10TH INTERNATIONAL CONFERENCE ON COMPUTATIONAL MATHEMATICS AND ENGINEERING SCIENCES

24-26 APRIL, 2026

Istanbul – Türkiye

PROGRAM BOOK

ONLINE

THE TENTH INTERNATIONAL CONFERENCE ON COMPUTATIONAL MATHEMATICS AND ENGINEERING SCIENCES (CMES-2026), ISTANBUL/TÜRKİYE, APRIL 24-26, 2026

The **Tenth International Conference on Computational Mathematics and Engineering Sciences (CMES-2026)** will be held in Beykent University from **24- to 26 April 2026 in İstanbul, Türkiye.** The symposium to be held this year is also significant as it is being organised in honour of Prof. Dr Etibar Penahlı's 70th birthday. It provides an ideal academic platform for researchers and professionals to discuss recent developments in both theoretical, applied mathematics and engineering sciences. This event also aims to initiate interactions among researchers in the field of computational mathematics and their applications in science and engineering, to present recent developments in these areas, and to share the computational experiences of our invited speakers and participants.

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MESSAGE FROM THE GENERAL CHAIRS


Dear Conference Attendees,

We are honored to welcome you to the **Tenth International Conference on Computational Mathematics and Engineering Sciences (CMES-2026)** at Beykent University from 24 to 26 April 2026 in Istanbul City, Türkiye.

CMES, founded in 2016 at Faculty of Science and Techniques Errachidia Moulay Ismail University Morocco is an annual intarnational conference, which was very successful in the past years by providing opportunities to the participants in sharing their knowledge and informations and promoting excellent networking among different international universities. This year, the conference includes 200 extended abstracts, several submissions were received in response to the call for papers, selected by the Program Committee. The program features keynote talks by distinguished speakers such as:
Nikolay A. Kudryashov from National Research Nuclear University MEPhI, Russia; **Aly R. Seadawy** from Taibah University, Saudi Arabia; **Yeliz Karaca** from University of Massachusetts Chan Medical School, USA, **Javid Ali** from Department of Mathematics , Aligarh Muslim University, Aligarh, India; **Adil Jhangeer** from VSB-Technical University of Ostrava, Czech Republic; **Varga Kalantarov** from Koç University, Türkiye, **Yusif Gasimov** from Azerbaijan University, Azerbaijan. The conference also comprises contributed sessions, posters sessions and various research highlights.

We would like to thank the Program Committee members and external reviewers for volunteering their time to review and discuss submitted abstracts. We would like to extend special thanks to the Honorary, Scientific and Organizing Committees for their efforts in making CMES-2026 a successful event. We would like to thank all the authors for presenting their research studies during our conference. We hope that you will find CMES-2026 interesting and intellectually stimulating, and that you will enjoy meeting and interacting with researchers around the world.

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TOPICS

Control Theory,
Game Theory,
Applied Mathematics,
Financial Mathematics,
Artificial Intelligence,
Education Sciences,
Engineering Sciences,
Computer Science,
Information Technology,
Geometry and Its Applications,
Analysis and Its Applications,
Statistics and Its Applications,
Algebra and Its Applications,
Topology and Its Application,
Chaos and Dynamical Systems,
Cryptography and its Applications,
Fractional Calculus and Applications,
Economics and Econometric Studies,
Electrical and Electronic Engineering,
Defense industry and applications,
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Computational Epidemiology,
Mathematical Chemistry,
Mathematics Education and Its Applications,
Numerical Methods and Scientific Programming,
Linearand Nonlinear programming and Dynamics,
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PROCEEDINGS

Full version of submitted papers will be published in Special Volumes of reputed journals. Procedure, Guidelines and Checklist for the preparation and submission of papers to the Proceedings of CMES-2026 can be found in the journals websites. The journals in which selected and peer-reviewed full papers of CMES-2026 will be published are as follows:

1. **BOOK OF ABSTRACTS [Free of charge]**

If Authors submit ABSTRACT TEXTS, then, after getting referees evaluations for these abstracts, they will be published in ABSTRACT PROCEEDING BOOK of CMES-2025. For FULL TEXT PAPERS, Authors have to submit their FULL TEXT PAPERS online via submission system of CMES-2025. These FULL TEXT PAPERS will be published in FULL TEXT PROCEEDING BOOK of CMES-2025 after getting at least two positive reports.

2. **CONFERENCE PROCEEDINGS [Free of charge]**

At the beginning, if Authors submit FULL TEXT PAPERS, then, after getting at least two positive referee reports, FULL TEXT PAPERS will be published in FULL TEXT PROCEEDING BOOK of CMES-2025 with ISBN:77733 number. Therefore, Abstracts of these FULL TEXT PAPERS will **NOT** be published in ABSTRACT PROCEEDING BOOK of CMES-2025.

3. FRACTAL AND FRACTIONAL JOURNAL [SCI-E], Selected papers from CMES-2025 will be published in a special issue dedicated to the Conference entitled "**Feature Papers for Mathematical Physics Section".**
https://www.mdpi.com/journal/fractalfract/special_issues/1TAP5BBZ45
This journal is indexed by SCI-E.

4. PROCEEDINGS OF THE INSTITUTE OF MATHEMATICS AND MECHANICS [E-SCI]
Selected papers from CMES-2025 will be published by https://proc.imm.az/special/

This journal is indexed by E-SCI.

5.TURKISH JOURNAL OF SCIENCE, [FREE]
Participants of CMES 2025 can submit their good quality papers to Turkish Journal of Science. After the peer review process, the papers will be published at TJOS. The authors must write "CMES 2025" as comments to the editor.
(Editor in Chief: Dr. Ahmet Ocak AKDEMİR) For on-line submission: https://dergipark.org.tr/tr/pub/tjos

6.TURKISH JOURNAL OF INEQUALITIES, [FREE]
"Participants of CMES 2025 can submit their good quality papers to Turkish Journal of Inequalities. Selected papers will be published at TJI after the peer review process. The participants can send their papers to erhanset@tjinequality.com. The authors must write "CMES 2025" as the subject.
(Editor in Chief: Prof. Dr. Erhan SET)
http://tjinequality.com/

7. MATHEMATICS IN NATURAL SCIENCE (MNS)
Authors can submit their full text paper directly to the journal by using the following link
https://www.isr-publications.com/mns

8. MATHEMATICS IN ENGINEERING, SCIENCE AND AEROSPACE (MESA), [FREE, SCOPUS]
"Selected papers will be published after peer review in the Journal of Mathematics in Engineering, Science and Aerospace (MESA)"
(Editor in Chief: Prof. Seenith Sivasundaram)
http://nonlinearstudies.com/index.php/mesa

9. APPLIED MATHEMATICS AND NONLINEAR SCIENCES, [SCOPUS]
Participants of CMES 2025 can submit their high quality full text papers to Applied Mathematics and Nonlinear Sciences by selecting CMES-2025 under the Select Article Type Menu.
https://www.editorialmanager.com/amns/default.aspx

10. MATHEMATICAL MODELLING AND NUMERICAL SIMULATION WITH APPLICATIONS (MMNSA), [TR DİZİN]
The Special Issue on "Advanced Methods of Modelling and Numerical Computation in Science and Engineering". Authors can submit their full text paper directly to the journal by using the information provided in the following link
https://mmnsa.org/index.php/mmnsa/special_issues/SI-CMES2023

11. SYMMETRY [SCI-E] ; SPECIAL ISSUE "ADVANCES IN MATRIX TRANSFORMATIONS, OPERATORS AND SYMMETRY"
Authors can submit their full text paper directly to the journal by using the following link
https://www.mdpi.com/journal/symmetry/special_issues/Advances_Matrix_Transformations_Operators_Symmetry

12. YUZUNCU YIL UNIVERSITY JOURNAL OF THE INSTITUTE OF NATURAL AND APPLIED SCIENCES (TR-Dizin)
Authors can submit their full text paper directly to the journal by using the following link
https://dergipark.org.tr/tr/pub/yyufbed

13. PEDAGOGICAL PERSPECTIVE (PEDPER)
Pedagogical Perspective **(PedPer)** is an international, double blind reviwing, non-profit, professional scientific journal. PedPer is a journal that accepts manuscripts related to pedagogy and education.
http://pedagogicalperspective.com/

14. COMPUTATIONAL METHODS FOR DIFFERENTIAL EQUATIONS (CMDE)
This is to announce that according to the authentication letter numbered 3/18/64395 dated 22 June 2016 issued by the Iranian Ministry of Science, Research and Technology, the Computational Methods for Differential Equations (CMDE) is ranked as "Scientific Research" Journal. Moreover, the CMDE is indexed by the well-known databases such as Web of Science, Scopus, Clarivate Analytics products and services- ESCI, ISC (Islamic World Science Citation Center), Zentralblatt, Doaj, etc. Before the review process, all papers are checked by iThenticate for plagiarism, and similarities of up to 25% are considered acceptable, taking into account author names but not including references.
https://cmde.tabrizu.ac.ir/

PROF. DR. ETIBAR PENAHLI

Professor Etibar Panakhov, born in 1955 in the Kalinin region of Armenia, is a renowned mathematician and an internationally recognized authority in the field of spectral theory of differential operators.

He graduated with honors from the Physics and Mathematics Boarding School in Baku in 1971 and from the Faculty of Mechanics and Mathematics of Azerbaijan State University in 1976. During his final year, he completed and defended his diploma thesis at Moscow State University. He continued his postgraduate studies at Moscow State University (1976–1980) and, in 1981, successfully defended his PhD thesis under the supervision of the prominent mathematician Professor B.M. Levitan. Since 2017, E. Panakhov, has been a Doctor of Science in Mathematics and a year later, he received a diploma as a professor of Azerbaijan.

Professor Panakhov's research has made significant contributions to the theory of direct and inverse spectral problems for differential operators. His work focuses on the spectral analysis of regular and singular Sturm–Liouville, Dirac, diffusion, and integro-differential operators, as well as inverse problems in potential theory. In recognition of the importance of his contributions, the Soviet Academy of Sciences included his work among the most significant scientific achievements of 1991.

He is the author of more than 200 scientific publications and has played a vital role in the development of the next generation of mathematicians. Under his supervision, 25 master's theses have been completed and 15 doctoral degrees awarded, with six of his students advancing to professorships.

From 1996 to 2019, Professor Panakhov served as Professor at Firat University in Elazig, Turkey, where he held key leadership roles, including Head of the Mathematics and Actuarial Departments, member of the University Senate, and advisor to the Rector on international relations with Turkic-speaking countries.

A committed leader in the global mathematical community, Professor Panakhov is a founding organizer of the Turkic World Mathematicians Society (TWMS) and served as its Vice President for over two decades, representing both Turkey and Azerbaijan. He has also been a principal organizer of multiple international TWMS congresses.

His international academic engagement includes visiting professorships in India, France, Iran, Hong Kong, Kazakhstan, and other countries, reflecting the global impact of his work.

Professor Panakhov currently serves as Co-Editor-in-Chief of the TWMS Journal of Pure and Applied Mathematics and continues to contribute actively to its advancement. He has also led the "Inverse Problems and Image Definition" Department at the Scientific Research Institute of Applied Mathematics under Baku State University and is a member of the Expert Council on Mathematics of the Higher Attestation Commission under the President of the Republic of Azerbaijan.

PLENARY & INVITED TALKS

TALK IN HONOR OF PROF. DR. ETIBAR PENAHLI

PROF.DR. VARGA KALANTAROV[1]
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TALK IN HONOR OF PROF. DR. ETIBAR PENAHLI

PROF.DR. MIKHAIL BRODSKY[1]
[1]President at Lincoln University, Lincoln, United Kingdom
president@lincolnuca.edu

TALK IN HONOR OF PROF. DR. ETIBAR PENAHLI

PROF. DR. YUSIF GASIMOV[1]
[1] Vice-rector; Azerbaijan University, Azerbaijan

vkalantarov@ku.edu.tr

FROM THE PAINLEVÉ TEST TO SOLUTIONS OF THE KURAMOTO–SIVASHINSKY EQUATION WITH NONLINEAR CONVECTION

PROF. DR. NIKOLAY A. KUDRYASHOV[1]

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Nuclear,University MEPHI, 31 Kashirskoe Shosse, 115409 Moscow,

Russian Federation,

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ABSTRACT

This report is devoted to the study a generalization of the Kuramoto-Sivashinsky equation in the form [1]

$$u_t + u_{xx} + \sigma u_{xxx} + u_{xxxx} + \beta u u_x + \chi (u^2)_{xx} = 0.$$

This equation is used to model processes in combustion physics, plasma physics, hydrodynamics, and other fields. Since the Cauchy problem for this equation cannot be solved by the inverse scattering transform, a traveling wave reduction is employed to seek solutions. It is shown that the equation generally fails the Painlevé test. However, we find parameter of equation values, the necessary condition for the existence of a general solution is satisfied [2]. Using the results of the Painlev\'e analysis, first integrals for the nonlinear ODEs are derived. The general solutions for two specific cases, each involving four arbitrary constants, are presented in terms of the Weierstrass elliptic function and the transcendental solutions of the first Painlevé equation. Furthermore, exact solutions with one and two arbitrary constants are obtained using the simplest equation method.

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RECENT DEVELOPMENTS ON ANALYTICAL AND COMPUTATIONAL METHODS FOR PARTIAL DIFFERENTIAL EQUATIONS WITH APPLICATIONS IN PHYSICS AND ENGINEERING

PROF. DR. ALY R. SEADAWY[1]
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ABSTRACT

Partial differential equations have become a useful tool for describing the natural phenomena of science and engineering. Nonlinear evolution equations (NLEEs) arise in many branches of science such as mathematics, physics, mechanics, engineering, and material science. The NLEEs are widely used to describe physical phenomena in various scientific and engineering fields, such as fluid mechanics, plasma physics, optical fibres, biology, solid-state physics, etc. Exact solutions of NLEEs play an important role in the proper understanding of the mechanism of many physical phenomena and processes in various areas of natural science. They can help to analyze the stability of these solutions and the movement role of the wave by making graphs of the exact solutions. The potential topics The main topics will be as follows:

- Methods of Mathematical Physics.
- Partial differential equations.
- Fractional partial differential equations.
- Stability analysis of dynamical system.
- Nonlinear water waves.
- Soliton solutions.
- Related topics about the partial differential equations.
- Computational fluid dynamics.
- Advanced theory of the fractal and fractional calculus.
- Methods for solving the fractal and fractional PDEs in physics and Engineering.
- Application of the fractal and fractional calculus in physics and Engineering.
- Fractal variational principle.
- Computational fluid dynamics

MATHEMATICAL NEURON–NEURAL-NETWORKS DYNAMICS WITH CONTINUOUS- AND DISCRETE-TIME MODELS IN NEUROSCIENCE, BIOLOGY AND PRECISION MEDICINE: COMPLEX FEATURE ENGINEERING AND DATA COMPLEXITY

PROF. DR. YELİZ KARACA[1]

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ABSTRACT

The extraction of the association between the complex systems' components could be regarded as a challenge due to their nonlinear characteristics; thus, focusing deterministically on only one single aspect of a situation may impede the understanding of the whole system or attaining a unitary whole. Data and refining of a raw dataset emerge as one important property of feature engineering through which the features for each label are built and the data used for the feature are filtered. There could be instances when missing values may include incorrect, incomplete and non-existent information, which reduce the accuracy and performance of machine learning algorithms. For the purpose of compensating this situation, complex feature engineering, which is a process of selecting, generating or modifying features such as sets of input variables or data to facilitate machine learning models learn patterns more effectively, provides complementary solutions in unstable environments with emergent structural and behavioral patterns, where emergence refers to shifts in the whole systems behavior. The features emphasize the quintessential example of the way simplicity generates complexity in conjunction with the inquiries regarding how it is possible that patterns can emerge from randomness. Further in mathematical aspects, mathematical modeling (i.e. wavelets, fractional calculus, fractals, artificial intelligence (AI), deep learning, ensemble methods, entropy, and so on) integrated with advanced technologies has been extensively utilized to characterize complex patterns existent in different areas such as medicine, neuroscience, biology, epidemiology, signal processing, image processing, computer informatics, data science, applied sciences, engineering and other related fields. Furthermore, discrete time and continuous time are two alternative frameworks within which variables that evolve over time are modeled in mathematical dynamics. Discrete time views values of variables as occurring at distinct, separate points in time, or equivalently as being unchanged throughout each non-zero region of time or time period. This implies that time is regarded as a discrete variable. Hence, a non-time variable jumps from one value to another as time moves from one time period to the next. To put it differently, discrete signal or discrete-time signal is a time series that consists of a sequence of quantities. While system

behavior is expressed by difference equations, discrete signals are common in computational simulations and data-based modeling processes. Continuous time, on the other hand, regards variables as having a
2
particular value only for an infinitesimally short amount of time. Between any two points in time, there are an infinite number of other point, and therein, the time variable could range over the entire real number line, or depending on the context, over some subset of it such as the non-negative reals. Thus, in continuous time modeling, the system behavior is generally denoted through differential equations, and in nature, they represent most of the physical processes like fluids, mechanical systems, epidemiology, and so forth. Overall, generally discrete models signify computational and complexity power, whereas continuous models signify theoretical accuracy. For these reasons, these two approaches complement each other in modern sciences. Hidden Markov Model (HMM), as a stochastic process where implicit or latent stochastic processes can be inferred indirectly through a sequence of observed states, is proven to be an applicable mathematical model concerning uncertain phenomena toward the description and computation of complex dynamical behaviors, thereby enabling the mathematical formulation of neural dynamics across spatial and temporal scales. HMM and multifractal methods within the framework of predictive quantization complexity models have been demonstrated to provide for the differential prognosis and differentiation of the subgroups with respect to multiple sclerosis (MS) which is an autoimmune degenerative disease with time and space related dissemination, leading to neuronal apoptosis, coupled with some subtle features that could be overlooked in clinical or medical practices. Overall, it is highly essential to quantify the nonlinear brain dynamics and its anatomical structure to be able to grasp the subtle features; yet, characterization across different interacting spatio-temporal scales is involved due to the brain's operation on multiple timescales, which may pose a formidable challenge. In view of these aspects and considerations as well as based on work and research conducted, the current lecture specifically aims to facilitate multifaceted decision-making processes, optimized outcome prediction, addressing the complexity of diseases and identification of the right pre-determined features through the proper selection of the variables with respect to the related discipline based on the pertinent criteria so that the mathematical model can be established appropriately. Such factors also emphasize the interdisciplinary regimes including the medical, clinical and computer-based aspects based on mathematical modeling considering their distinctive contributions that need to be carried out appropriately in a well-poised balance and knowledge-based scheme. These can ensure the identification of the external factors triggering the diseases along with the past history thereof, which can bring about timely and accurate prediction, diagnostics, course of the disease, follow-up, efficient management while being able to maintain the life quality of the patients with optimal outcomes including life-quality, (self-)control and survival, as health primarily is at stake.

Keywords: Complex feature engineering and data complexity, Computational and mathematical biology-medicine, Mathematical modeling, Discrete-time models, Continuous-time models, Mathematical neurology; Mathematical neuron-neural-networks dynamics modeling; AI, Ensemble predictive algorithmic systems; Deep learning, Mobile cloud computing; Computational complexity; Diffusion MRI signal processing; Accurate neuron geometry models, Bloch Torrey PDE, Stochastic processes and analyses, Pre-determined features; Uncertainty quantification; Precision medicine; Multifractal and singularity analysis; Fractional calculus operators; Discrete Hidden Markov model.

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A NOVEL APPROACH FOR CHARACTERIZING NONLINEAR DYNAMICAL SYSTEM BEHAVIOR THROUGH SELF-ORGANIZING MAPS AND CLUSTERING ANALYSIS

PROF. DR. ADIL JHANGEER[1]

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Abstract

Understanding the behavior of complex nonlinear dynamical systems remains a significant challenge because of the high dimensionality and intricate interactions among system parameters. These complexities often mask the underlying dynamical patterns, making it difficult to predict and control system responses under varying conditions.

In this study, we propose a novel framework based on Self-Organizing Maps (SOMs) combined with clustering techniques to systematically characterize system behavior arising from parameter variations. The proposed approach groups dynamical responses that exhibit similar patterns and enables the identification of latent structures within the parameter space.

To further interpret the resulting clusters, we perform a detailed dynamical analysis of each group. As a case study, the methodology is applied to the FitzHugh–Nagumo model, demonstrating its effectiveness in revealing distinct behavioral regimes. The obtained results identify meaningful latent patterns and classify the parameter space into 12 major behavioral groups, reflecting the heterogeneous nature of the system dynamics.

Overall, this approach provides an effective tool for understanding how parameter variations influence system behavior and offers valuable insights for the prediction and control of complex nonlinear systems.

CONTROLLABILITY OF GENERALIZED HILFER FRACTIONAL DYNAMICAL SYSTEMS WITH DELAYS

PROF. DR. JAVID ALI[1]

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Abstract

In this talk, we discuss the controllability of dynamical systems with (k,φ)-Hilfer fractional derivative with infinite delay and delay in control function. The necessary and sufficient condition obtained for the controllability requirement for linear systems, which are characterized by the Mittag–Leffler (M–L) functions, while the fixed point approach is used to arrive at adequate controllability criteria for nonlinear systems. The novel feature of this study is to inquire into the controllability notion by using (k, φ)-Hilfer fractional derivative, the most generalized variant of the Hilfer derivative. The advantage of this type of fractional derivative is that it recovers the majority of earlier studies on fractional differential equations (FDEs). Finally, few numerical examples are provided to illustrate our main results.

Keywords: Fractional dynamical systems, Controllability, Gramian matrix, Fixed point theorem, measure of non-compactness.

Day 3: 26 April 2026 (Online)

09:30 - 10:00	**PLENARY LECTURE** | Zoom: https://zoom.us/j/91881917723 **Speaker:** PROF. DR. ADIL JHANGEER **Title:** A NOVEL APPROACH FOR CHARACTERIZING NONLINEAR DYNAMICAL SYSTEM BEHAVIOR THROUGH SELF-ORGANIZING MAPS AND CLUSTERING ANALYSIS **Chair:** PROF. DR. TUBA GÜLŞEN
10:15 - 10:45	**PLENARY LECTURE** | Zoom: https://zoom.us/j/92289826748 **Speaker:** PROF. DR. JAVID ALI **Title:** CONTROLLABILITY OF GENERALIZED HILFER FRACTIONAL DYNAMICAL SYSTEMS WITH DELAYS **Chair:** PROF. DR. BAHADDİN SINSOYSAL

Hall 1 | 11:00 - 13:00 | Zoom: https://vks.odu.edu.tr/rooms/6um-es9-5l7-dgv/join

Chair: Dr. Öğr. Üyesi Ayşenur AKKILIÇ

AUTHORS	TİTLES
Fatma Kaymaz Karahan, Doğan Şengül	DESIGNING AN IN-PLANT LOGISTICS SYSTEM TO REDUCE WORK-IN-PROCESS: A MILK-RUN APPLICATION IN A MACHINING LINE
Şeyma Firdevs Hızal, Nur Seza Altınışık	MATHEMATICAL MODELING AND NUMERICAL ANALYSIS OF SALMONELLOSIS TRANSMISSION BETWEEN ANIMAL AND HUMAN POPULATIONS
Ali Ulvi Kasapoğlu, Seval Ene Yalçın	PREDICTING CONSTRUCTION PROJECT DELAYS USING MACHINE LEARNING MODELS
Sefa Yılmaz, Sertaç Çadırcı	COMPUTATIONAL FLUID DYNAMICS SIMULATIONS FOR TURBINE BLADE COOLING USING JET IMPINGEMENT
Elif Yıldızlılar, Ahmet Yönetken, Kübra Kaysal	PERFORMANCE ANALYSIS OF DRONE SENSOR SIGNALS WITH DIFFERENT KALMAN FILTERS
Tolga Ulaş Gürbüz, Birol Aslanyürek	A RECURSIVE APPROACH FOR EFFICIENT COMPUTATION OF THE GREEN’S FUNCTION OF MULTILAYER MEDIA WITH ARBITRARILY SHAPED BOUNDARIES
Ali Jabbari, Ercan Çelik	HYPER TAUBERIAN ALGEBRAS AND A BRIEF PROOF OF AMENABILITY FOR C(X)
Ali Jabbari, Ercan Çelik	CONVOLUTION OPERATORS ON SEMIDIRECT PRODUCTS AND CROSSED PRODUCTS OF MEASURE ALGEBRAS

Hall 2 | 11:00 - 13:00 | Zoom: https://vks.odu.edu.tr/rooms/upy-9h6-oha-6w7/join

Chair: Dr. Öğr. Üyesi Funda TÜRK

AUTHORS	TİTLES
Zozan Oktan, Cemil Tunç	ASYMPTOTIC STABILITY ANALYSIS FOR SECOND-ORDER NONLINEAR STOCHASTIC INTEGRO–DELAY DIFFERENTIAL EQUATIONS
Zozan Oktan, Cemil Tunç	STABILITY AND BOUNDEDNESS ANALYSIS OF THIRD-ORDER NONLINEAR STOCHASTIC DIFFERENTIAL EQUATIONS WITH DELAY
Melike Karta, Nimet Tanır	NUMERICAL SOLUTION OF THE GENERALIZED EQUAL WIDTH WAVE (GEW) EQUATION USING THE CRANK-NICOLSON FINITE DIFFERENCE SCHEME WITH OPERATOR SPLITTING TECHNIQUE
Melike Karta, Kadriye Nazlıaydın	NUMERICAL SOLUTION OF THE 1-DIMENSIONAL BENJAMIN-BONA-MAHONY-BURGERS EQUATION USING A DISCRETE APPROXIMATION METHOD WITH OPERATOR SPLITTING TECHNIQUE
Gülnihal Demir, Pelin Özkartepe	GROWTH AND DERIVATIVE ESTIMATES OF ALGEBRAIC POLYNOMIALS IN THE COMPLEX PLANE
İlknur Kızıl, Ulviye Demirbilek, Hadi Rezazadeh	WAVE SOLUTIONS, ENERGY ANALYSIS, AND PHYSICAL CHARACTERIZATION OF A NONLINEAR EVOLUTION EQUATION
Ulviye Demirbilek, Hasan Bulut, Ercan Çelik, İlknur Kızıl	SOLITON WAVE STRUCTURES OF (2+1) DIMENSIONAL NONLINEAR EVOLUTION EQUATION

Hall 3 | 11:00 - 13:00 | Zoom: https://vks.odu.edu.tr/rooms/u6w-oy7-kj0-71d/join

Chair: Prof. Dr. Ayşe METİN KARAKAŞ

AUTHORS	TİTLES
Aslıhan Demir, Ayşe Metin Karakaş, Sinan Çalık	THE NOVEL LOMAX-GARIMA DISTRIBUTION: PROPERTIES AND APPLICATIONS
Damla Dağ, İlhame Amirali	ON STABILITY INEQUALITIES AND NUMERICAL SOLUTIONS OF THIRD-ORDER NEUTRAL INTEGRO-DIFFERENTIAL EQUATIONS
Selçuk Han Aydın, Shokoufeh Ghezeljeh	FUNDAMENTAL SOLUTION METHOD AND APPLICATION TO THE 3-D MHD EQUATIONS
Ali Sercan Karakaş	A RESEARCH STUDY ON THE NUMERICAL SOLUTION OF THE BURGERS EQUATION BY GALERKIN METHOD BASED ON HERMITE B-SPLINE FUNCTIONS
Numan Yalçın	A PRELIMINARY STUDY ON THE ANAGEOMETRIC LAPLACE TRANSFORM
Emre Ünal, Ümit Esra Özcan, Mehmet Aksoy, Hacer Taşdöğen	INVESTIGATION OF GEOMETRIC PARAMETERS AFFECTING FAILURE-TO-FEED MALFUNCTIONS IN SMALL-CALIBER RIFLES
Andrzej Gontarz, Piotr Surdacki	RADIAL HOT ROLLING OF STEEL RINGS USING SLEEVE

Hall 4 | 11:00 - 13:00 | Zoom: https://vks.odu.edu.tr/rooms/7rv-t5i-pe0-dmt/join

Chair: Prof. Dr. Alper Osman ÖĞRENMİŞ

AUTHORS	TİTLES
Nermin Ulas, Alper Osman Ogrenmis	MULTIPLICATIVE LOKSODROME CURVES ON HELICOIDAL SURFACES
Etibar Panakhov, Aytan Bakhshizada	ASYMPTOTIC FORMULA FOR EIGENVALUES OF CANONICAL FORM OF THE DIRAC OPERATOR
Hüseyin Şen	OSCILLATION OF SOLUTIONS OF DIFFERENCE EQUATIONS WITH CONTINOUS ARGUMENTS
Murat Arı	A NUMERICAL APPROACH FOR A COUPLED NONLINEAR WAVE SYSTEM USING A MESHLESS COLLOCATION FRAMEWORK
Ajay Kumar	FRACTIONAL MODIFIED CAMASSA–HOLM AND DEGASPERIS–PROCESI EQUATIONS: DYNAMIC BEHAVIOR AND NONLINEAR WAVE STRUCTURES
Betül Atay	ON INDEPENDENT DOMINATION OF JUMP GRAPHS

Hall 5 | 11:00 - 13:00 | Zoom: https://vks.odu.edu.tr/rooms/sqh-ohx-mtu-usw/join

Chair: Dr. Öğr. Üyesi Yasemin DEMİREL

AUTHORS	TİTLES
Sinan Aslan	SOME INTEGRAL INEQUALITIES DERIVED FROM EXPONENTIALLY QUASI-CONVEX PARTIAL DERIVATIVES ON THE CO-ORDINATES
Fatih Temizsu	ON GENERALIZED P-DECREASING SEQUENCES IN LATTICE NORMED SPACES VIA LACUNARY DENSITY
Seçkin Yalçın, Murat Candan	FIBONACCI WEIGHTED DIFFERENCE SEQUENCE SPACE
Mahir Ceylan Erdoğan	A NOVEL METHOD TO SOLVE THE SOME CONFORMABLE FRACTIONAL NONLINEAR PARTIAL DIFFERENTIAL EQUATIONS
Hüseyin Ekinci, Gulshat Muhametjanova	THE EFFECT OF GEOGEBRA SOFTWARE ON MATHEMATICS ACHIEVEMENT OF SECONDARY SCHOOL STUDENTS IN KYRGYZSTAN
Gözde Özyurt	A STUDY ON NECTARINE MATRICES VIA SPLIT-COMPLEX REPRESENTATION
Etibar Penahlı, Ahu Ercan	FRACTIONAL EULER METHOD FOR SOLVING FRACTIONAL DIFFERENTIAL EQUATIONS

Hall 6 | 11:00 - 13:00 | Zoom: https://vks.odu.edu.tr/rooms/qsq-xqz-xba-9c4/join

Chair: Prof. Dr. Yavuz ALTİN

AUTHORS	TİTLES
Okan Genç, Ömer Oruç	EN EFFICIENT NUMERICAL METHOD FOR SECOND ORDER SINGULARLY PERTURBED DIFFERENTIAL EQUATIONS
Bahar Acay Öztürk	MATHEMATICAL MODELING OF EARTHQUAKE EFFECTS ON MULTISTOREY BUILDINGS USING THE PROPORTIONAL DERIVATIVE APPROACH
Eman Bakır Ahmad Ajm, Fatma Tokmak Fen, Mehmet Onur Fen	ANTIPERODICITY IN QUASILINEAR IMPULSIVE SYSTEMS
Süleyman Sarikaya, Yavuz Altin	LACUNARY STATISTICAL CONVERGENCE OF ORDER α IN CONE METRIC SPACES
Lale Cona, Deniz Şimşek	A HYBRID ITERATION APPROACH FOR SPLIT EQUILIBRIUM AND FIXED POINT PROBLEMS
Lale Cona, Jackson Kalule	ABOUT SOLVING GENERALIZED VARIATIONAL INEQUALITY, FIXED POINT AND EQUILIBRIUM PROBLEMS
Zehra Özdemir, Canan Yanilmaz, Emrah Yilmaz	GOTTMAN-MURRAY PROBLEM ON BIGEOMETRIC MULTIPLICATIVE CALCULUS

Hall 7 | 11:00 - 13:00 | Zoom: https://vks.odu.edu.tr/rooms/mtk-dqo-aim-w50/join

Chair: Prof. Dr. Oktay MUHTAROV

AUTHORS	TİTLES
Ugur Bayrakçı, Seyma Tülüce Demiray, Tayyip Onat	ON THE SOLUTIONS OF UNIDIRECTIONAL WAVE MODEL
İrem Çakmak, Tuba Gulsen, Etibar S. Panakhov	A NUMERICAL STUDY OF RUNGE–KUTTA METHODS WITHIN THE FRAMEWORK OF GEOMETRIC MULTIPLICATIVE CALCULUS
Ayşe Deniz Birkan, Tuba Gulsen, Etibar S. Panakhov	MODELING MEMORY EFFECTS IN WATER DISTRIBUTION NETWORKS VIA FRACTIONAL CALCULUS
Gülden Altay Suroğlu, Ayşe Buğatekin, Yaşar Tatar, Esra Ölçücü	A MULTIPLICATIVE MODEL FOR TIMEDEPENDENT RESIDUAL LIMB VOLUME CHANGES USING FRUSTUM-BASED LAYER GEOMETRY
Gülden Altay Suroğlu, Şeyma Firdevs Hızal, Münevver Yıldırım Yılmaz, Hasan Bulut	A CONFORMABLE FRENET FRAMEWORK FOR REGULARIZED FRACTAL FAULT CURVES
Oktay Mukhtarov, Merve Yücel, Kadriye Aydemir	SOLUTION OF HELMHOLTZ EQUATION BY THE α-P DTM
M. Sivabalan, A. Ashwin, Mehmet Yavuz, T. Nandha Gopal, T. Megala	NONLINEAR DYNAMICS OF A PREDATOR-PREY MODEL WITH FEAR REFUGE MECHANISM AND PREY HARVESTING

Hall 8 | 11:00 - 13:00 | Zoom: https://vks.odu.edu.tr/rooms/7vx-3wu-a89-dln/join

Chair: Doç. Dr. Hatice TAŞKESEN

AUTHORS	TİTLES
Marcelo V. Flamarion	SOLITON GAS IN NON-INTEGRABLE SYSTEMS
Hatice Taskesen, Zehra Cabir	LOCAL EXISTENCE FOR SOLUTIONS OF A DAMPED WAVE EQUATION OF VARIABLE COEFFICIENT
Büşra Ceylan Kuzu, Yunus Güral	SPARSE MODEL INFERENCE IN HIGH-DIMENSIONAL DATA: CORRELATION-SENSITIVE ADAPTIVE LASSO METHOD AND PERFORMANCE ANALYSIS
Nurhan Dündar	THE PROPERTIES OF SOLUTIONS TO THE WEAKLY DISSIPATIVE MODIFIED CAMASSA HOLM EQUATION
Mehmet Aydınalp, Tuba Ağırman Aydın	RECTIFYING SWEEPING SURFACES WITH A SPACELIKE SPINE CURVE IN LORENTZ–MINKOWSKI SPACE
Mehmet Aydınalp, Tuba Ağırman Aydın	RECTIFYING SWEEPING SURFACES WITH A TIMELIKE SPINE CURVE IN LORENTZ–MINKOWSKI SPACE
Mine Babaoğlu	SEMI-ANALYTICAL ANALYSIS AND SIMULATION OF DELAY DIFFERENTIAL EQUATIONS

Hall 9 | 11:00 - 13:00 | Zoom: https://vks.odu.edu.tr/rooms/hro-1vn-xki-fws/join

Chair: Doç. Dr. Birol Aslanyürek

AUTHORS	TİTLES
Tolga Ulaş Gürbüz, Birol Aslanyürek	ON THE USE OF NONLINEAR TRANSFORMATIONS FOR BOX-CONSTRAINED CONTRAST SOURCE INVERSION
İzzet Akbulut, Sema Yurdakul	IMPROVING ENVIRONMENTAL SUSTAINABILITY PERFORMANCE IN A PARTICLEBOARD PLANT
Alper Döyen	A HYBRID FUZZY AHP-PROMETHEE II APPROACH FOR EVALUATING CUSTOMER SERVICE REPRESENTATIVES IN THE BANKING SECTOR
Emre Bayrak, Murat Işık, Engin Kocaman, Mustafa Safa Yılmaz, Bahattin Koç	EFFECT OF MILLING PARAMETERS ON SURFACE ROUGHNESS, HARDNESS, TENSILE STRENGTH AND MICROSTRUCTURE IN INCONEL 718 ALLOY PRODUCED BY ADDITIVE MANUFACTURING METHOD
Dilara Yapışkan, Cristiana J. Silva	DYNAMICAL ANALYSIS OF BRUCELLOSIS TRANSMISSION UNDER MULTIPLE TIME DELAYS
Furkan Koçaslan, Ömer Gönül, Önder Güler	FEASIBILITY ASSESSMENT AND OPTIMIZATION OF RENEWABLE-SUPPORTED ELECTRIC BUS CHARGING OPERATIONS
Eda Nur Alıç, Nurettin Ekizoğlu, Abdullah Bulut, Mustafa Yurdakul, Ali Fırat İnal	FUZZY LOGIC–BASED ARDUINO SMART IRRIGATION SYSTEM FOR WATER CONSUMPTION OPTIMIZATION USING SENSOR DATA
Duygu Dönmez Demir, Asuman Açık, Ali Konuralp	A MATRIX COLLOCATION APPROACH BASED ON PELL-LUCAS PLYNOMIAL FOR SOLVING NONLINEAR DIFFERENTIAL EQUATIONS

Hall 10 | 11:00 - 13:00 | Zoom: https://vks.odu.edu.tr/rooms/evh-g1r-ju4-vpd/join *Chair: Prof. Dr. Erdal BAŞ*

AUTHORS	TİTLES
Muhittin Evren Aydın, Harith Adnan Arab Al-Azzawi	EXISTENCE OF RADIAL SOLUTIONS FOR CURVATURE-TYPE EQUATIONS
Ismail Onder, Muslum Ozisik, Aydin Secer	ON OPTICAL SOLITONS AND QUALITATIVE ANALYSIS OF THE THIRD ORDER PERTURBED NONLINEAR SCHRODINGER EQUATION HAVING THE KERR LAW IN THE ABSENCE OF GROUP VELOCITY DISPERSION
Sehnaz Yıldırım, Erdal Bas	MATHEMATICAL PHARMACOKINETIC PROCESSES WITH LOCAL DERIVATIVE
Sumeyye Turan, Erdal Bas	M-SERIES DERIVATIVE MATHEMATICAL MODELING FOR ADVANCED BUILDING ENERGY OPTIMIZATION
Hasan Cakicioglu, Muslum Ozisik, Aydin Secer	CUBIC-QUINTIC FORM OF SELF-PHASE MODULATION FOR THE (2+1)- PERTURBED BISWAS-MILOVIC EQUATION WITH OPTICAL DROMIONS
Elif Tufan Gov, Muslum Ozisik, Aydin Secer	OPTICAL DROMIONS WITH THE (2+1)-DIMENSIONAL STOCHASTIC PERTURBED GENERALIZED NONLINEAR SCHRODINGER EQUATION HAVING THE KERR LAW OF SELF-MODULATION
Asan Omuraliev, Peyil Esengul kyzy	ASYMPTOTIC ANALYSIS OF SINGULARLY PERTURBED VOLTERRA-TYPE INTEGRAL EQUATIONS
Beyza Billur İskender Eroğlu, Derya Avcı	BOUNDARY CONTROL OF HEAT CONDUCTION UNDER THE FADING MEMORY EFFECT
Aylin Yetim, Derya Avcı	A NOVEL MODEL FOR THE DYNAMIC INTERACTION OF ADDICTION, UNEMPLOYMENT, AND CRIME

Hall 11 | 11:00 - 13:00 | Zoom: https://vks.odu.edu.tr/rooms/sh2-s0a-oui-9ou/join

Chair: Doç. Dr. Ulviye DEMİRBİLEK

AUTHORS	TİTLES
Dumitru Baleanu	ON MODIFIED FRACTIONAL OPERATOR WITH MITTAG-LEFFLER KERNEL
Numan Yalcin, Mutlu Dedeturk	A STUDY ON THE ANAGEOMETRIC DERIVATIVE AND ITS FUNDAMENTAL PROPERTIES
Bahattin Erkmen, Bilal Şeker, İsmail Can Şeker	COMPARISON OF IMAGE ENHANCEMENT PERFORMANCES OF DIFFERENT POLYNOMIAL-BASED APPROACHES
Mücahit Yüzgül, Bilal Şeker, İsmail Can Şeker	ENHANCEMENT OF IMAGE CONTRAST USING POLYNOMIAL-BASED NUMERICAL METHODS
Nada Alsaaıd, Ulviye Demirbilek, Arzu Akbulut	LIE SYMMETRY ANALYSIS, CONSERVATION LAWS AND EXACT SOLUTIONS OF A NONLINEAR EVOLUTION EQUATION
Hazal Yüksekkaya	THE PLATE PARTIAL DIFFERENTIAL EQUATION: EXISTENCE AND DECAY
Yusuf Erbek, Bilal Şeker, İsmail Can Şeker	BRIGHTNESS ENHANCEMENT OF LOW-LIGHT IMAGES USING POLYNOMIAL-BASED

Hall 12 | 11:00 - 13:00 | Zoom: https://vks.odu.edu.tr/rooms/e0t-c0e-uiu-9yp/join

Chair: Prof. Dr. Fevzi ERDOĞAN

AUTHORS	TİTLES
Rıfat Oku, Fevzi Erdoğan	HYBRID FUZZY REGRESSION MODELS: A COMPARATIVE STUDY
Mustafa Hicret Yaman	EDMD OF EARTHQUAKE ACTIVITY IN TURKIYE
Aytekin Enver, Fatma Ayaz	FRACTIONAL REACTION–DIFFUSION MODELING OF COLORECTAL CANCER THERAPY
Ezgisu Uzel, Alper Osman Ogrenmis	SPIRAL CURVES AND GENERALIZATIONS IN THE MULTIPLICATIVE PLANE
Ahmad Muhammad, Muhammad Abubakar Isah, Salim Jibrin Danbatta, Sulaiman Sulaiman Ahmad	REVEALING DISSIPATION AS CAUSAL MEMORY STORAGE IN LINEAR AND NONLINEAR SYSTEMS: QSER APPLICATION
Ahmad Muhammad, Muhammad Abubakar Isah, Salim Jibrin Danbatta, Sulaiman Sulaiman Ahmad	QSER: A PHYSICS-GUIDED DECOMPOSITION FRAMEWORK FOR PHYSICAL SYSTEMS
Cihan Öksüz, Etibar Penahlı, Münevver Tuz	COMPARATIVE ANALYSIS OF EXPONENTIAL, LOGISTIC, AND GOMPERTZ TUMOR GROWTH MODELS AND MATHEMATICAL EVALUATION OF THE TREATMENT EFFECT
Mustafa Hicret Yaman	PHYSICS-INFORMED DMDC FOR CYLINDER FLOW

Hall 13 | 11:00 - 13:00 | Zoom: https://vks.odu.edu.tr/rooms/gxm-jvh-pns-ng2/join

Chair: Prof. Dr. Derya ARSLAN

AUTHORS	TİTLES
Nooriza Mirzabekova, Ercan Çelik	APPROXIMATE SOLUTIONS OF LINEAR INTEGRO-DIFFERENTIAL EQUATIONS USING BESSEL POLYNOMIALS
Sadaghat Shahmorad, Ercan Çelik	BLOCK GAUSSIAN ELIMINATION WITH QR FACTORIZATION IN PLACE OF DIAGONAL BLOCK INVERSION
Elif Deniz Öztürk, Ercan Çelik, S.Şule Şener Kılıç	KUDRYASHOV EXPANSION METHOD APPLIED TO FISHER MATHETICAL MODEL
Tuğba Yavuz	NOTES ON SOME CLASSES OF MEROMERPHIC CLOSE-TO-CONVEX FUNCTIONS
Ebru Cavlak Aslan, Özlem Pirinççi	SEMI ANALYTICAL SOLUTIONS OF TWO FORMS OF THE GKDV EQUATION
Ebru Cavlak Aslan, Emine Şimşek	EXACT SOLUTIONS OF A NONLINEAR COUPLED SYSTEM VIA EXTENDED HYPERBOLIC FUNCTION METHOD
Derya Arslan	A SECOND-ORDER ACCURATE NUMERICAL SCHEME FOR SINGULARLY PERTURBED BOUNDARY LAYER PROBLEMS WITH ERROR ANALYSIS

Hall 14 | 11:00 - 13:00 | Zoom: https://vks.odu.edu.tr/rooms/f0p-nul-eot-bzy/join

Chair: Doç. Dr. Yener ALTUN

AUTHORS	TİTLES
Sabri Gündüz, Faruk Düşünceli	NUMERICAL SOLUTION OF THE TELEGRAPH EQUATION USING ARTIFICIAL NEURAL NETWORKS
Yasemin Turğut	MULTI SOLITON SOLUTIONS OF SAWADA KOTERA EQUATION
Ramazan Aykat, Faruk Düşünceli	NUMERICAL SOLUTION OF THE KORTEWEG-DE VRIES EQUATION USING CHEBYSHEV POLYNOMIAL-BASED ARTIFICIAL NEURAL NETWORKS
Pınar Kurulur, Faruk Düşünceli	SOLVING LANE-EMDEN EQUATION THROUGH THE ELZAKI TRANSFORM METHOD
Beytullah Yağız, Sinan Deniz, Yener Altun	A HYBRID METAHEURISTIC APPROACH FOR HYPERPARAMETER OPTIMIZATION OF MACHINE LEARNING MODELS
Sinan Deniz, Beytullah Yağız, Yener Altun	INVESTIGATION OF DERIVATIVE-BASED AND DERIVATIVE-FREE OPTIMIZATION APPROACHES IN NONLINEAR PARAMETER ESTIMATION
Elif Yıldızlılar, Ahmet Yönetken, Kübra Kaysal	PERFORMANCE ANALYSIS OF DRONE SENSOR SIGNALS WITH DIFFERENT KALMAN FILTERS
Sertac Goktas, Melihcan Kurt	SOME PROPERTIES OF A FRACTIONAL SPECTRAL PROBLEM ON TIME SCALES

Hall 15 | 11:00 - 13:00 | Zoom: https://vks.odu.edu.tr/rooms/v1r-efh-d9h-o5m/join

Chair: Doç. Dr. Zulqıurnain Sabır

AUTHORS	TİTLES
Ayşe Elhaman	TRAVELLING-WAVE SOLUTIONS OF HIROTA EQUATION
Velat Karakeçi	MULTI SOLITON SOLUTIONS OF COMPLEX MKDV EQUATION
Fırat Korkmaz, Hatice Aslan	ON THE ADAPTATION OF SUMMABILITY METHODS TO SERIES WITH NONLINEAR FOURIER BASIS
Yusuf Fatihu Hamza	GAUSS-SEIDEL PROGRESSIVE ITERATIVE APPROXIMATION FOR CATMULL-CLARK SURFACES INTERPOLATION
Asan Omuraliev, Ella Abylaeva	ASYMPTOTIC ANALYSIS OF THE CAUCHY PROBLEM FOR A SINGULARLY PERTURBED LINEAR SCALAR INTEGRO-DIFFERENTIAL EQUATION
Seydou Traoré, Bakary Koné, Déthé Dione	FRACTIONAL MODELING AND OPTIMAL CONTROL OF COCOA BLACK POD ROT: A CAPUTO-FABRIZIO DERIVATIVE APPROACH
Yerra Shankar Rao, Kishan Kumar, Mehmet Yavuz, Binayak Dihudi	FRACTIONAL-ORDER MODELING OF MALWARE SPREAD USING THE HOMOTOPY PERTURBATION METHOD

Hall 16 | 11:00 - 13:00 | Zoom: https://vks.odu.edu.tr/rooms/ldx-fhi-b8t-g1c/join

Chair: Prof. Dr. Erhan PİŞKİN

AUTHORS	TİTLES
Fatih Rıza Çelik	APPROXIMATION BY FIBONACCI BASED KING TYPE SZÁSZ OPERATORS
Asif Pashayev	GLOBAL EXISTENCE OF SOLUTIONS TO THE MIXED PROBLEM FOR A SYSTEM OF NONLINEAR PSEUDO-HYPERBOLIC EQUATIONS
Rashad Mastaliyev, Khayala Alasgerova, Asif Pashayev	ON THE OPTIMALITY OF SINGULAR CONTROLS IN AN OPTIMAL CONTROL PROBLEM DESCRIBED BY A SYSTEM OF STOCHASTIC NONLINEAR INTEGRO-DIFFERENTIAL EQUATIONS
Erkan Sancar, Erhan Pişkin	NONEXISTENCE OF GLOBAL SOLUTIONS FOR THE WAVE EQUATION WITH FRACTIONAL TERM
Ayşe Fidan, Erhan Pişkin	QUALITATIVE ANALYSIS OF SOLUTIONS FOR A WEIGHTED HYPERBOLIC-TYPE EQUATION
Ayşe Demirhan, Erhan Pişkin	NONEXISTENCE OF GLOBAL SOLUTIONS FOR THE SINGULAR PARABOLIC-TYPE EQUATION
Özlem Ak Gümüş	EXPLORING COMPLEX BEHAVIORS IN A REFUGE-BASED DISCRETE PREDATOR–PREY MODEL
Ayşe Çiğdem Yar, Emrah Yılmaz	PROPORTIONAL HAPPINESS MODEL ON TIME SCALES

Hall 17 | 11:00 - 13:00 | Zoom: https://vks.odu.edu.tr/rooms/dm2-rst-swz-eu7/join

Chair: Prof. Dr. Seda ÖZMUTLU

AUTHORS	TİTLES
Muqddas Fatima, Panumart Sawangtong, Wannika Sawangtong	THE FRACTIONAL MODEL OF HEPATITIS B VIRAL INFECTION WITH HUMORAL IMMUNE RESPONSE VIA THE Φ-CAPUTO FRACTIONAL DERIVATIVE
Noor Fatima, Panumart Sawangtong, Wannika Sawangtong	A CAPUTO FRACTIONAL HBV MODEL WITH MULTI-STAGE CHRONIC PROGRESSION
Aykut Muderrisoglu, Berk Munci Inanc, Enes Mazlumoglu, Kazim Yildiz	CLASSIFICATION OF TURKISH E-COMMERCE PRODUCT REVIEWS USING TRANSFORMER-BASED DEEP LEARNING MODELS
Burcu Çağlar Gençosman, Seda Özmutlu	APPLICATION OF QUANTUM APPROXIMATE OPTIMIZATION ALGORITHM ON A SINGLE MACHINE SCHEDULING PROBLEM
Abdullah Semih Zivali, Soner Aydinlik	PREDICTING FORMULA 1 RACE OUTCOMES USING TREE BASED MACHINE LEARNING
Şevval Mayda, Nida Hayal Sevim, Kadirhan Demir, Yağmur Yener, Onur Kemal Kaytan, Ali Fırat İnal	AN EXPERT SYSTEM APPROACH TO BIRD STRIKE-SPECIFIC RISK ANALYSIS IN AVIATION: AN APPLICATION AT TAI
Mehmet Karay, Gülnur Yel, Hasan Bulut	INVESTIGATION OF THE VARIANT BOUSSINESQ SYSTEM SOLUTION VIA THE SARDAR SUB-EQUATION METHOD
Zelal Aslan, Ulviye Demirbilek, Arzu Akbulut	CONSERVATION LAWS AND EXACT SOLUTIONS OF A NONLINEAR PARTIAL DIFFERENTIAL EQUATION

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