Special Issue on Dynamical Systems in Fuzzy Environments

The study of dynamical systems in fuzzy environments is vital due to the inherent uncertainties and complexities in real-world systems. Traditional mathematical models often fall short of accurately representing such systems, where ambiguity and imprecision are established. Fuzzy systems provide a framework for modelling and analysing these uncertainties, enabling more accurate predictions and better decision-making. This is particularly crucial in fields such as environmental modelling, social networks, graphs and optimization, where precise data is often unavailable or incomplete. By advancing research in this area, we can develop strong and adaptive systems capable of handling the complexities of modern challenges.

We are excited to announce a call for papers for a special issue of the journal Transactions on Fuzzy Sets and Systems on Dynamical Systems in Fuzzy Environments. This special issue aims to display innovative research and developments in the field of fuzzy systems and their applications in dynamic and complex environments.

This special issue will cover a broad range of topics related to dynamical systems in fuzzy environments. We invite researchers, and academicians to submit original research articles, comprehensive reviews, and case studies that contribute to the understanding and advancement of fuzzy systems. The scope of this special issue includes, but is not limited to, the following topics:

Uncertain Systems and Soft Computing:
- Modelling and analysis of uncertain systems using fuzzy logic.
- Applications of soft computing techniques in handling uncertainties.
- Integration of fuzzy systems with other computational intelligence methods.

Dynamic Systems and Numerical Analysis:
- Stability and control of dynamic systems in fuzzy environments.
- Numerical methods for solving fuzzy differential equations.
- Simulation and modelling of dynamic fuzzy systems.

Fuzzy Graphs and Social Networks:
- Analysis of fuzzy graphs and their applications in social networks.
- Fuzzy clustering and community detection in social networks.
- Influence and information propagation in fuzzy social networks.

Decision Making in Complex Environments:
- Fuzzy decision-making models and algorithms.
- Multi-criteria decision-making in fuzzy environments.
- Applications of fuzzy decision-making in real-world problems.

Optimization Techniques in Fuzzy Systems:
- Fuzzy optimization methods and algorithms.
- Applications of fuzzy optimization in engineering and management.
- Hybrid optimization techniques combining fuzzy logic with other methods.

Environmental and Ecological Modelling:
- Fuzzy modelling of environmental and ecological systems.
- Applications of fuzzy systems in sustainability and conservation.
- Risk assessment and management using fuzzy logic.

Authors are invited to submit high-quality, original research articles or well-structured review papers through the journal's online submission system at https://sanad.iau.ir/journal/tfss/.

Manuscript Submission Deadline: October 30, 2025
Notification of Acceptance: December 15, 2025
Final Manuscript Submission: February 15, 2026
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