



*International Conference on Mathematics and Mathematics Education
(ICMME-2021), Gazi University, Ankara, September 16-18 2021
"Mathematics in the footsteps of Gazi"*



INTERNATIONAL CONFERENCE

ON MATHEMATICS AND MATHEMATICS EDUCATION

ONLINE PROGRAMME

16 September 2021 Thursday (Time zone:UTC+3 / İstanbul)

OPENING CEREMONY

[Please click here to join the Opening Ceremony](#)



10:30-11:00	Assos. Prof. Dr. Hasan Hüseyin SAYAN (Head of MATDER)
	Prof. Dr. Naim TUĞLU (Head of Mathematics Department)
	Prof. Dr. Suat KIYAK (Dean of Science Faculty)
	Prof. Dr. Musa YILDIZ (Rector of Gazi University)

PLENARY LECTURE

[Please click here to join the Plenary Lecture](#)



Chair: Prof. Dr. Ömer AKIN

11:10-11:50	Invited Spiker: Prof. Dr. Vatan KARAKAYA
	“An Assessment on the Place of Mathematical Knowledge Between Form and Metaphysics”

PLENARY LECTURE


[Please click here to join the Plenary Lecture](#)




Chair: Prof. Dr. M. Tamer KOŞAN

13:30-14:10	Invited Spiker: Assoc. Prof. Dr. Jan Zemlicka
	“Self-Small Products of Abelian Groups”


16 September 2021 Thursday
SESSION I / 14:20-15:40 (Time zone: UTC+3 / İstanbul)


HALL 1	Please click here to join the Hall		
Chair: Prof. Dr. Ayhan ŞERBETCİ			
Time	Author(s)	Title	
14:20-14:40	<u>Serkan Ayan</u> Nurhayat İspir	Rate of Convergence by Bivariate Generalized Kantorovich Type Sampling Series	
14:40-15:00	Şule Yüksel Güngör	Approximation by Some Kantorovich Type Max-Product Operators	
15:00-15:20	Abdulhamit Küçükaslan	Spanne-type Result for the Generalized Fractional Maximal Operator in the Vanishing Generalized Weighted Local Morrey Spaces	
15:20-15:40	Abdulhamit Küçükaslan	An Extension of the Adams-type Theorem to Vanishing Generalized Weighted Morrey Spaces	

HALL 2	Please click here to join the Hall		
Chair: Prof. Dr. Fatma AYZAZ			
Time	Author(s)	Title	
14:20-14:40	<u>Derya Arslan</u> , Ömer Akın	Numerical Analysis of Singularly Perturbed Problems with Integral Boundary Conditions	
14:40-15:00	Agâh Akın, <u>Harun Baldemir</u> , Ömer Akın	A Mathematical Investigation of COVID-19 in Turkey Using a Susceptible Infectious Recovered (SIR) Type Model	
15:00-15:20	Mesrur Ümit Bingöl, <u>Sanem Akdeniz Şafak</u> , Ömer Akın	Fuzzy Similarity of Subalpine, Steppe and Segetal Vegetation for Black Sea Region in Turkey	
15:20-15:40	Selami Bayeğ, <u>Nurettin Doğan</u> , Raziye Mert, Ömer Akın	Singularly Perturbed Fuzzy Initial Value and Fuzzy Boundary Value Problems	

16 September 2021 Thursday

SESSION I / 14:20-15:40 (Time zone: UTC+3 / İstanbul)

HALL 3		Please click here to join the Hall		
Chair: Prof. Dr. Ercan ALTINIŞIK				
Time	Author(s)	Title		
14:20-14:40	<u>Oğuz Alkış</u> , Ahmet Arıkan, Aynur Arıkan	N-Barely Transitive Groups		
14:40-15:00	<u>Oğuz Alkış</u> , Ahmet Arıkan, Aynur Arıkan	NC-Barely Transitive Groups		
15:00-15:20	<u>Rümeysa Sacide Altınkaya</u> Aynur Arıkan	On the Finitary Permutation Groups		
15:20-15:40	Engin Özkan, <u>Mine Uysal</u> , Bahar Kuloğlu	On the Catalan Transforms of the Incomplete Jacobsthal Numbers		

HALL 4		Please click here to join the Hall		
Chair: Prof. Dr. Devrim ÇAKMAK				
Time	Author(s)	Title		
14:20-14:40	<u>Semih Çavuşoğlu</u> , Oktay Sh. Mukhtarov	Modified Finite Difference Method for Solution of Two-interval Boundary Value Problems with Transition Conditions		
14:40-15:00	<u>Rıdvan Yaprak</u> , Erhan Coşkun	A Slough/Wound Interaction Model Accounting for Cellular Diffusion		
15:00-15:20	<u>Derya Sekman</u> , Vatan Karakaya	On Controlling Chaos for Multi-Step Iteration Process and Its Special Iterations in Discrete Dynamical Systems		
15:20-15:40	<u>Hazal Yüksekaya</u> , Erhan Pişkin	Nonexistence of Global Solutions for a Hyperbolic-Type Wave Equation With Delay		

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PLENARY LECTURE

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Chair: Prof. Dr. Ömer AKIN

15:50-16:30	Invited Spiker: Prof. Dr. Allaberen ASHYRALYEV “Time-Dependent Source Identification Problem for Schrodinger Differential and Difference Equations”
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16 September 2021 Thursday

SESSION II / 16:40-18:20 (Time zone: UTC+3 / İstanbul)

HALL 1

[Please click here to join the Hall](#)





Chair: Assoc. Prof. Dr. İsmet ALTINTAŞ

Time	Author(s)	Title
16:40-17:00	Fadime Gökçe	On Absolute Fibonacci Series Space and Matrix Operators
17:00-17:20	Fadime Gökçe	On the Absolute Euler Summability Factors
17:20-17:40	Gürhan Soylu	Approximation Properties of Generalized Jain Operators of Two Variables
17:40-18:00	İsmail Ekincioğlu, Cansu Keskin, <u>Züleyha Açelya Üçer,</u>	On the Multilinear Riesz Bessel Transforms on Morrey Spaces
18:00-18:20	Rosalio Jr. Artes	Cycle Neighborhood Polynomial of Graphs

16 September 2021 Thursday

SESSION II / 16:40-18:20 (Timezone: UTC+3 / İstanbul)

HALL 2		Please click here to join the Hall			
Chair: Assoc. Prof. Dr. Nurettin DOĞAN					
Time	Author(s)	Title			
16:40-17:00	Muhammet Yazıcı	Decay Estimate for the Klein-Gordon Equation in Anti de Sitter Spacetime			
17:00-17:20	Bahatdin Daşbaşı	On stability of the bacterial infection model through incommensurate fractional-order system			
17:20-17:40	Ilhame Amirali, Gabil M. Amiraliyev, <u>Hülya Acar</u>	Fitted Numerical Method for a Volterra Delay Integro-Differential Equation			
17:40-18:00	Yakup Yıldırım	Sub Pico-Second Optical Solitons in Birefringent Fibers with Kaup-Newell Equation by Two Strategic Integration Technologies			
18:00-18:20	Maja Nedović	On semi-Nekrasov matrices			

HALL 3		Please click here to join the Hall			
Chair: Prof. Dr. Mustafa ÇALIŞKAN					
Time	Author(s)	Title			
16:40-17:00	<u>Anıl Altınkaya</u> , Mustafa Çalışkan	Bertrand Curves and B-Lift Curves in Lorentzian 3-Space			
17:00-17:20	Pooja Swaroop Saxena	A Study on Zermelo Navigation Problem and the Curvature Properties on Conic Kropina Manifolds			
17:20-17:40	<u>Kebire Hilal Ayyacı</u> , Süleyman Şenyurt, Davut Canlı	Some Special Smarandache Ruled Surfaces According to Flc Frame in E^3			
17:40-18:00	Aysel Turgut Vanlı	The Properties of Projective, Conircular and Conharmonic Curvature Tensor Fields on the Complex Sasakian Manifold			
18:00-18:20	<u>Aytekin Enver</u> , Fahd Jarad, Fatma Ayaz, Nilay Akgönüllü Pirim	Biquadratic C^2 Spline and Caputo Fractional Order Derivative			

16 September 2021 Thursday
SESSION II / 16:40-18:20 (Time zone: UTC+3 / İstanbul)


HALL 4		Please click here to join the Hall		
Chair: Prof. Dr. Hüseyin YILDIRIM				
Time	Author(s)	Title		
16:40-17:00	Zeynep Çakmak Gürel	The Opinions of Secondary School Students' Parents about Mathematics Course in Distance Education		
17:00-17:20	<u>Aybige Arabacı,</u> <u>Keziban Orbay</u>	The Effects Of Activities Carried Out With Web 2.0 Tools On Some Field Competencies Of Mathematics Teacher Candidates		
17:20-17:40	<u>B. Damla Baber Elbistan,</u> <u>Kolja Pustelnik</u>	On the Development of Planning Ability in Problem Solving from Grades 5 through 7		
17:40-18:00	Habip Mehmet Sevgi	Assessment of the Online Course Process During the Pandemic Period from the Perspective of Instructor (Mathematics Teacher)		
18:00-18:20	Sare Şengül, <u>Dilara Yılmaz</u>	Pre-service and In-service Teachers' Proof Schemes and Their Opinions on Mathematical Proof		


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PLENARY LECTURE	
Please click here to join the Plenary Lecture	
Chair: Prof. Dr. Sare ŞENGÜL	
10:00-10:40	Invited Spiker: Prof. Dr. Erdiñ ÇAKIROĞLU “Sayı Duyusunun Gelişimi ve Matematiksel Yeterlikler”

17 September 2021 Friday


SESSION III / 10:50-12:10 (Time zone: UTC+3 / İstanbul)


HALL 1	Please click here to join the Hall		
Chair: Prof. Dr. İsmail EKİNCİOĞLU			
Time	Author(s)	Title	
10:50-11:10	<u>Sezer Erdem,</u> Serkan Demiriz	Matrix Transformations and Some Algebraic and Topological Properties Related to the New Catalan Double Sequence Space	
11:10-11:30	<u>Sezer Erdem,</u> Serkan Demiriz	Some Results Related to New Jordan Totient Double Sequence Spaces	
11:30-11:50	Gencay Oğuz	Some Mean Ergodic Type Theorems	
11:50-12:10	Rahime Dere Paçin	Some Operator Identities on the Umbral Algebra	

HALL 2	Please click here to join the Hall		
Chair: Prof. Dr. Meryem KAYA			
Time	Author(s)	Title	
10:50-11:10	<u>Ersan Erdem,</u> Gölnur Çelik Kızıllkan	Analysis of Covid-19 epidemic in Turkey using Generalized SEIR Model	
11:10-11:30	Gonca Çelikten	Implicit Exponential Finite Difference Method for Numerical Solutions of Modified Burgers Equation	
11:30-11:50	Josipa Barić, Ljiljanka Kvesić, Josip Pečarić, <u>Mihaela Ribičić Penava</u>	Hermite-Hadamard -Fejér type inequalities for higher order convex functions and quadrature formulae	
11:50-12:10	Qing-Bo Cai, <u>Gölnur Torun,</u> Ülkü Dinlemez Kantar	The Asymptotic Behavior for Generalized λ - Bernstein-Stancu Type Operators	

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SESSION III / 10:50-12:10 (Time zone: UTC+3 / İstanbul)

HALL 3		Please click here to join the Hall			
Chair: Prof. Dr. Keziban ORBAY					
Time	Author(s)	Title			
10:50-11:10	<u>Çağla Ramis</u> , Yusuf Yaylı	Generating Circle-Foliated Transition Surfaces in Lorentz Space			
11:10-11:30	<u>Aslıhan İklim Şen</u> , Mustafa Saltan	On Some Closed Sets and Circles of the Added Sierpinski Triangle			
11:30-11:50	Halil İbrahim Yoldaş	Some Notes on $N(k)$ -contact Metric Manifolds			
11:50-12:10	<u>Davut Canlı</u> , Süleyman Şenyurt, Kebire Hilal Ayvacı	An Extension of Smarandache Ruled Surfaces According to Frenet Frame in E^3			

HALL 4		Please click here to join the Hall			
Chair: Prof. Dr. Mustafa KANDEMİR					
Time	Author(s)	Title			
10:50-11:10	<u>Sare Şengül</u> , Gülşah Gerez Cantimer	The Field Experiences on the Online Application of the Case Study Method in Mathematics Lesson			
11:10-11:30	<u>Gülşah Gerez Cantimer</u> , Sare Şengül	The Investigation of Studies on Case Study Method in Education			
11:30-11:50	<u>Göksu İnan</u> , Zeynep Hande Toyganözü, Cüneyt Toyganözü	An Application On Comparison of Student Achievements in Face-to-Face and Online Education Models in University Mathematics Education			
11:50-12:10	H. Elif Dağlıoğlu, <u>Hilal Genç Çopur</u>	Translation of the Digital Game Critter Corral into Turkish and Its Evaluation in Terms of Mathematics Education Standards and Appropriateness for Children			

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PLENARY LECTURE

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Chair: Prof. Dr Fatma AYZ

13:40-14:20	Invited Spiker: Prof. Dr. Matthias HEIL “Flows Past Cylinders: Are The Transitions Between Different Flow Regimes Caused by A Continuous Evolution or by Bifurcations?”
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SESSION IV / 14:30-15:50 (Time zone: UTC+3 / İstanbul)

HALL 1	Please click here to join the Hall		zoom Video Conferencing
Chair: Prof. Dr. Birol ALTIN			
Time	Author(s)	Title	
14:30-14:50	Bahri Turan, <u>Kazım Özcan</u>	Order Boundedness of Ideal Operator	
14:50-15:10	<u>Abdullah Akkurt</u> , Fatih Korkmaz, Hüseyin Yıldırım	Generalized Fractional Integral Inequalities on Convex Functions	
15:10-15:30	Ayşegül Keten Çopur, <u>Fatma Özceran</u>	Some Results Based on (p,r)-Compact Sets in Banach Spaces	
15:30-15:50	Aynur Keskin Kaymakçı, <u>Ayşe Nazlı Uresin</u>	Upper and Lower θ_p -continuous Multifunctions	

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SESSION IV / 14:30-15:50 (Time zone: UTC+3 / İstanbul)

HALL 2		
Please click here to join the Hall		
Chair: Prof. Dr. Adil MISIR		
Time	Author(s)	Title
14:30-14:50	Özge Kazar, Meryem Kaya	Global Existence and Uniqueness of The Inviscid Velocity-Vorticity Model of The g-Navier-Stokes Equations
14:50-15:10	Enes Ata, İ. Onur Kıymaz	New Fractional Operators Including Wright Function in Their Kernels
15:10-15:30	Ali Yakar, Hadi Kutlay	A Note on Monotone Technique for a class of Fractional Integro-Differential Equations
15:30-15:50	Zeliha Özdemir, Kemâl Aydın	Numerical Integration of System of Differential Equations by Iterative Decreasing Dimension Algorithm




HALL 3		
Please click here to join the Hall		
Chair: Prof. Dr. Mustafa Fahri AKTAŞ		
Time	Author(s)	Title
14:30-14:50	Engin Özkan, Mine Uysal	A Generalization of Gaussian Pell-Lucas Polynomials
14:50-15:10	Selami Ercan	Groups whose proper factor-groups are Fitting
15:10-15:30	Yüksel Soykan, Erkan Taşdemir, Tülin Erdoğan Taşdemir	A Note on Sum Formulas of Generalized Hexanacci Numbers: Closed Forms of the Sum Formulas $\sum_{k=0}^n kx^k W_k$ and $\sum_{k=1}^n kx^k W_{-k}$
15:30-15:50	Yüksel Soykan, Erkan Taşdemir, Melih Göcen	A Note on Sum Formulas of Generalized Pentanacci Sequence: Closed Forms of the Sum Formulas $\sum_{k=0}^n kx^k W_k$ and $\sum_{k=1}^n kx^k W_{-k}$



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SESSION IV / 14:30-15:50 (Time zone: UTC+3 / İstanbul)


HALL 4	Please click here to join the Hall		
Chair: Prof. Dr. Ercan ÇELİK			
Time	Author(s)	Title	
14:30-14:50	Fercan Filiz, Erbil Çetin	Existence of Solutions for a Third-order Boundary Value Problem with Integral Boundary Conditions on Infinite Intervals	
14:50-15:10	Gülnur Haçat, Mine Akbaş, Aytekin Çıbık	Analysis of Continuous Data Assimilation Scheme for the Navier-Stokes Equations Using Variational Multiscale Method	
15:10-15:30	Faton Merovci	The Poisson Topp Leone Generalized Exponential Distribution	
15:30-15:50	Faton Merovci	The Marshall–Olkin ,Transmuted Rayleigh Distribution. Statistical Properties and Different Methods of Estimation	


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PLENARY LECTURE	
Please click here to join the Plenary Lecture	
Chair: Assoc. Prof. Dr. H. Mehmet BAŞKONUŞ	
16:00-16:40	Invited Spiker: Prof.Dr. Zakia Hammouch “An Efficient Algorithm to Solve Nonlinear Reaction-Diffusion Problems With Non-Integer Order Derivatives”

17 September 2021 Friday

SESSION V / 16:50-18:30 (Timezone: UTC+3 / İstanbul)

HALL 1		Please click here to join the Hall			
Chair: Prof. Dr. Aynur ARIKAN					
Time	Author(s)	Title			
16:50-17:10	Naim Tuğlu, <u>Elif Ercan</u>	Some Properties of Apostol Bernoulli Fibonacci and Apostol Euler Fibonacci Polynomials			
17:10-17:30	<u>Tuğçe Pekacar Çalıcı</u> , Huanyin Chen, Sait Halıcıoğlu, Guo Shile	Linear Maps Preserving Drazin Inverses of Matrices Over Local Rings			
17:30-17:50	Filiz Çıtak	Some Notes on Soft Modules in Soft Sets			
17:50-18:10	<u>Seval Işık</u> , Figen Kangalgil	Behavioural Analysis of a Predator-Prey Model			
18:10-18:30	<u>Feda İlhan</u> , Figen Kangalgil	On Stability Analysis and Flip Bifurcation of a Discrete-Time Predator-Prey System with Allee Effect and Prey Immigration			

HALL 2		Please click here to join the Hall			
Chair: Prof. Dr. Cengiz ÇINAR					
Time	Author(s)	Title			
16:50-17:10	Nida Palamut Koşar	On Some Applications of Korovkin Type Theorem for k-Positive Linear Operators			
17:10-17:30	<u>Melek Eriş Büyükkaya</u> , Nesrin Güler, Melike Yiğit	Some Remarks on Predictors in Reduced Linear Models			
17:30-17:50	<u>Melek Eriş Büyükkaya</u> , Nesrin Güler, Melike Yiğit	Some Further Properties of BLUPs in SUR Models			
17:50-18:10	Galina Lyutskanova- Zhekova	Parametric Identification in ODE Models as a Tool for Solving Real-world Problems			
18:10-18:30	<u>Burak Oğul</u> , Dağıstan Şimşek	Dynamical Behavior of Rational Difference Equation $x_{n+1} = \frac{x_{n-11}}{\pm 1 \pm x_{n-1} x_{n-3} x_{n-5} x_{n-7} x_{n-9} x_{n-11}}$			

17 September 2021 Friday

SESSION V / 16:50-18:30 (Time zone: UTC+3 / İstanbul)

HALL 3		
Please click here to join the Hall		
Chair: Prof. Dr. Cenap ÖZEL		
Time	Author(s)	Title
16:50-17:10	Özgür Taşdemir	SIP-direct-injective Modules and Rings
17:10-17:30	Tülay Yağmur	Complex (Gaussian) q-Fibonacci and Complex (Gaussian) q-Lucas Quaternions
17:30-17:50	<u>Samet Sarıođlan</u> , Selma Altınok	The Universal Difference Property for Generalized Splines over Principal Ideal Domains
17:50-18:10	Abdullah Yener	Several Weighted Hardy type Inequalities with Robin Boundary Conditions
18:10-18:30		



HALL 4		
Please click here to join the Hall		
Chair: Prof. Dr. Fikret GÖLGELEYEN		
Time	Author(s)	Title
16:50-17:10	Ebru Ersarı	Preservice High School Mathematics Teachers' Experiences on their Fieldwork During the COVID-19 Pandemic
17:10-17:30	Ebru Ersarı	The Effectiveness of the Subject Area Textbook Review Course Amid the COVID-19 Pandemic
17:30-17:50	<u>Dilek Soysal</u> , Majid Bani-Yaghoub	A Disease Modeling Approach to Simulate the Spread of Math Anxiety Between Students
17:50-18:10	Tuđba Uygun	Development of Preservice Mathematics Teachers' TPACK through Digital Storytelling
18:10-18:30	Burcu Parlak	Examining the Effects of Pre-school Education on Mathematics Achievement at Different Socioeconomic Levels: The Case of TIMSS 2019 Turkey



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CLOSING CEREMONY

[Please click here to join the Closing Ceremony](#)



18:30-19:30

The feelings and thoughts of the participants about the symposium and their expectations for the future