



**THE INTERNATIONAL CONFERENCE
“MATHEMATICAL AND COMPUTATIONAL MODELLING
IN SCIENCE AND TECHNOLOGY”**
<http://icmcmst.alpha-publishing.net/>



Izmir University, Izmir-Turkey
August 02 – 07, 2015

Conference Program

August 02, 2015	
15h30-17h30	Registration & Welcome Reception Izmir University Meeting Hall, 7th Floor

August 03, 2015	
09h00-10h00	Registration Izmir University Meeting Hall, 7th Floor
10h00-10h30	Opening Ceremony Izmir University Meeting Hall, 7th Floor

Hall A

First Plenary Sessions 10h30 - 12h30 Chair: A. Debbouche	
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10h30-11h10	P.B. Gilkey, Heat Content Asymptotics - Theory and Practice
11h10-11h50	A. Yagola, Regularizing algorithms for image restoration
11h50-12h30	V.E. Fedorov, Analytic Family of Solution Operators for Degenerate Fractional Equations
12h30-14h00	Lunch

First Contributed Talks (SS: 1) 14h00 – 15h40 Chairs: F.B.M. Belgacem et al.	
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14h00-14h20	C. Cattani, Application of the Sumudu transform to the Riemann Zeta function and consequences
14h20-14h40	A.N. Bakir, On Aluthge transform and non normality of operators
14h40-15h00	R. Naz, A partial Lagrangian method for models of Economics
15h00-15h20	J.P. Atanas, Simulation and modeling of a wall loss measurement through combined FBG sensors for pressurized pipes
15h20-15h40	S. M. Said, On a quasi linear problem modelling the flow underlying the surfaces water before the arrival of the destructive waves like that of tsunami

Coffee Break	
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Second Contributed Talks (SS: 1) 16h10 – 17h50 Chairs: F.B.M. Belgacem et al.	
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16h10-16h30	M. Kurt, The Band Collocation Problem and Its Combinatorial Model
16h30-16h50	A. Shah, A Two-Level Method for Emulating Parameterized Dynamic Partial Differential Equation Models
16h50-17h10	R. Zarrit, Numerical modeling of natural convection in rectangular inclined enclosures: influence of the aspect ratio and angles of inclination
17h10-17h30	S. Chaguetmi, Computational experimentations for physical properties of multicomponent fluorohafnate glasses
17h30-17h50	F.B.M. Belgacem, Sumudu applications to stochastics, statistics and correlation theory

Hall B

First Contributed Talks 14h00 – 15h40 Chair: O. Baysal	
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14h00-14h20	M.F. Teodoro, On the Approach of a Mixed Type Functional Differential Equation from Physiology
14h20-14h40	A.H. Shokouhi, A New Family of Large Sets of t-Designs and Cryptography
14h40-15h00	F.S. Bushehri, Design, Workshop Development Interior Design and Furniture Section
15h00-15h20	I.L. Popa, Nonuniform (μ, ν) -Trichotomy of Linear Discrete-Time Systems in Banach Spaces
15h20-15h40	O. Orhan, Conservation Laws of Ermakov-Pinney Equation

15h40-16h10	Coffee Break	
Second Contributed Talks 16h10 – 17h50 Chair: V. Antonov		
16h10-16h30	A. Boufelfel, Schrodinger Equation in Nano Science	
16h30-16h50	F.A. Cetinkaya, Asymptotic Behaviour of Eigenvalues and Eigenfunctions of a Boundary Value Problem with Retarded Argument	
16h50-17h10	I. Yesilce, Relationship between Convex and B-convex Functions	
17h10-17h30	E. Deliktas, Effect of Slow Layer on the Propagation of Surface Elastic SH Waves in a Double Layered Nonlinear Elastic Half Space	
17h30-17h50	Y. Nasri, Existence and multiplicity results for elliptic equation with singular growth	
Hall C		
First Contributed Talks 14h00 – 15h40 Chair: A. Khireddine		
14h00-14h20	B. Takhedmit, A parametric uncertainty analysis method for queues with vacations	
14h20-14h40	L. Harfouche, Estimation of discrete probability density associated with the kernel method	
14h40-15h00	F. Leslous, Nonconvex optimization based on DC programming and DCA in the search of a global optimum of a nonconvex function	
15h00-15h20	Z. Amrouchi, Modelling of semi-infinite practical problem in connparagraph with a humanoid robot	
15h20-15h40	L. Boudjenah, On the structure of the set solution of a class of Paratingent equation with delayed argument	
15h40-16h10	Coffee Break	
Second Contributed Talks 16h10 – 17h50 Chair: V.E. Fedorov		
16h10-16h30	L. Borel, Investigation of Degenerate Evolution Equations with Memory Using the Methods of the Theory of Semigroups of Operators	
16h30-16h50	N. Ivanova, Nonlocal in time problem for a class of partial differential equations	
16h50-17h10	M.V. Plekhanova, Cauchy problem for a high order quasilinear degenerate equation	
17h10-17h30	A. Firsova, Statistical analysis of solution accuracy for inverse problems in electrodynamics	
17h30-17h50	N. Yaparova, Numerical method for solving an inverse problem of identifying the source Function	

August 04, 2015		
Hall A		
Second Plenary Sessions 09h30 - 10h50 Chair: D.F.M. Torres		
09h30-10h10	D. Baleanu, Some open problems in fractional dynamics	
10h10-10h50	E.G. Ekomasov, Interaction of sine-Gordon solitons in the model with attracting impurities and damping	
10h50-11h20	Coffee Break	
Third Contributed Talks (SS: 2) 11h20 – 12h40 Chairs: A. Khastan et al.		
11h20-11h40	F. Tchier, Some properties on fuzzy and demonic operators	
11h40-12h00	H. Rouhparvar, Solutions of Fuzzy partial differential equation	
12h00-12h20	Z. Alijani, Fuzzy transform to approximate solution of two-point boundary value problems	
12h20-12h40	R. Alikhani, Nonlinear second order fuzzy differential equations by fixed point in partially ordered sets	
12h40-14h10	Lunch	
Fourth Contributed Talks (SS: 2) 14h10 – 15h20 Chairs: A. Khastan et al.		
14h10-14h30	M. Chebbah, A new improved version of optimal control solving nonlinear model of fuzzy discrete and continuous multi-objectives Gabassov (Kirillova) exact methods	
14h30-14h50	A.A. Alkandari, Using estimated fuzzy linear parameters for electrical load estimation	
14h50-15h10	B.A. Alkandari, Economic dispatch with fuzzy load and cost function coefficients of all thermal power systems	
15h10-15h30	A. Khastan, Solution of First Order Linear Difference Equations with Uncertainty	
15h30-16h10	Coffee Break & Poster Session 1	

Fifth Contributed Talks 16h10 – 17h30 Chair: E. Ekomasov	
16h10-16h30	H.M. Baskonus, On some new complex analytical solutions for the nonlinear long short-wave interaction system with complex structure
16h30-16h50	A. Khireddine, A new INSAR flattening algorithm based on modulation of the fringes frequency
16h50-17h10	I. Hamada, Relative controllability of fractional stochastic dynamical systems with multiple delays in control
17h10-17h30	Y. Karaca, The application of support vector machines for the classification of multiple sclerosis subgroups
Hall B	
Third Contributed Talks 11h20 – 12h40 Chair: A. Boufelfel	
11h20-11h40	S. Guerfia, Statistical evaluation of the distribution of the population in the Algerian physical space
11h40-12h00	K. Hachama, Mathematical Modeling and Optimization of Chemical Batch Reactor
12h00-12h20	B. Sadaoui, Behaviour at the non positive integers of a class of multiple Dirichlet series
12h20-12h40	M. Moumni, Stability and Chaos in a Yang-Mills System
12h40-14h10	Lunch
Fourth Contributed Talks 14h10 – 15h30 Chair: B. Pektas	
14h10-14h30	I. Area, Recursive approach for generating generalised Zernike polynomials
14h30-14h50	A. Selitskii, On a New Class of Operators Satisfying the Kato Conjecture
14h50-15h10	T. Mirgalikzy, Application of the method of integral equations in the problem of electrical sounding for a three-dimensional media with topography
15h10-15h30	A. Zhumadillayeva, Energetic method of solving nonlinear established tasks of thermomechanics for the rod superalloys
15h30-16h10	Coffee Break & Poster Session 1
Fifth Contributed Talks 16h10 – 17h30 Chair: C.M.A. Pinto	
16h10-16h30	E. Tamci, The heat flux identification problem for a nonlinear parabolic equation in 2D
16h30-16h50	N.Y. Aksoy, The Variational Method for the Solution of an Inverse Problem
16h50-17h10	A. Khelifa, Characterizations of classical d -orthogonal polynomials
17h10-17h30	L. Menniche, A Logarithmic barrier approach for linear programming
Hall C	
Third Contributed Talks 11h20 – 12h40 Chair: I. Dassios	
11h20-11h40	A. Mohammed, One Ring or More Rings? Corona Ring Design for 400kV High Voltage Non – Ceramic Insulators
11h40-12h00	Z. Pinar, The solutions of Nonlinear Evaluation equations via Hermite Approximation
12h00-12h20	A. Zarai, Global existence and blowing up of solution for non linear wave equations of Kirchhoff type with a weak fractional damping
12h20-12h40	R. Guefaifia, Existence of positive weak solutions for a class of nonlocal elliptic systems
12h40-14h10	Lunch
Fourth Contributed Talks 14h10 – 15h30 Chair: J. Losada	
14h10-14h30	A. Akgul, Multiple Solutions of Second Order Differential Equations
14h30-14h50	H. Zeybek, Solitary-Wave Solutions of the GEW Equation Using Quintic B-spline Collocation Method
14h50-15h10	M. Dalah, Finite element method and Two-Grid method applied for solving electro-visco-elastic contact problem
15h10-15h30	M. Aichour, Novel selective mutation operator for tree-based evolutionary algorithm
15h30-16h10	Coffee Break & Poster Session 1
Fifth Contributed Talks 16h10 – 17h30 Chair: I. Area	
16h10-16h30	M. Bagci, A Comparison of the Lattice Solitons Governed by the NLS Equation and NLSM Systems
16h30-16h50	I. Naeem, Conserved currents and exact solution of some systems of nonlinear PDEs
16h50-17h10	I. Touil, A feasible-interior point method for linear semi-definite programming problems
17h10-17h30	M. Djidel, Combination of a few methods of supervised classification by remote sensing for soil occupation mapping from Landsat images

August 05, 2015

Hall A

Third Plenary Sessions 09h30 - 10h50 Chair: D. Baleanu

09h30-10h10	D.F.M. Torres, Optimal control of tuberculosis and HIV/AIDS
10h10-10h50	V. Antonov, Fractal analysis of biological signals in a real time mode

10h50-11h20 Coffee Break

Sixth Contributed Talks (SS: 3) 11h20 – 12h40 Chairs: A. Atangana et al.

11h20-11h40	C.M.A. Pinto, Fractional feed-forward networks
11h40-12h00	H. Jafari, Group analysis of the time-fractional Buckmaster equation with Riemann-Liouville derivative
12h00-12h20	A. Debbouche, Relaxation and optimality properties in nonlinear control problems of fractional nonlocal systems
12h20-12h40	A. Atangana, Controlling the wave movement on the surface of shallow water with the Caputo-Fabrizio derivative with fractional order

12h40-14h10 Lunch

Seventh Contributed Talks (SS: 3) 14h10 – 15h20 Chairs: A. Atangana et al.

14h10-14h30	Sadia Arshad, On stability of fractional order model of HIV infparagraph
14h30-14h50	J. Losada, On quasi-periodicity properties of fractional integrals and fractional derivatives of periodic functions
14h50-15h10	I. Dassios, Singular linear systems of fractional nabla difference equations
15h10-15h30	Z. Dahmani, Existence, Uniqueness and Stability of Solutions for Lane-Emden Fractional Differential Equations

15h30-16h10 Coffee Break & Poster Session 2

Eighth Contributed Talks (SS: 3) 16h10 – 17h30 Chairs: A. Atangana et al.

16h10-16h30	E. Guariglia, On some properties of the fractional derivative of the Riemann zeta function
16h30-16h50	T. Oygur, Chaos Measures for Autoregressive Fractionally Integrated Moving Average Difference Equations
16h50-17h10	G.C. Wu, Lattice Fractional Diffusion Equation of Random Order
17h10-17h30	Z. Bouteffal, Impulsive hyperbolic system of partial differential equations of fractional order with delay

Hall B

Sixth Contributed Talks 11h20 – 12h40 Chair: M. Kurt

11h20-11h40	A.J.M. Jawad, Solitary Wave Solutions for Systems of Non-linear Partial Differential Equations
11h40-12h00	A. Shomali, The Autocentral Automorphisms of finite groups
12h00-12h20	M. Sat, On the Hochstadt--Lieberman theorem for Singular canonical Dirac operator
12h20-12h40	M. Zeinali, The existence result of the equation of the motion of a particle in a viscous fluid

12h40-14h10 Lunch

Seventh Contributed Talks 14h10 – 15h30 Chair: F. Tchier

14h10-14h30	A. Mohammadpouri, Classification Results for L_r -Biharmonic Hypersurfaces in $\{E\}^{n+1}$
14h30-14h50	L. Ragoub, Non existence of solutions of a third boundary value problem
14h50-15h10	F. Toufic, Fixed points in Kleene Algebra
15h10-15h30	A. Seadawy, Classification of travelling wave solutions of the fifth-order KdV equations and its stability

15h30-16h10 Coffee Break & Poster Session 2

Eighth Contributed Talks 16h10 – 17h30 Chair: R. Naz

16h10-16h30	A. Dali, Multi-quasielliptic and Gevrey regularity of hypoelliptic differential operators
16h30-16h50	N. Dardar, Degenerate impulsive fractional dynamic inclusions with nonlocal control conditions
16h50-17h10	C.B. Tabi, Investigation of the Keller-Segel model with a fractional derivative
17h10-17h30	M.K. Mezadek, Localization and pseudospectrum of some matrix

Hall C

Sixth Contributed Talks 11h20 – 12h40 Chair: I. Naeem

11h20-11h40	I. Otmani, Statistical methods of multilayer perceptron with applications in Medicine
11h40-12h00	F. Medjani, Modelling of the transport of pollutant in a groundwater aquifer

12h00-12h20	A. Boudaoui, Existence Results for Stochastic Impulsive Semilinear Neutral Functional integro differential inclusions driven by a fractional Brownian motion
12h20-12h40	B. Boutarfa, Structural electronic and optical properties of alloys with first principles
12h40-14h10	Lunch
Seventh Contributed Talks 14h10 – 15h30 Chair: M. Djidel	
14h10-14h30	N. Cheghib, Synthesis and evaluation of anti-cancer properties of new derivatives Quinolin type
14h30-14h50	N. Kribes, Statistical analysis of surface roughness in hard turning with AL2O3 and TiC mixed ceramic tools
14h50-15h10	D. Guessoum, Statistical information on the squatter housing
15h10-15h30	M. Stiti, A molecular modelling and spectroscopic study on the interaction between cyclomaltoheptaose and a kind of Benzoxazolinone
15h30-16h10	Coffee Break & Poster Session 2
Eighth Contributed Talks 16h10 – 17h30 Chair: A.J.M. Jawad	
16h10-16h30	A. Benrabah, Regularization method for an abstract ill-posed biharabolic problem
16h30-16h50	M. Kerboua, Complete controllability of nonlocal fractional stochastic differential evolution equations with Poisson jumps
16h50-17h10	H. Boulares, Stability in nonlinear delay fractional differential equations
17h10-17h30	A. Benchaabane, Complete controllability of stochastic systems with impulsive effects in Hilbert space

August 06, 2015

10h00-18h00	Full Day Social Program Boat Tour
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August 07, 2015

09h00-11h00	Scientific Meeting & Closing Ceremony Izmir University Meeting Hall, 7th Floor
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