



an Open Access Journal by MDPI

Fuzzy Covering Rough Set and Its Applications

Guest Editors:

Dr. Kai Zhang

School of Mathematical Sciences, Anhui University, Hefei 230601, China

Dr. Bin Yang

Associate Professor & Doctoral Supervisor, College of Science, Northwest A&F University, Yangling 712100, China

Dr. Jingqian Wang

School of Mathematics and Data Science, Shaanxi University of Science and Technology, Xi'an 710021, China

Deadline for manuscript submissions:

31 August 2024

Message from the Guest Editors

Dear Colleagues,

The fuzzy covering rough set brings together the main advantages of covering rough sets and fuzzy set theory. Among them, constructing a neighborhood operator that satisfies a general binary relation is a topic to be explored. Neighborhood operators can satisfy self-inverse relations, self-inverse-symmetric relations, etc. Various types of neighborhood operators can be used to construct different fuzzy covering rough set models. These fuzzy covering rough sets should have to satisfy the inclusion relationship between lower and upper approximations. Additionally, these fuzzy covering rough set models can be used for a range of applications, such as attribute reduction, multiattribute decision making, prediction, multi-granularity decision making, three-way decisions, etc. These will all be important directions for developing fuzzy covering rough set applications.

The aim of this Special Issue is to encourage the publication of original papers related to the theoretical foundations, computational methods, and applications of the fuzzy covering rough set.



mdpi.com/si/185922







an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Sergei D. Odintsov

 Institució Catalana de Recerca i Estudis Avançats (ICREA), Passeig Luis Companys, 23, 08010 Barcelona, Spain
Institute of Space Sciences (ICE-CSIC), C. Can Magrans s/n, 08193 Barcelona, Spain

Message from the Editor-in-Chief

Symmetry is ultimately the most important concept in natural sciences. It is not surprising then that very basic and fundamental research achievements are related to symmetry. For instance, the Nobel Prize in Physics 1979 (Glashow, Salam, Weinberg) was received for a unified symmetry description of electromagnetic and weak interactions, while the Nobel Prize in Physics 2008 (Nambu, Kobayashi, Maskawa) was received for the discovery of the mechanism of spontaneous breaking of symmetry, including CP symmetry. Our journal is named *Symmetry* and it manifests its fundamental role in nature.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), CAPlus / SciFinder, Inspec, Astrophysics Data System, and other databases.

Journal Rank: JCR - Q2 (*Multidisciplinary Sciences*) / CiteScore - Q1 (General Mathematics)

Contact Us

Symmetry Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/symmetry symmetry@mdpi.com X@Symmetry_MDPI