# 22 September 2022 Thursday

	OPENING CEREMONY		
	Assoc. Prof. Dr. Hasan Hüseyin SAYAN (Head of MATDER)		
	Prof. Dr. Mustafa AŞCI (Head of Mathematics Department)		
10:00-11:00	Prof. Dr. Yakup KASKA (Dean of Science Faculty)		
	Prof. Dr. Ahmet KUTLUHAN (Rector of Pamukkale University)		

	PLENARY LECTURE	
	Fatma Yıldız Hall	
	Chair: Abdulhamit KÜÇÜKASLAN	
	Invited Spiker: Prof. Dr. Ömer AKIN	
11:15-12:00	"Some Interdisciplinary Applications of Fuzzy Logic"	

	PLENARY LECTURE		
	HALL S1		
	Chair: Malkhaz BAKURADZE		
	Invited Spiker: Prof. Dr. Yoshihiro Sawano		
13:00-14:00	"Weighted Morrey Spaces"		

## 22 September 2022 Thursday SESSION I / 14:15-15:35 (Time zone: UTC+3 / İstanbul)

HALL S1			
	Chair: Özlem Girgin ATLIHAN		
Time	Author(s)	Title	
14:15-14:35	Reyhan Canatan İLBEY Nilay Şahin BAYRAM	On (p,q)- Analogue of Mittag-Leffler Operators	
14:35-14:55	Hamdullah BAŞARAN Mehmet GÜRDAL	Refinement of Berezin Radius Inequalities with Kantorovich Ratio	
14:55-15:15	Mustafa GÜLFIRAT Nilay Şahin BAYRAM	On Ideals I(c,q)	
15:15-15:35	Abdulhamit KÜÇÜKASLAN	Spanne and Adams type Results in the Vanishing Generalized Weighted Local Morrey Spaces	

HALL S2		
		Chair: Ruslan SURMANIDZE
Time	Author(s)	Title
14:15-14:35	Nurettin DOĞAN Selami BAYEĞ Raziye MERT Ömer AKIN	Singularly Perturbed Two-Point Fuzzy Boundary Value Problems
14:35-14:55	Rauf AMIROV Sevim DURAK	Inverse Spectral and Inverse Nodal Problems For Singular Diffusion Equation
14:55-15:15	Özge ARIBAŞ İsmet GÖLGELEYEN Mustafa YILDIZ	On the Existence and Uniqueness of an Initial-Boundary Problem for a Semilinear Fractional Diffusion Equation
15:15-15:35	Ali KURT Abdulsamet BEKTAŞ	Analytical Solutions of Conformable Time Fractional Partial Differential Equation

## 22 September 2022 Thursday SESSION I / 14:15-15:35 (Time zone: UTC+3 / İstanbul)

HALL S3			
	Chair: Canan Celep YÜCEL		
Time	Author(s)	Title	
14:15-14:35	Gül Karadeniz GÖZERİ	A Note on the Sequence of Balancing-Like Numbers	
14:35-14:55	Serel MADAK	New Coding/Decoding Algorithm on k-Order Fibonacci Numbers	
14:55-15:15	Süleyman AYDINYÜZ Mustafa AŞCI	Moore-Penrose Inverse of Generalized k-Order Fibonacci Numbers	
15:15-15:35	Abdullah AKKURT Hüseyin YILDIRIM	Catalan Numbers in terms of \$(\alpha,k)\$-gamma function and \$(\alpha,k)\$-beta function	

HALL S5				
	Chair: İsmet AYHAN			
Time	Author(s)	Title		
14:15-14:35	Berna AYGÜN	Gamification in Computer Aided Mathematics Education: Classcraft		
14:35-14:55	Nehir KEYİK Rezan YILMAZ	6th Grade Students' Construction Processes of Prime Number Concept in Realistic Mathematics Education Based Environment		
14:55-15:15	Süleyman Emre AKTAŞ Çağlar Naci HIDIROĞLU	Investigation of Debugging Skills in Computational Thinking in the Technology-Enriched Mathematical Modeling Cycle		
15:15-15:35				

## 22 September 2022 Thursday SESSION II / 15:45-17:05 (Time zone: UTC+3 / İstanbul)

HALL S1		
		Chair: Ainur TEMIRKHANOVA
Time	Author(s)	Title
15:45-16:05	Aygül BİLGİN Hülya DURU Serkan İLTER	A note on quasi-metrizable spaces
16:05-16:25	Sena Özen YILDIRIM Ayşe Nur TUNÇ	On a Topological Operator via Local Closure Function
16:25-16:45	Havva Nur ÖZTÜRK Serkan İLTER Hülya DURU	A note on global classical solutions to a Cauchy problem
16:45-17:05	Canay AYKOL	Two-weighted inequalities for Riesz potential and its commutators in generalized weighted Morrey spaces

#### 22 September 2022 Thursday SESSION II / 15:45-17:05 (Time zone: UTC+3 / İstanbul)

HALL S2				
	Chair: Abdulhamit KÜÇÜKASLAN			
Time	Author(s)	Title		
15:45-16:05	Emel KARACA	A Survey on Non-null Slant Ruled Surfaces		
16:05-16:25	Hatice TOZAK	On k-type spacelike slant helices due to Bishop frame in Minkowski space-time		
16:25-16:45	Ruslan SURMANIDZE	On Dimensions of Invariant Tensor Fields on MWH Spaces with Subgroup of Given Type		
16:45-17:05	Serpil HALICI	p,q-Harmonic Numbers		

HALL S3		
		Chair: Ali KURT
Time	Author(s)	Title
15:45-16:05	Ramin	Spectral Expansion Formula for a Singular Sturm-Liouville Problem
	FARZULLAZADEH	
	Khanlar MAMEDOV	
16:05-16:25	Shabnur ALIZADEH	On the Scattering Problem for a Discontinuons Boundary Value Problem
	Khanlar MAMEDOV	
16:25-16:45	Jalolxon NURITDINOV	Minkowski difference of cubes
16:45-17:05	Jan ZEMLICKA	Small, compact or connected objects?

## 22 September 2022 Thursday SESSION II / 15:45-17:05 (Time zone: UTC+3 / İstanbul)

HALL S5	ONLINE	
		Chair: Berna AYGÜN
Time	Author(s)	Title
15:45-16:05	Mehmet ERÇOBAN	Examining the Processes of 7th Grade Students' Understanding of the Concept of Arithmetic Mean in the
	Sare ŞENGÜL	Framework of 3E Learning Model: Within the Scope of Open-Ended Task
16:05-16:25	Ferdağ CULHAN	Discursively Examination of 8th Grade Students' Geometric Thinking Levels
	Emine Gaye CONTAY	
16:25-16:45	Mustafa ALTUNTAŞ	Model Eliciting Activity Experiences of Primary School Teachers A TÜBİTAK Project(TM2İ)
	İsmail KAYGISIZ	
	İbrahim ÇETİN	
	Şeyma KARAN	
	Halil İbrahim CANLI	
16:45-17:05	İbrahim GÜNALTILI	The Effects of Mathematics on Human Intelligence-I

	PLENARY LECTURE
	HALL S1
	Chair: Emine Gaye ÇONTAY
	Invited Spiker: Prof. Dr. Gila Hanna-Dr. Kitty Yan
17:15-18:15	"Teaching proof with an interactive theorem prover"

## 23 September 2022 Friday

	PLENARY LECTURE		
	HALL S1 Google Meet Link for Online Participations: <u>https://meet.google.com/dpb-zphc-phm</u>		
	Chair: Abdulhamit KÜÇÜKASLAN		
	Invited Spiker: Prof. Dr. Amiran GOGATISHVILI		
09:00-09:45	"Weighted integral inequalities restricted on the cone of monotone functions and applications in the embedding's of Lorentz-type spaces"		

## 23 September 2022 Friday SESSION III / 10:50-12:10 (Time zone: UTC+3 / İstanbul)

HALL S1	Google Meet Link for Online Participations: <u>https://meet.google.com/dpb-zphc-phm</u>		
	Chair: Alp Arslan KIRAÇ		
Time	Author(s)	Title	
10:20-10:40	Şükran KONCA	A new 2-norm derived by bounded linear functionals on the space of p-summable sequences of real numbers	
10:40-11:00	Ebru ALTIPARMAK Ibrahim KARAHAN	A New Accelerated Fixed-Point Algorithm with Application to Image Restoration Problem	
11:00-11:20	Müjdat AĞCAYAZI	Some Results on Commutators	

11:20-11:40	Süleyman GÜNEŞ	Problem Solving Processes of Preservice Mathematics Teachers with Geometer's Sketchpad: The Case of
	Rezan YILMAZ	Simson Line Theorem

HALL S2	Google Meet Link for Online Participations: <u>https://meet.google.com/rfg-yfhs-evq</u>	
		Chair: Handan Çerdik YASLAN
Time	Author(s)	Title
10:20-10:40	Sema SERVİ Kürşat CANEVİ Galip OTURANÇ	Comparison of Semi-Analytical Methods with Solving Surge Tank Problem
10:40-11:00	Orhan ÖZDEMİR	Oscillation criteria for third-order nonlinear neutral differential equations via comparison principles
11:00-11:20	Şerife YILMAZ	Some problems with stabilization of linear systems
11:20-11:40	Esra ÇONGAR Sevim DURAK	Inverse Nodal Problems For Sturm-Liouville Operators With Singular Coefficient

## 23 September 2022 Friday SESSION III / 10:50-12:10 (Time zone: UTC+3 / İstanbul)

HALL S3	Google Meet Link for Online Participations: <u>https://meet.google.com/qtk-qsjz-pyv</u>			
		Chair: Gül Karadeniz GÖZERİ		
Time	Author(s) Title			
10:20-10:40	Ali AYTEKİN Tunçar ŞAHAN	Coverings of Hom-Lie Crossed Modules		
10:40-11:00	Miraç ÇETİN	Idun-semicommutative Rings		
11:00-11:20	Aysun Erdoğan SERT Simge ÖZTUNÇ	Banach and Kannan Type Contracting Mappings for Box Metric in Digital Images		
11:20-11:40	Okan Bodur Canan Hazar Güleç	On Some Properties of Double Series Spaces Derived by Cesaro Means		

HALL S4	Google Meet Link for Online Participations: <u>https://meet.google.com/efg-bcdp-jvd</u>			
	Chair: Çağlar Naci HIDIROĞLU			
Time	Author(s)	Title		
10:20-10:40	Gülşah Gerrez CANTİMER Sare ŞENGÜL	The Investigation of SSCI Indexed Studies on Problem Posing in Terms of Affective Components		
10:40-11:00	Büşra KIRAL Sare ŞENGÜL	Mathematical Reasoning and Proof in Fifth Grade Mathematics Textbook		
11:00-11:20	Gülşah Gerez CANTİMER Sare ŞENGÜL	The Content Analysis of Concept Mapping Studies in Education: The Status of Concept Mapping Studies in Our Country in the Last 10 Years		
11:20-11:40	Burcu PARLAK	Some Factors Affecting Mathematics Success with Problem Solving in Computer Based Assessment:TIMSS 2019		
11:40-12:00	Özgenur YILMAZ Güler TULUK	Application of Virtual Manipulatives and Simulations to Mathematics Lesson Plans		

## PLENARY LECTURE

	FATMA YILDIZ HALL Google Meet Link: <u>https://meet.google.com/pcv-cpme-xac</u>	
	Chair: Çağlar Naci HIDIROĞLU	
	Invited Spiker: Prof. Dr. Esra Bukova GÜZEL	
13:30-14:20	"Mathematics Education, Daily Life and Modelling"	

	PLENARY LECTURE		
	FATMA YILDIZ HALL Google Meet Link: <u>https://meet.google.com/pcv-cpme-xac</u>		
	Chair: Hasan Hüseyin SAYAN		
	Invited Spiker: Assist. Prof. Dr. İbrahim ÇETİN		
16:00-16:45	"Differences in the Way of Doing Maths from Past to Present"		

	PLENARY LECTURE		
	HALL S1 Google Meet Link for Online Participations: <u>https://meet.google.com/dpb-zphc-phm</u>		
	Chair: Ruslan Surmanidze		
	Invited Spiker: Prof. Dr. Malkhaz Bakuradze		
17:00-17:45	"On addition formulas related to elliptic integrals"		

#### 23 September 2022 Friday SESSION IV / 14:30-15:50 (Time zone: UTC+3 / İstanbul)

HALL S1	Google Meet Link for Online Participations: <u>https://meet.google.com/dpb-zphc-phm</u>		
	Chair: Amiran GOGATISHVILI		
Time	Author(s)	Title	
14:30-14:50	Ainur TEMİRKHANOVA	Alternative criteria for boundedness of one class of matrix operators in weighted sequence spaces	
14:50-15:10	Akbota ABYLAYEYA	Two-sided estimates of the norm of an operator with a logarithmic singularity for $p > q$	
15:10-15:30	Amiran GOGATISHVILI Tuğçe Ünver YILDIZ	From Cesaro and Copson to Morrey	
15:30-15:50	Muratbekov M.B. Muratbekov M.M.	Estimates of singular numbers (s-numbers) and eigenvalues of a mixed elliptic-hyperbolic type operator with parabolic degeneration	

#### 23 September 2022 Friday SESSION IV / 14:30-15:50 (Time zone: UTC+3 / İstanbul)

HALL S2	Google Meet Link for Online Participations: <u>https://meet.google.com/rfg-yfhs-evq</u>			
	Chair: Nurettin DOĞAN			
Time	Author(s) Title			
14:30-14:50	Dilek VAROL	A New Formula for the Operational Matrix of the Fractional Derivative of the Chebyshev Polynomials		
14:50-15:10	Güner TOPCU Kemâl AYDIN	Some Properties of Matrix Family Which Consist of Convex Combinations		
15:10-15:30	İlyas HAŞİMOĞLU	Asymptotics of the eigenvalues of a boundary value problem for the operator Schrödinger equation with a spectral parameter, which is included polynomially in the boundary condition		
15:30-15:50	Güner TOPCU Kemâl AYDIN	Some Properties of Matrix Family Which Consist of Linear Combinations		

HALL S3	Google Meet Link for Online Participations: <u>https://meet.google.com/qtk-qsjz-pyv</u>	
		Chair: Serpil HALICI
Time	Author(s)	Title
14:30-14:50	MERVE YAKAR Mustafa AŞCI	Bivariate Lucas Balancing Polynomials
14:50-15:10	UTKU PEHLİVAN	Permuting n- Derivations From Semilattices to Lattice
15:10-15:30	Şahin CERAN	Permuting n-(f,g)-Derivations on Lattices
15:30-15:50	Mustafa YILMAZ Mustafa ASCI	On Bivariate Gaussian Balancing Polynomials

## 23 September 2022 Friday SESSION IV / 14:30-15:50 (Time zone: UTC+3 / İstanbul)

HALL S4	Google Meet Link fo	or Online Participations: <u>https://meet.google.com/efg-bcdp-jvd</u>		
Chair: Cansel AYCAN				
Time	Author(s)	Title		
14:30-14:50	Hatice ÇETİNKAYA Gülay KORU YÜCEKAYA	On Matrixes of Commutative Quaternions		
14:50-15:10	Murat ALTUNBAŞ	Notes on Meta-Golden Riemannian Structures		
15:10-15:30	Fadime ORMAN Gülay KORU YÜCEKAYA	On Algebra of Elliptical Quaternions		
15:30-15:50	Erdem KOCAKUŞAKLI	Translating Solitons on Null Direction in Minkowski Space		

## 24 September 2022 Saturday SESSION V / 09:00-10:20 (Time zone: UTC+3 / İstanbul)

HALL S1	Google Meet Link for Online Participations: <u>https://meet.google.com/bxg-ftpg-aki</u>				
Chair: Murat BEŞENK					
Time	Author(s)	Title			
09:00-09:20	Gülnaz Boruzanlı EKİNCİ	K1,1-Structure Connectivity of Generalized and Double Generalized Petersen Graphs			
09:20-09:40	Kübra OYMAK Murat BEŞENK	Directed Orbital Triangle Graphs			
09:40-10:00	Ali Gökhan ERTAŞ İbrahim GÜNALTILI	On Some Basic Properties Of Finite Graph			
10:00-10:20	Ramazan SUNAR	On Projective Graphs			
HALL S2	Google Meet Link fo	Google Meet Link for Online Participations: <u>https://meet.google.com/gem-esjz-ywi</u>			
	Chair: Güllü Canan Hazar GÜLEÇ				
Time	Author(s)	Title			
09:00-09:20	Ömer AKGÜLLER Mehmet Ali BALCI	Deep Learning Based Classification of Eigenworms with Gramian Angular Fields			
09:20-09:40	Mustafa Hicret YAMAN Gamze YÜKSEL	Dynamic Mode Decomposition of Wake Flow			
09:40-10:00	Ömer AKGÜLLER Mehmet Ali BALCI	Classification of 3D Point Clouds Using Graph Communities and Deep Learning			
10:00-10:20	Deniz ELMACI Figen KANGALGİL	Stability Analysis of Prey – Predator System Involving Multiple Allee Effect			

## 24 September 2022 Saturday SESSION V / 09:00-10:20 (Time zone: UTC+3 / İstanbul)

HALL S3	Google Meet Link fo	or Online Participations: <u>https://meet.google.com/mwf-runm-vov</u>		
Chair: Çağlar Naci HIDIROĞLU				
Time	Author(s)	Title		
09:00-09:20	Serkan COŞTU	The Effect of PASS Theory Activities Used in the Learning Environment on the Development of Number		
	Büşra YAŞAR	Sense: A Pilot Study		
	Müjdat KARADAĞ			
	Ceren ERCAN			
09:20-09:40	Hasan Yasin TOL	Attitudes and Views of Secondary School Students towards Problem Solving		
	Selin ÇENBERCİ			
09:40-10:00	Serkan COŞTU	Predictors of Mathematics Learning Disability (Dyscalculia)		
	Lena LINDENSKOV			
10:00-10:20	Yeliz Özkan HIDIROĞLU	Current Strategies for the Empowerment of Mathematics Teachers		

HALL S4	Google Meet Link for Online Participations: <u>https://meet.google.com/xhm-ccng-ngz</u>				
Chair: Dilek VAROL					
Time	Author(s)	Title			
09:00-09:20	Fatmagül SAKLAVACI	Figures Placed Between Geometric Patterns in Medieval Anatolian Turkish-Islamic Architecture			
09:20-09:40	Gulseli BURAK	Some Properties of Metric in Digital Topology			
09:40-10:00					
10:00-10:20					

HALL S5	Google Meet Link for Online Participations: <u>https://meet.google.com/hjw-hgsh-big</u>			
Chair: Ainur TEMIRKHANOVA				
Time	Author(s)	Title		
09:00-09:20	Aliya Naaz SIDDIQUI	Inequalites on Riemannian Warped Product Submersions for Vertical Casorati Curvatures		
09:20-09:40	Siyat Nur NOYAN Ahmet Sinan ÇEVİK	Characterization of the Wreath Product $D_{2n}/\mathbb{Z}_2$ in Terms of p-Cockcroft Property		
09:40-10:00	Péter NEGYESI	Adaptive technologies for 21st century mathematics education		
10:00-10:20	Esengül YILDIZ	The Effect of Singapore Model and Worked-Out Examples Methods on Students' Success Level on Solving Word Problems Related to Numbers		