eugenia Cornejo
15:40–16:00	Coffee break
16:00–17:40	**Session S3**. Chairperson: María Eugenia Cornejo
	Use of Fuzzy Time Series to generate linguistic descriptions of noise pollution Luis Rodríguez-Benítez, Juan Moreno-García, Ester del Castillo-Herrera, Jun Liu and Luis Jiménez-Linares
	A Novel Fingerprint Identification Fuzzy System Using a Center-Distance Weighted Local Binary Pattern Ahmad Momani and László Kóczy
	Projective and Computational Intelligence-Based Index Theory: Mathematical Models, Representations, Plotting Methods and Fuzzy-transitions Tünde Olexó and István Á. Harmati
	Global Sensitivity Analysis and Low Magnitude Pruning for Convolutional Neural Networks Reduction in ImageNet based on Transfer Learning State of the Art Models Piotr Kowalski and Ernest Jeczmionek
	Fuzzy approximating metrics and their relations with fuzzy partial metrics and modular metrics Alexander Šostak and Raivis Bēts
17:40–18:40	**Keynote Speaker - Luigi Romano** Title: Hardware-assisted Trusted Computing: State of The Art and Emerging Use Cases. Chairperson: Raffaele Olivieri
19:30	**Welcome reception**

TUESDAY 4th
Location: Hotel Royal Continental

9:00–9:50	**Keynote Speaker - Irina Perfilieva** Title: Fuzzy sets as manifolds – a new direction in data analysis Chairperson: László T. Kóczy Venue: Hotel Royal Continental
9:50–11:00	**Session S4**. Chairperson: Irina Perfilieva Venue: Hotel Royal Continental
	Generalized linearity of aggregation and related functions Andrea Stupnanova and Radko Mesiar
	A preliminary study between semicopulas and other algebraic structures Carlos Bejines López and Manuel Ojeda Hernández
	Closure theory of semirings-valued fuzzy sets Jiří Močkoř
11:00–11:30	Coffee break
11:30–13:30	**Session S5**. Chairperson: László T. Kóczy Venue: Hotel Royal Continental
	A Fuzzy Multi-Criteria Decision Making approach for Explainable Machine Learning in the Actuarial Context Catalina Lozano, Francisco Romero, Jesús Serrano-Guerrero and José A. Olivas
	A software tool for solving the Traveling Salesman Problem and related non-fuzzy and fuzzy opti-mization problems Boldizsár Tüű-Szabó, Ruba Almahasneh, Peter Foldesi and László T. Kóczy
	Characterizing clarify and reduce method by means of left-sided formal concept analysis María José Benítez-Caballero and Jesús Medina
	Extension of The Time Dependent Travelling Salesman Problem Model with Interval-Valued Fuzzy Soft Sets Almahasneh Ruba and László T. Kóczy
	ITAMACDSS: A Fuzzy CDSS for coeliac disease Marco Elio Tabacchi
	Preference in multi-adjoint logic programming based on ordered adjoint pairs Jesús Medina and José Antonio Torné-Zambrano
13:30–15:00	Lunch
16:30–19:30	**Naples tour**
19:30	**Gala dinner**

WEDNESDAY 5th **Workshop DigForASP** **Location: Hotel Royal Continental**	
10:00–11:00	**Keynote Speaker - Stefania Costantini** Title: Digital Forensics: a case for Neuro-Symbolic approaches Chairperson: Jesús Medina
11:00–11:20	Coffee break
11:20–13:30	**Session S6**. Chairperson: Stefania Costantini
	Lattice valued aggregation operators applicable in digital forensics Maria Eugenia Cornejo Piñero, Jesús Medina, Ivana Stajner-Papuga and Andreja Te-pavcevic
	Power consumption-based identification of used encryption solution in IoT environments Aleksandar Jevremović and Zona Kostic
	Maritime Cyber Security Based on a Convolutional Neural Network Jamal Raiyn
	Epistemic Logic and Theory of Mind for Modelling Group Dynamics of Criminal Organizations Stefania Costantini, Andrea Formisano and Valentina Pitoni
	Intrusion detection using intelligent systems Laszlo Barna Iantovics, Olivér Hornyák, Gloria Cerasela Crisan, Bogdan Crainicu and Elena Nechita
	Analysing the influence of the pandemic on crime patterns in North Macedonia Aleksandra Dedinec, Sonja Filiposka and Anastas Mishev
13:30–15:00	**Closing Session**

Social Events

SUNDAY 2nd	
09:00	**Tour to Pompei, Naples and Surroundings. The details will be announced very soon.**

MONDAY 3rd	
19:30	**Welcome reception**

TUESDAY 4th	
16:30–19:30	**Naples tour**
19:30	**Gala dinner**

WEDNESDAY 5th	
13:30–15:00	**Closing Session**