PLENARY TALK

Fuzzy Challenges

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Abstract:
On the 60th anniversary of the birth of fuzzy theory, it continues to offer challenges. On the one hand, from the time of its publication, the question arose as to how it would fit into the world of mathematical theories, since, among others, set theory, logic, and operations research are closely related to fuzzy theory. The other challenge is that successful practical applications often precede the full exploration of their mathematical and theoretical background. The third challenge is very timely, since fuzzy is not an outdated theory, but rather an element of hybrid artificial intelligence models, which indicates new developments every day. Taking into consideration those challenges and based on subjective 30 years of experience, a review of them is definitely actual in connection with the anniversary.

Bio:
Márta Takács was born in Subotica, completed her schooling in her hometown, and obtained a mathematics degree at the University of Belgrade. She obtained her university doctorate in 1996 at Eötvös Loránd University in Budapest, in mathematical logic, in the field of fuzzy inference systems. She developed the continuation of the topic in her PhD thesis, and in 2004 she graduated from the University of Novi Sad as a Doctor of Mathematical Sciences. She obtained her habilitation in the field of informatics at the Óbuda University. She has been teaching mathematics and IT subjects in higher education institutions for more than three decades, and is currently a full professor at University of Novi Sad and Óbuda University. She is BoG member of the IEEE SMC Section, member of the Hungarian Science Abroad Presidential Committee of the Hungarian Academy of Sciences, chair of the organizing committee of SISY conference since its foundation.