

ICAMΣ'18

International Conference on Applied Mathematics in Engineering

June 27-29, 2018 - Balıkesir, TURKEY

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Program Book



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June 27-29, 2018 - Balikesir, TURKEY

International Conference on Applied Mathematics in Engineering

We are pleased to announce that the International Conference on Applied Mathematics in Engineering (ICAME18) will be held from June 27 to June 29, 2018 in Burhaniye/Balikesir, Turkey. The aim of this conference is to bring together leading researchers and academics in the field of applied mathematics and engineers in order to debate current and interdisciplinary topics in control, fractional calculus, optimization and their applications in engineering sciences.

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ICAME'18	Wednesday, 27th June 2018	
	08:00-09:00	Registration
	09:00-09:45	Opening Ceremony
	09:45-10:30	Plenary Lecture-SALOON 1 Prof.Dr. Dumitru BALEANU (Chair) Prof.Dr. J. A. Tenreiro MACHADO
	10:35-10:50	Coffee Break
	10:50-11:35	Plenary Lecture-SALOON 1 Prof.Dr. Dumitru BALEANU (Chair) Prof.Dr. Albert C. J. LUO
	11:40-12:10	Invited Speaker Prof.Dr. Necati ÖZDEMİR (Chair) Prof.Dr. Ekrem SAVAŞ
	12:15-13:30	Lunch

Wednesday, 27th June 2018

		HALL 1 Fractional Calculus-I Chair: Dumitru BALEANU	
		Authors	Titles
Session 1	13:30-15:10	55- Adel Agila and Dumitru Baleanu	Discrete-Time Control of Fractional Dynamic Systems
		91- Tahir Cosgun , Murat Sari and Hande Uslu	A Discussion of the Generalized Abel Integral Equation
		37-Marcela Fabio and Maria Troparevsky	Approximate Solutions to Initial Value Problems for Fractional Differential Equations
		163- Mahmut Modanli	Using numerical method for third order fractional partial differential equation
		119- Berat Karaagac , Nuri Murat Yagmurlu, Selcuk Kutluay and Alaattin Esen	The Extended Modified Exp- Method and Its Application to Some Fractional Differential Equations
		HALL 5 Mathematical Modelling in Health Science-I Chair: Carla PINTO	
		Authors	Titles
Session 1	13:30-15:10	68- Carla Pinto , Ana Carvalho and J.N. Tavares	Time-varying pharmacodynamics in a simple non-integer HIV infection model
		247-Ahmed M. Elaiw, Shafeek. A. Ghaleb and A. Hobiny	Effect of discrete time delay and antibodies on HCV dynamics with cure rate and two routes of infection
		74- Tuğba Akman Yıldız , Sadia Arshad and Dumitru Baleanu	Optimal Control of Generalized Tumor Growth Model with Chemotherapeutic and Immunotherapeutic Treatment
		244- Esmehan Uçar , Necati Özdemir and Derya Avcı	Caputo's Fractional Derivative Model of Immune Response to Tumor Growth
		106-Murat Sari, Arshed Ahmad and Tahir Coşgun	Mathematical Modelling of a Medical Problem Using Multiple Linear Regression
15:10-15:30	Coffee Break		

Wednesday, 27th June 2018

		HALL 2	
		Control Theory	
		Chair: Mehmet Kemal LEBLEBICIOGLU	
		Authors	Titles
Session 1	13:30-15:10	70- Naci Saldi and Serdar Yüksel	Decentralized Stochastic Control: Optimality and Approximations
		156- Tuğba Küçükseyhan	Reduced Order Optimal Control of Gierer-Meinhardt Equation
		185- Fikriye Nuray Yılmaz	Comparison of the stabilized finite element solutions of optimal control of convection diffusion equation
		126- Ayşegül Ulus	Solving Discrete Time Infinite Horizon Optimal Control Problems by Weak Pontryagin's Principle: Method and Applications
		Facility Layout, Line Balancing, Manufacturing	
		Chair: Ramazan YAMAN	
		Authors	Titles
Session 1	13:30-15:10	122- Ahmad El Sayed and Gokturk Poyrazoglu	Optimal Storage Units' Sizing and Placements Within The Turkish Power Transmission Grid
		1- Ibrahim Kucukcoc and Francesco Pilati	Integrated assembly line balancing and feeding problem
		77- Sevde Dilruba Karayel , Ediz Atmaca and Seda Ay	Determination of Suitable Alternative in Facility Layout Problem Considering Different Criteria
		101- Muhammet Enes Akpinar , Mehmet Ali Ilgin and Sude Bulut	Implementation Of 5s Systematic In A Hard Chrome Plating Company
		98- Fatma Selen Madenoğlu	Weighted Superposition Attraction Algorithm for Type II Two-Sided Assembly Line Balancing Problem
15:10-15:30			

Wednesday, 27th June 2018

		HALL 3 Chaos Chair: Fatma TOKMAK FEN	
Session 1 13:30-15:10	Authors		Titles
	205-Metin Varan, Bahar Ulusoy, Ihsan Pehlivan, Bilal Gurevin and Akif Akgul		Nonlinear analysis and circuit realization of chaotic Aizawa system
	211-Marat Akhmet and Mehmet Onur Fen		Chaos Extension in Coupled Lorenz Systems
	212-Marat Akhmet and Mehmet Onur Fen		Poincaré Chaos in Non-autonomous Equations
	213- Fatma Tokmak Fen and Mehmet Onur Fen		Period-doubling Route to Chaos in Systems with Impulsive Effects
	203-Akif Akgul, Burak Aricioglu, Bilal Gurevin and Sezgin Kacar		Design of experiment setup for fractional order chaotic systems
		HALL 7 Metaheuristics Chair: Aslan Deniz KARA OGLAN	
Session 1 13:30-15:10	Authors		Titles
	97- Fatma Selen Madenoğlu		Metaheuristic Approach to Dual-Resource Constrained Job Shop Scheduling Problem
	183- Osman Tunca , Ibrahim Aydogdu, Ferhat Erdal and Serdar Carbas		Structural Design Optimization through Water Cycle Algorithm with Evaporation Rate
	152- Halima Lakhbab		Novel Hybrid Particle Swarm Optimization for Unconstrained Optimization Problem
	184- Osman Tunca , Ibrahim Aydogdu, Tevfik Oguz Omercioglu and Serdar Carbas		Grasshopper Optimization Algorithm Based Design of Structures
	270- Aslan Deniz Karaoglan , Ismail Atalay and Ibrahim Kucukkoc		Application of Artificial Bee Colony Algorithm for Distance Restricted Vehicle Routing Problem
15:10-15:30	Coffee Break		

Wednesday, 27th June 2018

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		HALL 4	
		Statistics	
		Chair: Vilda PURUTCUOGLU	
Session 1	13:30-15:10	Authors	Titles
		179- Elif Doğan Dar and Vilda Purutçuoğlu	Detection of Binding Sites of Chip-seq Data via Hidden Markov Model and Bayesian Inference of Model Parameters
		178-Melih Ağraz, Ekin Can Erkuş and Vilda Purutçuoğlu	A New R Programming Package for the Detection of Outliers in Univariate Time Series Data
		31- Hasan Tatli and Ş. Sibel Menteş	Power Law of Cross Correlation Between the North Atlantic Oscillation and Precipitation
		128- Talha Arslan and Birdal Senoglu	Estimating the Parameters of Truncated Jones and Faddy's Skew t Distribution
		104-Murat Sari, Hande Uslu and Tahir Coşgun	The Qualitative Behavior of Some Stiff ODEs Through Stochastic Methods
		Design Optimization	
		Chair: Ahmet SAHINER	
Session 1	13:30-15:10	Authors	Titles
		90-İlker Küçükoğlu, Fatma Balkancıoğlu, Emine Chousein Topal, Öznur Sayım and Tülin Gündüz	A methodical model formulation for the tool path optimization problem in CNC machines: A case study
		121- İdris A. Masoud Abdulhamid , Ahmet Şahiner and Nurullah Yılmaz	Smoothing Technique with Auxiliary Function Thru Bezier Curves for Global Optimization
		201- Ilker Gölcük , Adil Baykasoglu and Fehmi Burcin Ozsoydan	A cultural algorithm for mechanical design optimization
		124- Meltem Koşan and Mustafa Aktaş	A New Design of Solar-Assisted Heat Pump with Energy Storage for Heating Greenhouses
		109- Suna Ertunç , Özlem Türkşen and Nilüfer Vural	A Nonlinear Modeling and Optimization Process: Obtaining Optimal Drying Conditions for Olive Leaves
15:10-15:30		Coffee Break	

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		HALL 1	
		New Fractional Derivative-Nonlocal	
		Chair: Zakia HAMMOUCH	
Session 2	15:30-17:10	Authors	Titles
		36- Arran Fernandez and Dumitru Baleanu	A series formula for Prabhakar fractional operators
		231- Derya Avcı and Aylin Yetim	Initial-Boundary Value Problems in A Half-Space for An Advection-Diffusion Equation with Atangana-Baleanu Derivative
		262-Toufik Mekkaoui and El Abdon Atangana	New numerical approximation of fractional derivative with non-local and non-singular kernel: Application to chaotic models
		188- Mehmet Yavuz	Behavior of Fractional Derivative Operators Defined on Two Different Kernels in Nonlinear Equations
		HALL 5	
		Optimization in Health	
		Chair: Vilda PURUTCUOGLU	
Session 2	15:30-17:10	Authors	Titles
		57- Hasan H. Erođlu , Mehdi Sadighi and B. Murat Eyuboglu	Imaging Anisotropic Conductivity with Induced Current Magnetic Resonance Electrical Impedance Tomography (ICMREIT)
		85-Umut Akyüz and Vilda Purutcuoglu	Modeling of Breast and Gynecological Cancers Data and Investigating New Biological Findings
		89- Songul Cinaroglu	Ensemble Learning Methods to Deal with Imbalanced Disease Data
		273- Kadir Günođlu	Investigation of lifetime cancer risk and radiological hazards in some Marble samples mining from the Marmara Region
67- Emre Kara , Sinan Turhan, Ahmet İhsan Kutlar and Kivanç Güngör	Mathematical Modelling of a Glaucoma Drainage Device Testing Apparatus		
17:10-17:30		Coffee Break	

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		HALL 2	
		Control Applications-I Chair: Albert LUO	
Session 2	15:30-17:10	Authors	Titles
		103- Tolgay Kara and Emre Kara	A Short Review of CFD Based System Identification in Aerodynamics Applications
		38- Arshi Meraj and Dwijendra Pandey	Approximate controllability of non-autonomous Sobolev type differential equations with nonlocal condition
		196-Onur Silahtar and Özkan Atan	FPGA Based Synchronization by Using Adaptive Control Method of Two Different Chaotic Systems
		241- Haris Calgan , José Manuel Andrade and Metin Demirtas	Optimization of Capacitance and Speed Values for Self-Excited Induction Generators using the Response Surface Method
		HALL 6	
		Multiple Criteria Decision Making Chair: Ahmet SAHINER	
Session 2	15:30-17:10	Authors	Titles
		75- Sevde Dilruba Karayel and Ediz Atmaca	Identifying The Important Criteria for Determination of Temporary Debris Storage Sites By Using Analytic Hierarchy Process
		99- Muhammet Enes Akpinar and Mehmet Ali Ilgin	Evaluation Of Product Recovery Facilities Using Multi Criteria Decision Making
		44- Belkız Torğul and Turan Paksoy	A Hybrid MCDM Based QFD Approach for Supplier Selection Problem
		100-Mehmet Ali Ilgin, Muhammet Enes Akpinar and Sude Bulut	Evaluation Of Customers Of A Company Using Multi Criteria Decision Making
		45- Belkız Torğul and Turan Paksoy	A Simultaneous Optimization Model for Distribution Planning and Supplier Selection in Closed Loop Supply Chain Network
17:10-17:30	Coffee Break		

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		HALL 3	
		Nonlinear Phenomena Chair: Hüseyin MERDAN	
Session 2	15:30-17:10	Authors	Titles
		27- Hüseyin Merdan	Asset Flow Differential Equations
		34- Hasan Tatli	Detrended Fluctuation Analysis of Drought Over Turkey
		235- Utku Cem Karabulut , Levent Bilgili and Alper Kiliç	An Analytical Approach To Solve Blasius Equation By Method Of Weighted Residuals
		56- Matthias Hinze , André Schmidt and Remco I. Leine	Stability of Mechanical Systems Containing Fractional Springpot Elements
		214-İlkay Yaslan Karaca and Fatma Tokmak Fen	Third Order Impulsive Boundary Value Problems on Time Scales with Positive Solutions
Energy Optimization Chair: Ramazan YAMAN			
Session 2	15:30-17:10	Authors	Titles
		173- Hasan Huseyin Yildirim and Sakir Sakarya	Reinvestment Decisions for Wind Energy Projects
		169- Veysel Çoban and Sezi Cevik Onar	Selection of Solar Energy Plant with Large-scale Group Decision Making under Hesitant Fuzzy Linguistic Assessment
		236- Tuba Sinoplugil Tezer and Ramazan Yaman	Examples and assessments for Pareto-based multi-objective optimization approaches used for stand-alone hybrid renewable energy systems
		171- Veysel Çoban and Sezi Cevik Onar	Analysing of Solar Energy Pricing Process with Hesitant Fuzzy Cognitive Map
		240- Hasan Huseyin Yildirim and Mehmet Yavuz	Wind Energy Investments' Profitability Index Based on Artificial Neural Networks
		17:10-17:30	

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		HALL 4		
		Numerical Methods-I		
Session 2		Chair: Dogan KAYA		
		Authors	Titles	
		15:30-17:10	71- Doğan Kaya , Asif Yokuş and Uğur Demiroğlu	An Application for Sharma-Tasso-Olver Equations by Using Auto-Bäcklund Transformation
			48- Metin Şengül	Mixed Element Modeling via Newton's Method
			197- Hasan Gündüz and Mustafa İnç	(G'/G)-Expansion Method and Its Application to Whitham Broer-Kaup-Like Equation
			132- Sibel Ozer and Berat Karaagac	A New Outlook: A Numerical Study on Rosenau-Burgers Equation via Galerkin Finite Element Method
			222- Faruk Düşünceli , Ercan Çelik and Muzaffer Askin	New Exact Solutions for the Doubly Dispersive Equation Using an Improved Bernoulli Sub-Equation Function Method
		HALL 8		
		Artificial Intelligence-I		
Session 2		Chair: Metin DEMIRTAS		
		Authors	Titles	
		15:30-17:10	204- Ebru Dag , Metin Demirtas, Haris Calgan and Erdem Ilten	Modeling and Optimizing of the Intelligent Traffic Light system by using PLC
			191- Rabia Korkmaz Tan and Şebnem Bora	Exploiting the Impact of The Migration Operator Used in The Adaptive Genetic Algorithm in Optimization Problems of Complex Systems
			209- Sevcan Emek , Vedat Evren and Şebnem Bora	Agent-based Hormonal Regulation of Blood Glucose Levels Using Negative Feedback Control Mechanism
			153- İsmail Atbakan and Rifat Aşlıyan	Design of Textile Pattern Categorization Using Hough Transform
208-Murat Erhan Cimen, Sezgin Kacar, Emre Guleryuz, Bilal Gurevin and Akif Akgul	Modeling of chaotic motion video with artificial neural networks			
17:10-17:30	Coffee Break			

Thursday, 28th June 2018		
ICAMΣ'18	09:00-09:45	Plenary Lecture-SALOON 1 Prof.Dr. Dumitru BALEANU (Chair) Prof.Dr. Jordan Yankov HRISTOV
	09:45-10:15	Invited Speaker Prof.Dr. Albert C. J. LUO (Chair) Prof.Dr. Mehmet Kemal LEBLEBİCİOĞLU
	10:15-10:30	Coffee Break

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		HALL 1	
		Fractional Calculus-II	
		Chair: Fatma AYAZ	
Session 3	10:30-12:10	Authors	Titles
		251- Fatma Ayaz and Bektaş Güner	A Second Order Numerical Technique for Multi Term Variable Order Fractional Equations
		182-Chokalingham Ravichandran, Valli Valliammal, Zakia Hammouch and Haci Mehmet Baskonus	Neutral Differential Systems of Fractional Order With State-Dependent Delay
		158- Serbay Duran , Berat Karaağaç and Alaattin Esen	Analytical Solving Some Fractional Differential Equations Using New Extension Sub-Equation Method
		194- Ali Konuralp and Sercan Öner	Numerical Solutions of Linear Fractional Differential Equations with Delay Obtained by Using Euler Polynomials
		195- Ali Konuralp and Sercan Öner	Optimized Taylor-Euler Series Solutions for Linear Volterra-Fredholm Integral Equations with Delay Terms
		HALL 5	
		Mathematical Modelling in Health Science-II	
		Chair: Carla PINTO	
Session 3	10:30-12:10	Authors	Titles
		133- Songul Kaya Merdan , İsmail Tahir Kökten	Numerical Study on Blood Flow Modelling in Arteries
		69-Ana Carvalho, Carla Pinto and J.N. Tavares	Maintenance of the latent reservoir by pyroptosis and superinfection in a fractional order HIV transmission model
		243-Ahmed M. Elaiw, Taofeek O. Alade and Saud M. Alsulami	Global stability of latent Chikungunya virus dynamics model with multitarget cells and saturation
		49- Meltem Göğeli	An epidemiological model for the cross-species transmission dynamics of brucellosis in Turkey
		265- Mehmet Yavuz and Necati Ozdemir	SIR Epidemic Model with Caputo-Fabrizio Fractional Operator
12:10-13:15	Lunch		
13:15-13:45	Invited Speaker/Prof.Dr. Dumitru BALEANU (Chair)/ Prof.Dr. Carla PINTO		
13:45-14:00	Coffee Break		

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		HALL 2	
		Control Applications-II Chair: Metin DEMIRTAS	
Session 3	10:30-12:10	Authors	Titles
		199-Efgan Uğur, Tolgay Kara and Abdulhafez Abdulhafez	Modeling and Simulation of an Autonomous Wheelchair with Control Purposes
		216-Rahman Bitirgen, Ismail Bayezit and Mahmut Reyhanoglu	Feedback Linearization Control of a 2DOF Helicopter
		140-Tolgay Kara and Bayram Arda Kuş	Wastewater Treatment Plant Modeling and Simulation with Control Purposes
		242-Toufik Amieur, Metin Demirtas, Haris Calgan and Erdem Ilten	Adaptive Fuzzy Sliding Mode Control Based LMIs of MIMO Nonlinear Uncertain Systems
		218-Rahman Bitirgen and Bayezit Ismail	Time Optimal Control of a Reaction Wheel Actuated System
		HALL 6	
		Engineering Applications-I Chair: Yılmaz GUR	
Session 3	10:30-12:10	Authors	Titles
		4-Yunus Biçen	Mechanical Fault Diagnosis Using the Frequency Response Analysis in Electrical Machines
		131-Berk Güzelışık, Göktürk Poyrazoğlu, Elife Begüm Bacaksız and Atalay Demirok	The Future Promise of Vehicle-to-Grid (V2G) Optimization - Optimal Scheduling Methods to Integrate Plug-in Electric Vehicles
		221-Arif Can Başbüyük, Osman Kocaaslan and Kürşad Melih Güleren	Supersonic CFD Analysis of a Mach 2.65 Mixed-Compression Axisymmetric Intake
		193-Sedat Kömürcü	Investigation of the Structural Design Parameters of Masonry Walls Based on Nonlinear Finite Element Analysis
		198-Ertugrul Ates and Ilker Ustoglu	Developing a Mathematical Model for CBTC System and Safe Braking Distance Calculation
12:10-13:15	Lunch		
13:15-13:45	Invited Speaker/Prof.Dr. Dumitru BALEANU (Chair)/ Prof.Dr. Carla PINTO		
13:45-14:00	Coffee Break		

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		HALL 3	
		Diffusion Wave Phenomena Chair: Hasan BULUT	
Session 3	10:30-12:10	Authors	Titles
		80- Evren Topcu and Dursun Irk	High Order Galerkin Method for the Advection Diffusion Equation
		186-Ersin Bahar, Sila Korkut Uysal, Yesim Cicek and Gurhan Gurarslan	A semi-Lagrangian Scheme for Numerical Solution of Advection-Diffusion Equations
		72- Hatice Taşkesen	Explosive solutions for a class of stochastic nonlinear wave equation with damping terms
		19- Erhan Pişkin and Fatma Ekinci	Global nonexistence of solutions for a coupled nonlinear wave equations with degenerate damping terms
		22-Erhan Pişkin and Hazal Yüksekaya	Blow up of Solutions for a Timoshenko Equations with Positive and Negative Initial Energy
		HALL 6	
		Scheduling Chair: Ramazan YAMAN	
Session 3	10:30-12:10	Authors	Titles
		16- Aydin Teymourifar , Gurkan Ozturk and Ozan Bahadir	An Adaptive Evolutionary Algorithm Integrated with Neighborhood Search Heuristics for Solving Multi-objective Flexible Job Shop Scheduling Problems
		105- Emine Tutsun and Zehra Kamisli Ozturk	A New Approach to Exam-Session Planning in Multiple Session Exams
		110- Burcu Kubur Ozbel and Adil Baykasoğlu	Solving the single-level capacitated lot-sizing and scheduling problem with setup time consideration
		161- Alkin Yurtkuran and Betul Yagmahan	An optimization model for the energy efficient job shop scheduling problem with machine state and time-of-use electricity tariffs of Turkey
		113- İlyas Gögebakan , Kerem Arayıcı, Hakan Çetin and Göktürk Poyrazoğlu	Scheduling Optimization of Large Scale Price Maker Energy Storage Systems
12:10-13:15	Lunch		
13:15-13:45	Invited Speaker/Prof.Dr. Dumitru BALEANU (Chair)/ Prof.Dr. Carla PINTO		
13:45-14:00	Coffee Break		

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Session 3		HALL 4	
		Numerical Methods-II Chair: Burcu GURBUZ	
10:30-12:10		Authors	Titles
		79- Burcu Gürbüz and Mehmet Sezer	A Numerical approach for solving Burger-Fisher equation with variable coefficients using Laguerre polynomials
		81- Asuman Zeytinoglu	Numerical Solutions of the Nonlinear Klein-Gordon Equation through a Compact Finite Difference Scheme
		92- Muhammet Enes Durmaz and Gabil Amirali	Numerical Solution of the Fredholm Integro-Differential Equation with Initial-Layer
		94- Nihal Özdoğan and Mevlüde Yakıt Ongun	A Nonstandard Numerical Approach for a Ratio-Dependent Predator-Prey Model
		95- Nihal Özdoğan and Mevlüde Yakıt Ongun	Stability Analysis of a Discretized Predator-Prey Model with Beddington-DeAngelis Functional Response
Session 3		HALL 8	
		Routing, Location, Logistics, Transportation and Optimization Chair: Aslan Deniz KARAÖGLAN	
10:30-12:10		Authors	Titles
		202- Melike Sultan Karasu Asnaz , Bedri Yüksel and Kadriye Ergün	Wind farm layout optimization for minimum wake loss
		224-Alper Kilit, Omer Can Karakurt, Utku Cem Karabulut and Levent Bilgili	Queuing Theory Applications in Maritime Transport
		112- Ozgur Tirasci and Gokturk Poyrazoglu	A Novel Minimal Placement Model with Tensors in Electronic Board Design
		142- Sukran Seker	Risk Analysis with Bow-Tie Analysis in Shipbuilding Industry
		143- Sukran Seker	Sensitivity Analysis Indicator for Project Evaluation under Uncertainty and Risk
12:10-13:15		Lunch	
13:15-13:45		Invited Speaker/Prof.Dr. Dumitru BALEANU (Chair)/ Prof.Dr. Carla PINTO	
13:45-14:00		Coffee Break	

Thursday, 28th June 2018

		HALL 1 Fractional Calculus-III Chair: J. A. Tenreiro MACHADO	
Session 4 14:00-15:40	Authors		Titles
	269-Manuel D. Ortigueira, António M. Lopes and J. A. Tenreiro Machado		Numerical computation of the Mittag-Leffler function
	154- Betul Hicdurmaz and Esra Akdeniz		A New Fractional Differencing Algorithm for ARFIMA
	8- Mehmet Ali Balci and Ömer Akgüller		A Labor Migration Model with Fractional Derivatives
	141- Serkan Aslıyüce and Ayşe Feza Güvenilir		On Fractional Calculus and Inequalities
	54- Figen Özpınar		Discrete Adomian Decomposition Method for Fractional Difference Equations
			HALL 5 Mathematics-I Chair: Alireza Khalili GOLMANKHANEH
Session 4 14:00-15:40	Authors		Titles
	39-Nader Rahbar Soureh, Yashar Zehforoosh and Alireza Khalili Golmankhaneh		Fractal Koch Curve Antenna and Their Dimension
	47- Yılmaz Gür		Solid Modelling and 3D Printing of an Object Based on Koch's Snowflake Fractal
	28- Vahide Bulut		Generalized Curvature of The Contact Curve Based on The Local Surface Frame
	137- Fatma Altun and Rıdvan Şahin		An Approach to Multicriteria Decision Making Based on Distance Measures for Probabilistic Simplified Neutrosophic Information
	138- Fatma Altun and Rıdvan Şahin		Multicriteria Decision Making Based on Probabilistic Simplified Neutrosophic Numbers
15:40-16:00		Coffee Break	

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		HALL 2	
		Neutral Differential Equations	
		Chair: Songul KAYA MERDAN	
Session 4	14:00-15:40	Authors	Titles
		102- Medine Demir , Aytekin Çıbık and Songül Kaya Merdan	Numerical Analysis of Second Order Time Stepping Methods for the Natural Convection Problems
		254- Adil Kaymaz and Ercan Tunç	New oscillation criteria for second order nonlinear neutral differential equations with damping term
		255- Orhan Özdemir and Ercan Tunç	Philos-Type Oscillation Criteria for Second Order Half-Linear Mixed Neutral Differential Equations
		249-Elçin Yusufoglu and İlkem Turhan Çetinkaya	A Contact Problem for a Half-space With Inhomogeneous Coating
		253-Ercan Tunç and Orhan Özdemir	Oscillation Theorems for Second Order Half-Linear Mixed Neutral Differential Equations
		Artificial Intelligence-II	
		Chair: Umut OKKAN	
Session 4	14:00-15:40	Authors	Titles
		268- Umut Okkan and Nuray Gedik	Calibration of a Hydrological Model by Using a Hybrid Approach Combining Levenberg-Marquardt and Particle Swarm Algorithms
		76- Kadir Tekeli and Rifat Aşlıyan	A New Spread Spectrum Audio Watermarking Technique: Improved Robustness and Increased Capacity Using Moving Average
		147- Kadir Büyüközkan , Halil Coşkun, Nazlı Keskin, Esra Saban, İsmail Altan Tekin and Coşkun Hamzaçebi	A Hibrit Artificial Bee Colony Algorithm for Capacitated Vehicle Routing Problem – A Case Study
		134-Korhan Gunel, İclal Gör and Kadir Tekeli	Swarm Intelligence Enchanced by Oblique Section Planes for solving Dirichlet Boundary Problems for ODEs
		107- Özlem Türkşen and Suna Ertunç	Interval Estimation of Beta-Glucan Content of Yeast by Using Fuzzy Least Squares Modeling Approach
15:40-16:00	Coffee Break		

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		HALL 3	
		Heat and Fluid Flow-I	
		Chair: Ercan CELIK	
		Authors	Titles
Session 4	14:00-15:40	29- Cemre Aydin and Munevver Tezer-Sezgin	The DRBEM Solution of the Cauchy MHD Flow in a Duct with one of the Walls is Slipping and Variably Conducting
		66- Emre Kara	Numerical Simulation of Hypersonic Flow over Double Ellipse Configuration with Multi-grid Accelerated and Cartesian Based Flow Solver
		219-Murat Gökay İmamoğlu, Osman Babayiğit and Kürşad Melih Güleren	Numerical Investigation of Flash-Mounted Duct for Subsonic and Transonic Flow Regimes
		217-İbrahim Kağan Kutlubay, Osman Babayiğit and Kürşad Melih Güleren	Computational Fluid Dynamics Analysis of the NASA S-Duct Intake
		229- Derya Avcı , Beyza Billur Iskender Eroglu, Necati Ozdemir and Yuriy Povstenko	Control of Thermal Stresses Based on Angular Symmetric Fractional Heat Conduction Equation in A Half-Space
		Global Optimization, Discrete Optimization	
		Chair: Ahmet SAHINER	
		Authors	Titles
Session 4	14:00-15:40	116- Nurullah Yilmaz and Ahmet Şahiner	A New Auxiliary Function Approach for Inequality Constrained Global Optimization Problems
		200- Ilker Gölcük , Adil Baykasoglu and Fehmi Burcin Ozsoydan	A flower pollination algorithm for improving cluster analysis
		125-Ahmet Sahiner, Shehab A. Ibrahim and Nurullah Yilmaz	A New Auxiliary Function Method For Unconstrained Global Optimization
		162- Hamit Armağan and Tuncay Yiğit	Total Sound Press Level and Polynomial Interpolation in the e-Studio
		223-Utku Cem Karabulut, Olçay Sert , Levent Bilgili and Alper Kılıç	A Cost-Benefit Analysis on Ship Speed Optimization
		15:40-16:00	Coffee Break

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		HALL 4	
		Numerical Methods-III	
		Chair: Ali KONURALP	
Session 4	14:00-15:40	Authors	Titles
		271- Seyma Tuluce Demiray and Hasan Bulut	Hyperbolic Function Solutions for Positive Gardner-KP Equation
		50- Asif Yokus , Doğan Kaya and Uğur Demiroğlu	An implementation of Auto-Bäcklund Transformation
		65-Erhan Pişkin and Hazal Yuksekkaya	Mathematical Behavior of Solutions of Hyperbolic-type Equations
		14- Semih Küçük , Firat Evirgen	Numerical Simulation of Some Partial Differential Equations by Homotopy Perturbation Sumudu Transform Method
		96- Yakup Ermurat and Ömer Özyurt	Numerical Modeling Of Heat Fluid And Mass Transfer In Algae Cultivation Process Integrated With Ground Source Heat Pump
		Production Management	
		Chair: Ramazan YAMAN	
Session 4	14:00-15:40	Authors	Titles
		10- Ibrahim Kucukcoc , Qiang Li and David Z. Zhang	New optimal solutions for additive manufacturing production planning problem to minimise cost
		145- Simge Yozgat and Hatice Ediz Atmaca	Mathematical Modelling Approach to Increase Cell Efficiency in a Furniture Firm
		93- Elif Guleryuz , Pelin Yildiz, Gulcin Kaya, Duygu Yilmaz Eroglu and Tulin Gunduz	Capacity Planning for Support Parts for Pipe Production
		220- Ramazan Yaman , Gulsen Yaman, Ramazan Altay and Emir Can Yaman	Concreteness and Likeliness of Design and Optimization Stages
		146- Simge Yozgat , Hatice Ediz Atmaca and Sevede Dilruba Karayel	Application of a Cellular Manufacturing in a Company and a New Layout Suggestion
15:40-16:00	Coffee Break		

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		HALL 1 New Fractional Derivative-Local Chair: Jordan Yankov HRISTOV	
Session 5 16:00-17:40	Authors		Titles
	118- Berat Karaagac		New Extension Sub-Equation Method for Fractional order Boussinesq-like equations
	187- Sumeyra Ucar , Nihal Yilmaz Ozgur and Beyza Billur Iskender Eroglu		Complex Conformable Derivative and Integral
	256-Mehmet Yavuz and Burcu Yaşkıran		Conformable Operator in Approximate Solutions of Nonlinear Differential Equations
	206- Beyza Billur Iskender Eroglu and Dilara Yapışkan		Conformable Fractional Optimal Control Problem with Transversality Condition
	43- Zehra Pinar		On the analytical solutions of the fractional partial differential equations
			HALL 5 Mathematics –II Chair: Ayse Dilek MADEN
Session 5 16:00-17:40	Authors		Titles
	263- Ezgi Kaya and Ayse Dilek Maden		On the Co-PI Energy of Graphs
	264- Ayşe Dilek Maden		The Number of Spanning Trees of Graphs
	135- Ali Köseoğlu and Rıdvan Şahin		A Simplified Neutrosophic Multiplicative Set-Based Method for Multicriteria Decision Making
	136- Ali Köseoğlu and Rıdvan Şahin		Simplified Neutrosophic Multiplicative Similarity Measures and Their Application to Pattern Recognition Problems
	61- Müfit Şan		Existence and uniqueness results for a nonlinear differential equation with non-continuous right hand side
17:40-18:00	Coffee Break		
18:00-18:45	Round Table Discussion/Albert C.J. Luo, J.A. Tenreiro Machado, Dumitru Baleanu, Necati Ozdemir and Jordan Y. Hristov		
19:30	Dinner		

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		HALL 2	
		Functional Theory, Algebra Chair: Ekrem SAVAS	
Session 5	16:00-17:40	Authors	Titles
		58- Yeşim Sağlam Özkan and Sezayi Hızlıyel	On function theory for Q-holomorphic functions
		73- Hakan Şahin , İshak Altun, Duran Türkoğlu and Nurcan Bilgili Gungor	Multivalued F-contraction on M-Metric Space
		82- Nurcan Bilgili Gungor and Hakan Sahin	Soft Quasi Metric Spaces and Some Notes on Soft G-Metric Spaces
		170- Nurcan Bilgili Gungor	Some Common Fixed Point Results via Implicit Contractions on Soft Quasi Metric Spaces
		42- Bilgehan Güven	The Spectral Decomposition of a Covariance Matrix for a Balanced Random Effects Model
		HALL 6	
		Analytics, Data Science, Data Mining, Statistics Chair: Cem KADILAR	
Session 5	16:00-17:40	Authors	Titles
		127- Muhammed Ali Koşan , Mehmet Sevri and Hacer Karacan	Comparison of Classification Algorithms used in Intrusion Detection Systems
		88- Songul Cinaroglu	Comparison of Alternative Transformations to Handle Heavily Skewed Distribution of Health Expenditures
		9- Mehmet Ali Balci and Ömer Akgüller	Hierarchies in the Clusters of Borsa Istanbul
		59- Gamze Özel and Cem Kadılar	Modified Exponential Type Estimators for Population Mean in Stratified Random Sampling: An Application on the Geometric Distributed Aftershocks
		83- Gamze Özel , Hatice Öncel Çekim and Cem Kadılar	Ln Type Estimators under Stratified Random Sampling
17:40-18:00	Coffee Break		
18:00-18:45	Round Table Discussion/Albert C.J. Luo, J.A. Tenreiro Machado, Dumitru Baleanu, Necati Ozdemir and Jordan Y. Hristov		
19:30	Dinner		

Thursday, 28th June 2018

		HALL 3 Heat and Fluid Flow-II Chair: Munevver TEZER-SEZGIN	
Session 5 16:00-17:40	Authors		Titles
	25- Munevver Tezer-Sezgin and Merve Gurbuz		Stability of Unsteady MHD Flow in a Rectangular Duct
	24- Merve Gurbuz and Munevver Tezer-Sezgin		Numerical Modelling of MHD Convection Flow in Cavities
	151- Tahir Cosgun , Murat Sari and Arshed Ahmad		A Discussion of the Singular and Weakly Singular Integral Equations with Abel Type Kernels
	175- Gabriel Magalakwe and Masood Khalique		Symmetry Methods of Flow and Heat Transfer between Slowly Expanding or Contracting Walls
	123- Meltem Koşan and Mustafa Aktaş		Numerical Investigation of Heat Transfer in The Thermal Energy Storage Unit
		HALL 7 Scheduling, Supply Chain Chair: Aslan Deniz KARAOGLAN	
Session 5 16:00-17:40	Authors		Titles
	130-Yihua Li, Lila Rasekh and Raf Jans		Commercial Advertisements Scheduling Problem
	111-Burcu Kubur Ozbel and Adil Baykasoğlu		Order selection and scheduling decisions in make-to-order manufacturing environments
	64-Batuhan Eren Engin and Turan Paksoy		Bi-objective Closed Loop Supply Chain with Different Machinery Options
	63-Batuhan Eren Engin and Turan Paksoy		Modeling Just-in-Time distribution in a Green supply chain
	164-İlker Kucukoglu, Betul Yagmahan and Alkin Yurtkuran		Fuzzy Multi Criteria Decision Making Approach Integrated Mathematical Model for Examination Timetabling Problem
17:40-18:00	Coffee Break		
18:00-18:45	Round Table Discussion/Albert C.J. Luo, J.A. Tenreiro Machado, Dumitru Baleanu, Necati Ozdemir and Jordan Y. Hristov		
19:30	Dinner		

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		HALL 4	
		Numerical Methods-IV	
		Chair: Haci Mehmet BASKONUS	
Session 5	16:00-17:40	Authors	Titles
		210-Faruk Dusunceli, Haci Mehmet Baskonus and Hasan Bulut	New Exact Solutions for the Drinfeld-Sokolov Equation Using an Improved Bernoulli Sub-Equation Function Method
		51- Fatma Güler Eroğlu and Songul Kaya Merdan	Proper Orthogonal Decomposition Method for the Darcy-Brinkman Equations
		157-Korhan Gunel, Gülsüm İşman and Merve Kocakula	Numerical Solutions of ODEs with Dirichlet Boundary Conditions via Recurrent Neural Networks
		160- Serbay Duran and Doğan Kaya	Applications of a New Expansion Method for Finding Wave Solutions of Nonlinear Differential Equations
		117- Berat Karaagac , Alaattin Esen, Nuri Murat Yagmurlu and Yusuf Ucar	Numerical solutions of Gilson pickering equation by the Collocation finite element method.
		Engineering Applications-I	
		Chair: Yılmaz GUR	
Session 5	16:00-17:40	Authors	Titles
		46- Yılmaz Gür	Modelling and 3D Printing of a Complex IPMS Gyroid
		192- Sedat Kömürcü	3D Finite Element Modeling of the Nonlinear Behavior of Confined Masonry Walls
		20- Rajai Alassar	Cooling and Pasteurizing Eggs
		129-Mehmet Sevre, Muhammed Ali Koşan and Hacer Karacan	Secure Multiparty Computation and Blockchain-Smart Contract Based Election System
17:40-18:00	Coffee Break		
18:00-18:45	Round Table Discussion/Albert C.J. Luo, J.A. Tenreiro Machado, Dumitru Baleanu, Necati Ozdemir and Jordan Y. Hristov		
19:30	Dinner		

		HALL 1 Fractional Calculus-IV Chair: Zakia HAMMOUCH	
Session 6	08:40-10:00	Authors	Titles
		190- Ayşegül Keten and Mehmet Yavuz	Identifying of the Solutions of Nonlinear Fractional Differential Equations with Caputo-Fabrizio Operator in Banach Spaces
		189- Sumeyra Ucar and Nihal Yilmaz Ozgur	Complex Conformable Derivatives and Rolle's Theorem
		267- Alaattin Esen and Murat Önal	Numerical Solutions of Time Fractional Burgers'- Equation using Finite Difference Methods
		266- Alaattin Esen , Berat Karaagac, Nuri Murat Yagmurlu and Selcuk Kutluay	New Analytical solutions of (3+1) Extended Jimbo Miwa Equation
		HALL 5 Game Theory Chair: Said AGOUJIL	
Session 6	08:40-10:00	Authors	Titles
		52-Pınar Usta, Serap Ergün and Sırma Zeynep Alparslan Gök	A Game Theoretical Approach for The Emergency Evacuation
		261- Said Agoujil , El Arbi Abdellaoui Alaoui and Mustapha El Moudden	Framework for Analysing of Inter-cluster Communication in the DRHT by using Game Theory
		53- Serap Ergün , Pınar Usta, Gerhard Wilhelm Weber and Sırma Zeynep Alparslan Gök	Optimization for Supply Chain Planning After Disasters with Cooperative Game Theory under Uncertainty
10:30	<p style="text-align: center;">EXCURSION Ayvalik Tour (Departure from the hotel at 10.30, Arriving at the hotel at 18.00)</p>		

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		HALL 2		
		Numerical Methods-V		
		Chair: Haci Mehmet BASKONUS		
Session 6	08:40-10:00	Authors	Titles	
		148- Sibel Ozer	An Efficient Numerical Technique for the Rosenau-KdV-RLW Equation	
		230- Osman Kocaaslan and Kürşad Melih Güleren	Numerical Investigation of the Wrap Angle Effect on Swirler Blade Combustion Performance	
		11- Qasem Al-Mdallal	A numerical study of initial flow past an oscillating circular cylinder	
		40- Cihan Bayindir	Compressive Spectral Method for the Simulation of the Water Waves	
		HALL 6		
		Routing		
		Chair: Ramazan YAMAN		
Session 6	08:40-10:00	Authors	Titles	
		114- İlknur Tükenmez , Çağrı Koç and Gilbert Laporte	Vehicle Routing Problems with Simultaneous Pickup and Delivery: Review and Research Perspectives	
		159- Merve Şen , Tuğçe Kilişci, Tilve Aydın, Mustafa Emre Kazaz, İlknur Tükenmez and Pınar Baban	Green Vehicle Routing Problem in a Logistics Company	
		115- İlknur Tükenmez and Onur Kaya	Simulated Annealing For Vehicle Routing Problem with Alternative Links From The triple Bottom Line Perspective	
10:30	EXCURSION Ayvalik Tour (Departure from the hotel at 10.30, Arriving at the hotel at 18.00)			

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		HALL 3	
		Numerical Methods-IV	
		Chair: Hayriye GULBUDAK	
Session 6	08:40-10:00	Authors	Titles
		181- Hayriye Gulbudak , Vincent L. Cannataro, Necibe Tuncer and Maia Martcheva	Ecology and Evolution of Vector-Borne Diseases in a multi-scale model
		15- Firat Evirgen , Emin Ümit Kobak	Applications of Exp $(-\phi(\xi))$ Expansion Method to Some Partial Differential Equations for Finding Exact Solutions
		237-İbrahim Enam İnan, Hasan Bulut , Sibel Şehriban Ataş and Tuğba Yazgan	Extended Exp $(-\phi(\xi))$ Expansion Method for Some Exact Solutions of Sixth-Order Ramani Equation and Coupled Modified KdV-type Equation
		HALL 7	
		Scheduling	
		Chair: Aslan Deniz KARAOGLAN	
Session 6	08:40-10:00	Authors	Titles
		139- Yeliz Buruk Şahin	Multi-Objective Optimization of a Parallel Machine Scheduling Problem Using Epsilon Constraint Method
		155- Yeliz Buruk Şahin	Bi-Objective Optimization of an Unrelated Parallel Machine Scheduling Problem with Sequence-Dependent Setup Times
		272- Kadir Günöğlü and Hakan Akyıldırım	Calculation of the mass attenuation coefficients, effective atomic numbers and effective electron numbers of some concrete containing pumice and barite at different ratios
10:30	EXCURSION Ayvalik Tour (Departure from the hotel at 10.30, Arriving at the hotel at 18.00)		

Friday, 29th June 2018

		HALL 4	
		Artificial Intelligence-III Chair: Abdelhakim BOUDKHIL	
Session 6	08:40-10:00	Authors	Titles
		7- Yunus Biçen	Alternative Methods for Adaptive Exponential Smoothing and the Effect of Used Constants on Forecasting
		260- Abdelhakim Boudkhal , M. Chetoui, N. Benabdallah, A. Ouzzani and N. Benahmed	A Highly Miniaturized MEMS Pyramidal Helix Antenna for THz Applications using Reliable Evolutionary Optimizers
		259- Abdelhakim Boudkhal , M. Chetoui, N. Benabdallah, A. Ouzzani and N. Benahmed	A Compact Integrated THz Horn-shaped Helix Antenna based on MEMS Technology using Accurate Automatic Strategists
		HALL 8	
		Control Application-III and Statistics Chair: Metin DEMIRTAS	
Session 6	08:40-10:00	Authors	Titles
		232- Vatan Aksoy Tezer and Ismail Bayezit	Development of a 6-DoF Pose Estimation Package in ROS
		234- Vatan Aksoy Tezer and Ismail Bayezit	SLAM based Control and Waypoint Navigation of Hexarotor Platform
		149-Esra Gökpınar, Gamze Güven and Fikri Gökpınar	Comparison of tests for the homogeneity of Inverse Gaussian scale parameters
120-Gamze Güven, Özge Gürer , Hatice Şamkar and Birdal Şenoğlu	Hypothesis testing in one-way ANOVA based on fiducial approach when the error terms have Weibull distribution and heterogeneous variances		
10:30	<p>EXCURSION Ayvalik Tour (Departure from the hotel at 10.30, Arriving at the hotel at 18.00)</p>		

