



## Review of Number 26

Naim Çağman\* <naim.cagman@gop.edu.tr>

*Department of Mathematics, University of Tokat Gazisomanpaşa, 60250 Tokat, Turkey*

**Abstract** — Here, we review all papers that are published in Number 26 of the Journal of New Theory. We then introduce all of the members of the editorial board and reviewers of the papers in this issue.

**Keywords** — *Journal of New Theory, J. New Theory, JNT, Number 26.*

### 1 Number 26

We are happy to inform you that Number 26 of the Journal of New Theory (JNT) is completed with 9 articles.

In [1], the authors introduced the concepts of upper and lower  $(\alpha, \beta, \theta, \delta, \ell)$ -continuous fuzzy multifunctions. It is in order to unify several characterizations and properties of some kinds of modifications of fuzzy upper and fuzzy lower semi-continuous fuzzy multifunctions, and to deduce a generalized form of these concepts, namely upper and lower  $\eta\eta^*$ -continuous fuzzy multifunctions.

In [2], the author given some definitions and results in  $Q$ -soft normal subgroup theory and cosets. Also some results were introduced which have been used by homomorphism and anti-homomorphism of  $Q$ -soft normal subgroups. Next they proved the analogue of the Lagrange's theorem.

In [3], the author, by using nano topology, introduced micro topology and also study the concepts of micro-pre open sets and micro-semi open sets and some of their properties are investigated.

In [4], the authors investigated the notion of generalized roughness for fuzzy ideals in OSGs on the basis of isotone and monotone mappings. Then the notion of approximation is boosted to the approximation of fuzzy bi-ideals, approximations fuzzy interior ideals and approximations fuzzy quasi-ideals in OSGs and investigate their related properties. Furthermore  $(\in, \in \vee q)$ -fuzzy ideals are the generalization

---

\* *Editor-in-Chief of the Journal of New Theory.*

of fuzzy ideals. Also the generalized roughness for  $(\in, \in \vee q)$ -fuzzy ideals, fuzzy bi-ideals and fuzzy interior ideals studied in OSGs and discuss the basic properties on the basis of isotone and monotone mappings.

In [5], the authors introduced the concept of matrix operators and establishes two new theorems on matrix summability of Fourier series and its derived series. The results obtained in the paper further extend several known results on linear operators. Various types of criteria, under varying conditions, for the matrix summability of the Fourier series. In this paper quite a different and general type of criterion for summability of the Fourier Series has been obtained. In the theorem function is integrable in the sense of Lebesgue to the interval  $[-\pi, \pi]$  and period with period  $2\pi$ .

In [6], the authors introduced a single structure which carries the subsets of  $X$  as well as the subsets of  $Y$  under the parameter  $E$  for studying the information about the ordered pair of soft subsets of  $X$  and  $Y$ . Such a structure is called a binary soft structure from  $X$  to  $Y$ . The purpose of this paper is to introduce certain binary soft weak axioms that are analogous to the axioms of topology.

In [7], the author introduced  $\Psi^*$ -locally closed sets and different notions of generalizations of continuous functions in a topological space and study some of their properties. Several examples are given to illustrate the behavior of these new classes of functions. The author also defined  $\Psi^*$ -submaximal spaces.

In [8], the authors introduced fuzzy soft locally closed and fuzzy soft b-locally closed sets and study their properties in fuzzy soft topological space. Further they defined and studied fuzzy soft LC-continuous and fuzzy soft b-LC-continuous functions.

In [9], the author suggested a mathematical model in form fractional-order differential equations (FDEs) system identifying population dynamics in two species bacteria struggling one another and exposed to multiple antibiotics simultaneously. Stability analysis of the equilibrium points of the proposed model was also carried out. Additionally, the results of the analysis have promoted by numerical simulations.

## 2 Acknowledgement

We would like to express our deepest thanks to all of the members of the editorial board and reviewers of the papers in this issue who are İ. Deli, F. Karaaslan, F. Smarandache, M. A. Noor, B. Davvaz, J. Zhan, H. Garg, S. Broumi, S. Pramanik, M. I. Ali, P. K. Maji, O. Muhtaroglu, A. A. Ramadan, S. Enginoğlu, S. J. John, M. Ali, A. Sezgin, A. M. A. Latif, M. Sarı, J. Ye, D. Mohamad, İ. Zorlutuna, A. Shehata, K. Aydemir, T. Biswas, S. Demiriz, H. Olğar, A. Boussayoud, E. H. Hamouda, K. Mondal, G. Senel, N. Yaqoob, Q. H. Imran, A. F. Atik, P. G. Patil, F. Feng.

JNT publishes original research articles, reports, reviews and commentaries that are based on a theory of mathematics. However, the topics are not limited to only mathematics, but also include statistics, computer science, physics, engineering, chemistry, biology, economics or social sciences that use a theory of mathematics.

JNT is a refereed, electronic, open access and international journal. Papers in JNT are published free of charge.

Please, write any original idea. If it is true, it gives an opportunity to use. If

it is incomplete, it gives an opportunity to complete. If it is incorrect, it gives an opportunity to correct.

You can reach freely all full text papers at the journal home pages;

<http://www.newtheory.org> or <http://dergipark.gov.tr/jnt>

To receive further information and to send your recommendations and remarks, or to submit articles for consideration, please e-mail us at **[jnt@newtheory.org](mailto:jnt@newtheory.org)**.

We hope you will enjoy this issue of JNT. We are looking forward to hearing your feedback and receiving your contributions.

Happy reading!

### 3 Contents

- [1] Generalized Forms of Upper and Lower Continuous Fuzzy Multifunctions, Pages 1-12, Ismail Ibedou, Salah Abbas.
- [2] Q-Soft Normal Subgroups, Pages 13-22, Rasul Rasuli.
- [3] On Micro Topological Spaces, Pages 23-31, Sakkraiveeranan Chandrasekar.
- [4] Generalized Roughness of  $(\in, \in \vee q)$ -Fuzzy Ideals in Ordered Semigroups, Pages 32-53, Azmat Hussain, Muhammad Irfan Ali, Tahir Mahmood.
- [5] Summability of Fourier Series and its Derived Series by Matrix Means, Pages 54-63, Abdelhadi Mohammad Karazon, Mohammad Mahmoud Amer.
- [6] Weak Soft Binary Structures, Pages 64-72, Arif Mehmood Khattak, Zia Ullah Haq, Muhammad Zamir Burqi, Saleem Abdullah.
- [7]  $\Psi^*$ -Locally Closed Sets and  $\Psi^*$ -Locally Closed Continuous Functions in Topological Spaces, Pages 73-83, Ashraf Said Nawar.
- [8] Fuzzy Soft Locally Closed Sets in Fuzzy Soft Topological Space, Pages 84-89, Sandhya Gandasi Venkatachalarao, Anil Prabhakar Narappanavar.
- [9] Fractional-order Mathematical Modeling of Bacterial Competition with Therapy of Multiple Antibiotics, Pages 90-103, Bahatdin Daşbaşı.
- [10] Review of Number 26, Pages 104-106, Naim Çağman.