

## TUESDAY, July 27, 2010, 19:00-21:00, Welcome Party, Location: Cankaya University

### Wed, July 28, 2010

8:30-9:30	<b>Registration</b>	<b>Conference Hall</b>				
9:30-10:00	<b>Opening Ceremony</b>	<b>Conference Hall</b>				
10:00-10:45	<b>Plenary Lecture 1 Conference Hall</b>	<b>Lev A. OSTROVSKY (USA)</b> <i>Strongly Nonlinear Internal Waves in the Ocean and Their Complex Behaviour</i> <b>CHAIR: A. Luo</b>				
10:45-11:15	<b>Coffee Break</b>					
11:15-12:00	<b>Plenary Lecture 2 Conference Hall</b>	<b>A. LUO (USA)</b> <i>Bouncing Flows in Discontinuous Dynamical Systems with Multi-Valued Vector Fields</i> <b>CHAIR: T. Solomon</b>				
12:00-12:15	<b>Coffee Break</b>					
12:15-13:00	<b>Plenary Lecture 3 Conference Hall</b>	<b>M. GIDEA (USA)</b> <i>Instability and Chaos in Hamiltonian Systems</i> <b>CHAIR: J. Masdemont</b>				
13:00-14:45	<b>Lunch</b>					
14:45-18:45	<b>Poster Session</b>					
14.45-16.30	<b>Parallel Session 1 Conference Hall</b>	<b>Parallel Session 2 Blue Hall</b>	<b>Parallel Session 3 AMFI 1</b>	<b>Parallel Session 4 AMFI 2</b>	<b>Parallel Session 5 AMFI 3</b>	<b>Parallel Session 6 AMFI 4</b>
16.30-17.00	<b>Coffee Break</b>					
17.00-18.45	<b>Parallel Session 7 AMFI 4</b>	<b>Parallel Session 8 Conference Hall</b>	<b>Parallel Session 9 AMFI 1</b>	<b>Parallel Session 10 Blue Hall</b>	<b>Parallel Session 11 AMFI 2</b>	<b>Parallel Session 12 AMFI 3</b>
19:00-21:00	<b>Dinner</b>					

Wed, July 28, 2010		Parallel Session 1		PLACE-Conference Hall	
<b>14:45-16:30</b>	<b>Fractional Calculus Applications</b>	<b>Chair</b>	<b>J.A. Tenreiro Machado</b>	<b>Co-chair</b>	<b>Abolhassan Razminia</b>
<b>14.45-15.15</b>	<b>J. A. Tenreiro Machado</b>	<i>Fractional Dynamics of a System with Particles Subjected to Impacts</i>			
<b>15.15-15.35</b>	<b>Abolhassan Razminia</b> ,Vahid Johari Majd	<i>A Note on the Sequential Linear Fractional Dynamical Systems from the Control System Viewpoint and L2-Theory</i>			
<b>15.35-15.55</b>	<b>Dumitru Baleanu</b> , Abolhassan Razminia	<i>Active Control and Synchronization of Chaotic Incommensurate, Fractional Order Rössler System</i>			
<b>15.55-16-15</b>	<b>Ehsan Ghotb Razmjou</b> ,Ranjbar, Z., Rahmani, R.R.Ghaderi, S. Momani	<i>Stabilization of Fractional order Unified Chaotic systems</i>			
<b>16.15-16.30</b>	<b>Ehsan Ghotb Razmjou</b> ,A. Ranjbar, Z. Rahmani, R. Ghaderi	<i>Synchronization and Parameter Identification of Fractional-Order Unified Chaotic System</i>			

Wed, July 28, 2010		Parallel Session 2		PLACE-Blue Hall	
<b>14:45-16:30</b>	<b>Nonlinear Dynamics of Continuous and Discontinuous Dynamical Systems</b>	<b>Chair</b>	<b>Albert Luo</b>	<b>Co-chair</b>	<b>Abdellatif Rahmouni</b>
<b>14.45-15.05</b>	<b>Abdellatif Rahmouni</b> , Z.Beidouri, R. Benamar	<i>Geometrically Nonlinear Free Transverse Vibration Of 2-Dof Systems Involving The Coupling Between Axial And Transverse Displacements</i>			
<b>15.05-15.25</b>	<b>Asmae Khaldoun</b> , Gerard Wegdam, Daniel Bonn	<i>Study of the non linear flow behavior of the quick clay</i>			
<b>15.25-15.45</b>	<b>Babak Khabiri</b> ,A. R. Amani , M. Kazeminavaei	<i>Defect structure by Homotopy perturbation Method</i>			
<b>15.45-16.00</b>	<b>Banafshe Seyedaghazadeh</b> ,M. Rezaee	<i>Effects Of Crack Severity And Location On Transverse Vibration Of A Non-Proportional Damped Beam</i>			
<b>16.00-16.30</b>	<b>Albert Luo</b> , Fuhong Min	<i>A pendulum synchronizing with a periodically driven, damped Duffing oscillator under a feed back control</i>			

Wed, July 28, 2010		Parallel Session 3		PLACE-AMFI 1	
<b>14:45-16:30</b>	<b>Wavelet Applications to the Complex Systems</b>	<b>Chair</b>	<b>Erdal Dinc</b>	<b>Co-chair</b>	<b>Arnaldo Batista</b>
<b>14.45-15.15</b>	<b>Erdal Dinc</b> Eda Bükler, Dumitru Baleanu	<i>Fractional factor analysis wavelet transform for the simultaneous spectral analysis of a binary mixture system</i>			
<b>15.15-15.35</b>	<b>Arnaldo Batista</b> ,Bruno Nascimento, Luis Brandão Alves, Manuel Ortigueira, Raul Rato	<i>An Automatic System for the Cardiac Arrhythmia Detection and Characterization</i>			
<b>15.35-16.00</b>	Murat Kambur , İbrahim Narin ,Erdal Dinç, <b>Seçil Çandır</b> , Dumitru Baleanu	<i>Application of the fractional wavelet transform to the quantitative spectral resolution of a commercial veterinary preparation</i>			
<b>16.00-16.25</b>	Yücel Kadioğlu, <b>Onur Şenol</b>	<i>Quantification of Pyridoxine and Thiamin in Pharmaceutical Preparation by HPLC analysis</i>			

Wed, July 28, 2010		Parallel Session 4		PLACE -AMFI 2	
<b>14:45-16:30</b>	<b>Stochasticity in Applied Nonlinear Dynamics</b>	<b>Chair</b>	<b>Diogo Pinheiro</b>	<b>Co-chair</b>	<b>Ali Reza Amani</b>
<b>14.45-15.15</b>	<b>Ali Reza Amani</b> , M. Kazeminavaei	<i>Quintom Model with the Double and Triple-Sine-Gordon Potentials</i>			
<b>15.15-15.40</b>	<b>Arvin Fatemi</b> , A.Fatemi,N.Maleki	<i>Study of Diffusion Coefficient in Sand piles</i>			
<b>15.40-16.05</b>	<b>Diogo Pinheiro</b> , I. Duarte,A. A.Pinto, S. R. Pliska	<i>Optimal Life Insurance, Consumption and Investment Decisions</i>			
<b>16.05-16.30</b>	<b>Diogo Pinheiro</b> , L. Boukas , S. Z. Xanthopoulos, A. A. Pinto, A. N. Yannacopoulos	<i>Pricing contingent claims in incomplete markets through risk sharing and beliefs updating</i>			

Wed, July 28, 2010		Parallel Session 5		PLACE- AMFI 3	
<b>14:45-16:30</b>	<b>Analytical/Numerical Methods in Viscous and Non Newtonian Fluid Flow and Heat Transfer</b>				
		<b>Chair</b>	<b>A.K. Banerjee</b>	<b>Co-chair</b>	<b>Amel Al-Aidrous</b>
<b>14.45-15.15</b>	A.K. Banerjee , A. V. Kumaran		<i>Unsteady MHD flow past a stretching sheet due to heat source/sink</i>		
<b>15.15-15.45</b>	Amel Al-Aidrous , A. Abdullah		<i>The influence of linear and nonlinear magnetic field</i>		
<b>15.45-16.15</b>	Tamizharasi R.,V. Kumaran		<i>Pressure in MHD/Brinkman flow past a stretching sheet</i>		

Thu, July 29, 2010		Parallel Section 6		PLACE- AMFI 4	
<b>14:45-16:30</b>	<b>Celestial Mechanics and Dynamical Astronomy</b>			<b>Josep Mademont</b>	<b>Co-chair</b> <b>Giorgio Mingotti</b>
<b>14.45-15.15</b>	Anna Zanzottera ,Giorgio Mingotti, Roberto Castelli, Michael Dellnitz		<i>Design and Optimization of Earth-to-HaloTransfers in the Earth–Moon Scenario</i>		
<b>15.15-16.00</b>	Giorgio Mingotti ,F.Toppoto,F. Bernelli Zazzera		<i>Efficient Invariant-Manifold, Low-ThrustPlanar Trajectories to the Moon</i>		

Wed, July 28, 2010		Parallel Session 7		PLACE- AMFI 4	
<b>17:00-18:45</b>	<b>Chaotic Dynamics and Transport in Classical and QS</b>			<b>Chair</b> <b>Nicholas T. Ouellette</b>	<b>Co-chair</b> <b>Gyorgy Karolyi</b>
<b>17.00-17.30</b>	Nicholas T. Ouellette, Douglas H. Kelley, and Sophia T. Merrifield		<i>Mixing by resonances and long-term chaotic advection in Stokes flows</i>		
<b>17.30-18.00</b>	Gyorgy Karolyi, Tamas T, Adilson Motter, Marton Gruiz		<i>Transient chaos in a damped, undriven system: the magnetic pendulum</i>		
<b>18.00-18.30</b>	Vsevolod Vitkovsky,L.E.Konkov, S.V.Prants		<i>Controlling transport of atomic matter waves in optical lattices</i>		

Wed, July 28, 2010		Parallel Session 8		PLACE- Conference Hall	
<b>17:00-18:45</b>	<b>Fractional Calculus Applications</b>			<b>Chair</b> <b>Malgorzata Klimek</b>	<b>Co-chair</b> <b>Erkan Nane</b>
<b>17.00-17.30</b>	Malgorzata Klimek		<i>Sequential fractional differential equations with Hadamard derivative</i>		
<b>17.30-17.55</b>	Agnieszka B. Malinowska		<i>Fractional variational calculus for nondifferentiable functions: generalized natural boundary conditions</i>		
<b>17.55-18.15</b>	Erkan Nane		<i>Fractional Cauchy problems on bounded domains: survey of recent results</i>		
<b>18.15-18.40</b>	Nuno R. O. Bastos ,Delfim F.M.Torres		<i>A Combined Discrete Fractional Sum</i>		

Wed, July 28, 2010		Parallel Session 9		PLACE--AMFI 1	
<b>17:00-18:45</b>	<b>Celestial Mechanics and Dynamical Astronomy</b>	<b>Chair</b>	<b>Tere Seara</b>	<b>Co-chair</b>	<b>Andrzej Maciejewski</b>
<b>17.00-17.30</b>	Alejandro Luque , Jordi Villanueva	<i>Computation of quasi-periodic invariant curves using averaging-extrapolation methods</i>			
<b>17.30-18.00</b>	Catalin Bogdan Gales	<i>A cartographic study of the phase space of the restricted three body problem</i>			
<b>18.00-18.25</b>	Kristian Uldall Kristiansen P. L. Palmer, M. Roberts	<i>Adiabatic invariance of a slow manifold with bifurcation</i>			
<b>18.25-18.50</b>	Laura Garcia - Taberner Josep J. Masdemont	<i>Spacecraft formations reconfiguration using finite element methodology with adaptive remeshing</i>			
Wed, July 28, 2010		Parallel Session 10		PLACE—Blue Hall	
<b>17:00-18:45</b>	<b>Nonlinear Dynamics of Continuous and Discontinuous Dynamical Systems</b>	<b>Chair</b>	<b>Katica ( Stevanovic ) Hedrih</b>	<b>Co-chair</b>	<b>Evan Haskell</b>
<b>17.00-17.35</b>	Katica ( Stevanovic ) Hedrih	<i>Transfer energy in the hybrid system non-linear dynamics</i>			
<b>17.35-17.50</b>	Katica ( Stevanovic ) Hedrih Vladimir Raičević , Srdjan Jović	<i>Phase trajectory portrait of the vibro-impact forced dynamics of two heavy mass particles motions along rough cycle</i>			
<b>17.50-18.20</b>	Liming Dai, L. Han	<i>Multiple-Periodicity Diagnosis of Nonlinear Dynamic Systems with Employment of Periodicity Ratio</i>			
<b>18.20-18.45</b>	Evan Haskell , Vehbi E. Paksoy	<i>Localized Activity States for Neuronal Field Equations of Feature Selectivity in a Stimulus Space with Toroidal Topology</i>			
<b>18.45-19.00</b>	Majdi Alomari ,Rodanski Benedykt S	<i>Controlling Bifurcations of Subsynchronous Resonance (SSR) using Static Synchronous Series Compensator (SSSC)</i>			

Wed, July 28, 2010		Parallel Session 11		PLACE--AMFI 2	
<b>17:00-18:45</b>	<b>Analytical/Numerical Methods in Viscous and NonNewtonian Fluid Flow and Heat Transfer</b>				
	<b>Chair</b>	<b>Kumaran V.</b>	<b>Co-chair</b>	<b>Ioan Pop</b>	
<b>17.00-17.30</b>	Ioan Pop, V. Kumaran	<i>Boundary layer flow past a permeable shrinking surface with slip and variable wall heat flux</i>			
<b>17.30-18.00</b>	Kumaran V., Ioan Pop	<i>Nearly parallel Blasius flow with slip</i>			
<b>18.00-18.25</b>	Seyed Mohammad Motevalli, M.R. Pahlavani , M. Azimi	<i>Theoretical Prediction of EOS in binary mixtures</i>			
<b>18.25-18.50</b>	Sujata Tarafdar, Soma Nag, Tapati Dutta	<i>Spreading of Fluids on Solids Under Pressure: Effect of Slip</i>			

Wed, July 28, 2010		Parallel Session 12		PLACE--AMFI 3	
<b>17:00-18:45</b>	<b>Mathematical Methods from Probability, Optimization and Data Mining in Finance, Life and Systems</b>				
	<b>Chair</b>	<b>Gerhard Wilhelm Weber</b>	<b>Co-chair</b>	<b>Özlem Defterli</b>	
<b>17.00-17.45</b>	Jerzy A. Filar	<i>The Hamiltonian Cycle Problem And Some Challenging Non-Convex Programs</i>			
<b>17.45-18.25</b>	Jeffrey Webb	<i>Second Order Nonlinear Electromagnetic Interactions in Nanoscale Ferroelectric Thin Films on Metal Substrates</i>			
<b>18.25-18.50</b>	Asim Egemen Yilmaz	<i>Why You Should Consider Nature-Inspired Optimization Methods in Financial Mathematics</i>			