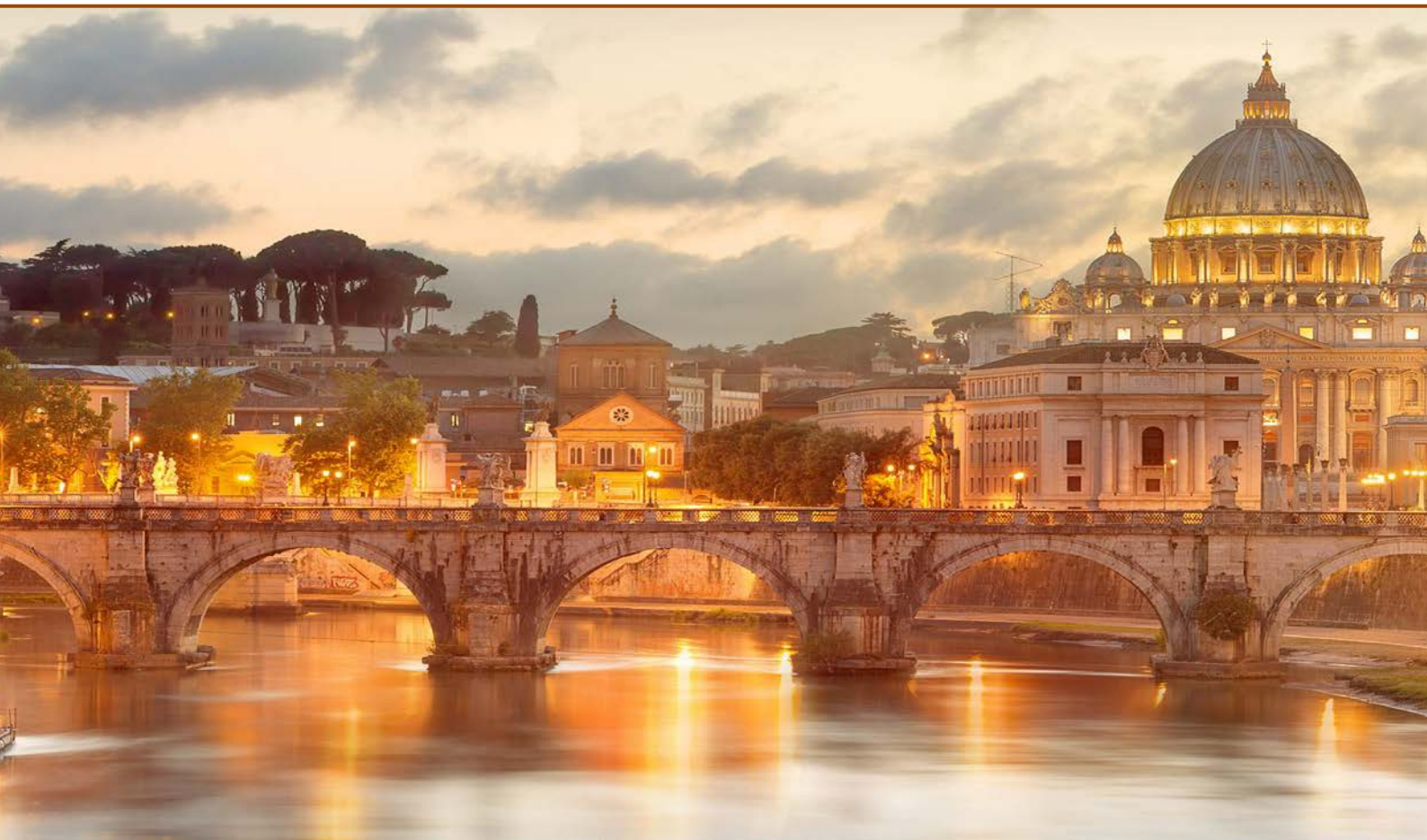


Conference Program



Rome, Italy
November 23-25, 2018

Conference Location:

The Church Palace Hotel

Via Aurelia, 481, 00165, Rome, Italy

<https://www.thechurchpalace.com/en/>

Friday 23rd November 2018

Conference Room: A

Time: 09:00-09:30

Plenary Lecture:



Second Order Conditions and Uniqueness of Multipliers in Optimal Control

by Prof. Javier F. Rosenblueth, National Autonomous University of Mexico, MEXICO.

Conference Room: A

Time: 09:30-10:00

Plenary Lecture:



On the Models of Thin Film Growth

by Prof. Gabriella Bognar, University of Miskolc, HUNGARY.

10:00-10:30: Coffee Break

Friday 23rd November 2018

Conference Room: A

Time: 10:30-12:30

Title: Dynamical Systems and Control

Chair: Javier F. Rosenblueth, Toshinori Nawata

Design of an Augmented Automatic Choosing Control by Weighted Gradient Optimization Automatic Choosing Functions for Nonlinear Systems	Toshinori Nawata
Normality and Quasinormality in Nonlinear Programming and Optimal Control	Javier F. Rosenblueth
Study Regarding the Accuracy of Measurement by Factors as Repeatability and Reproducibility	Ioan Ghimbaseanu
Robust Trajectory Tracking Control of Omni-Wheeled Mobile Robots	Aleksandr Andreev, Olga Peregudova, Katherine Sutyorkina
An Improved Motion Controller of a Mobile Robot based on a Hyperchaotic System	Eleftherios K. Petavratzis, Christos K. Volos, Hektor E. Nistazakis, Ioannis N. Stouboulos, Ioannis M. Kyprianidis
Stability Problem for non-Autonomous Systems of Nonlinear Difference Equations	Aleksandr Andreev, Olga Peregudova, Katherine Sutyorkina
Numerical Investigation of the Three-Dimensional Velocity Fields Induced by Wave-Structure Interaction	Giovanni Cannata, Francesco Gallerano, Federica Palleschi, Chiara Petrelli, Luca Barsi
Analysis of the Impact of Changes in System Parameters on the Quality of Control	Gennadii Samsonov, German Michalconok
Machine Learning Approach Application for High-voltage Instrument Transformers Technical State Assessment	Alexandra Khalyasmaa, Alina Stepanova, Daria Shatunova, Vadim Manusov
Spectral Determination of Nonlinear System Parameters	Adil Brouri, Mohamed Benyassi
Identification of Nonparametric Nonlinear Systems	Mohamed Benyassi, Adil Brouri

Friday 23rd November 2018

Conference Room: A

Time: 12:30-14:30

Special Session Title: Optimization and Artificial Intelligence in Engineering Applications

Chair: Gebrail Bekdas

Mass Ratio Factor on Optimum TMD Design in Frequency Domain	Gebrail Bekdař, Sinan Melih Nigdeli
Investigation of Cross-Sectional Dimension on Optimum Carbon Fiber Reinforced Polymer Design for Shear Capacity Increase of Reinforced Concrete Beams	Aylin Ece Kayabekir, Gebrail Bekdař, Sinan Melih Nigdeli, Rasim Temür
Estimating of Analysis Results for Structures with Linear Base Isolation Systems using Artificial Neural Network Model	Melda Yucel, Seda Öncü-Davas, Sinan Melih Nigdeli, Gebrail Bekdař, Selçuk Sevgen
Artificial Neural Network Model for Optimum Design of Tubular Columns	Melda Yucel, Gebrail Bekdař, Sinan Melih Nigdeli, Selçuk Sevgen
Performance Comparison of Location of Optimum TMD on Seismic Structures	Sinan Melih Nigdeli, Gebrail Bekdař
Time Delay Factor of Structural Control Systems for Excitations with and Without Pulses	Serdar Ulusoy, Sinan Melih Nigdeli, Gebrail Bekdař
Grey Wolf Optimizer based Design of Reinforced Concrete Retaining Walls Considering Shear Key	Rasim Temür, Aylin Ece Kayabekir, Gebrail Bekdař, Sinan Melih Nigdeli

14:30-15:00: Coffee Break

Friday 23rd November 2018

Conference Room: A

Time: 15:00-17:00

Title: Environmental Sciences and Development

Chair: Dina Bite, Shiang-Tai Liu

A Cost-Benefit Analysis of the Metro Line 1 in Naples, Italy	Armando Carteni, Ilaria Henke, Clorinda Moliterno
Material Properties of Rammed Earth Prepared from Illitic-Kaolinitic Clay	Pavel Padevet, Tereza Otcovska, Barbora Muzikova
Network Governance Approach: Collaboration Practices between NGOs and Local Governments in Rural Areas in Latvia	Dina Bite, Zenija Kruzmetra, Janis Kuis
A Network DEA Approach to Measure the Efficiency Change of Taiwan Financial Holding Companies	Shiang-Tai Liu
Disaster Fundraising via Social Media: A Case Study of Non-resident Nepalese Community in Australia	Ritesh Chugh
Urban Agriculture: As a Transformation Strategy for Social Construction and Improvement of the Quality of Life in Vulnerable Communities in the Urban Area	Francisco Javier Vélez Zabala, Viviana Yulieth Hidalgo Zapata, Mónica Andrea Martínez Martina, Ana María Soto González, María Eugenia Vélez, Juan Diego López Vargas
The Impact of Population Trends upon Urban and Rural Sustainable Development Indicators	Alexandru Sin, Luminita Chivu, Silvia Dedu, Sorin Avram, Carmen Gheorghe
Statistical Analysis on Real Kinematic Urban Driving Cycles by Preliminary Use of VSP Variable	Livia Della Ragione, Giovanni Meccariello

Poster Presentations

Optimized Segmentation Adaptive based Testing of the Wavelet Co-movement Analysis: The Case of US and G8 Countries	Jitka Poměnková, Eva Klejmová, Tobiáš Malach
The Uncovered Interest-Rate Parity Assumption in a Hyperchaotic System	Ourania I. Tacha, Ioannis N. Stouboulos, Efthymia Meletlidou, Ioannis M. Kyprianidis
Dynamics and Circuit Emulation of an Extreme Multistable System of Coupled Oscillators with Hidden Attractors	Jamal-Odyseas Maaita, Efthymia Meletlidou, Christos Volos

17:00 Welcome Drink

Saturday 24th November 2018

Conference Room: A

Time: 09:00-11:00

Title: Chemical Engineering

Chair: Badea Lepadatescu, Dilgam Tagiyev

Beneficial Effect of Ethylene Glycol on the Activity of P-doped NiMo/Al ₂ O ₃ HDS Catalysts	Alexey L. Nuzhdin, Evgeniya N. Vlasova, Galina A. Bukhtiyarova, Aleksander A. Porsin, Igor P. Prosvirin, Valerii I. Bukhtiyarov
Study of Axial Force and Torque at Drilling on ZTAL4Cu1 Alloy	Badea Lepadatescu
Some Researches in the Field of the Use of Permanent Magnet Motor for Vehicle Propulsion	Bolfa Traian Eugen
Mathematical Modeling of the Hardware Design of the Catalytic Process of Hydrocarbon Processing at the Design Stage	Salim Asadov, Ali Akhundov, Dilgam Tagiyev
Some Researches Regarding Stress Intensity Factors in Crack Closure Problems	Ioan Enescu
Synthesis, Characterization and Physico-chemical Properties of Novel Mixed Ligand Platinum(II) Complexes with Nitrogen and Sulfur Atoms	Dilgam Tagiyev, Asmet Azizova, Mirsalim Asadov

11:00-11:30: Coffee Break

Saturday 24th November 2018

Conference Room: A

Time: 11:30-13:30

Title: Computers, Applied Mathematics and Informatics

Chair: Anthony Spiteri Staines, Chris Evangelides

Ordinary Petri Net Matrices	Anthony Spiteri Staines
Model of Fatigue Life Degradation of Crankshaft	Radim Jarkovsky, Pavel Cyrus, Stepan Major
Novel Solution of the Diffusion Equation Utilizing Optimization through Genetic Algorithm	Chris Evangelides, Epaminondas Sidiropoulos
Approximate Solution of Singular Integro-Differential Equations for Displaced Fejer Points	Feras Al Faqih, Iurie Caraus
Modeling and Simulation of Transients in Electric Power Systems using Hybrid System Theory	Yury Shornikov, Evgeny Popov
Research on Network Security Quantitative Model based on Probabilistic Attack Graph	Yimin Cui, Junmei Li, Li Cheng, Wei Zhao, Cheng Luan
Clusterization by the K-means Method when K is Unknown	Natalya Litvinenko, Orken Mamyrbayev, Assem Shayakhmetova, Mussa Turdalyuly

Saturday 24th November 2018

Conference Room: A

Time: 13:30-15:30

Title: Health Science and Biomedical Systems

Chair: Igor Neelov, Luis Hebert Palma Pulido

Descriptive Analysis of the Water Balance in Swimmers of the Club Orcas Tuluá	Luis Hebert Palma Pulido, Jocelyn Portela Arévalo, Ruben Darío Lerma Piedrahita, Carlos Hernán Méndez Díaz, Diego Bonilla Ocampo
Plantar Pressure in Transtibial Amputees	Lely A. Luengas, Miguel A. Gutierrez
Statistical Analysis of Health Inequalities in European Countries	Viera Pacáková, Pavla Jindrová, Lucie Kopecká
Computer Simulation of Complex of Lysine Dendrigrft with Molecules of Therapeutic KED Peptide	Igor Neelov, Valerii Bezrodnyi, Anna Marchenko, Emil Fatullaev, Sofia Miktaniuk
Prevalence of Intestinal Parasites in Children of an Invasion Community in a Municipality of Colombia	Beatriz Giraldo-Ospina, Paola-Andrea Fontal-Vargas, Diego-Fernando López-Muñoz, Leonardo Beltrán-Angarita, Viviana Morales-Jiménez, María-Nohemy Gómez
Identification of Contact Angle and Heterogenity Detection in Tactile Images	Dmitriy E. Alexandrov, Stepan A. Nersisyan
The Longevity in a Population of a Country in Development	Ana Consuelo Tascón, Paola Andrea Fontal Vargas, Luz Jizen Jizela Jiménez, María José Lozano, Juan David Peñaranda

15:30-16:00: Coffee Break

Saturday 24th November 2018

Conference Room: A

Time: 16:00-18:00

Title: Finance, Accounting and Law

Chair: Teruji Sekozawa, Harold Edmundo Mora Campo

Evaluation of Options for Stabilization of Potato Farmer Income	Wataru Sagisaka, Teruji Sekozawa
“Femminicidio” and Old Laws of a Very Little Castle in Middle Italy	Carlo Artemi
The Application of the Rosenberg Scale for Self-Esteem Test, in Delegates from the Network of Women Victims of the Armed Conflict of Tuluá, Valle Del Cauca - Colombia	Jhon Pablo Marín Yusty, Carlos Andrés Ramírez Castillo
Approaches to the Concept of Family under the Colombian Legislation	Harold Edmundo Mora Campo, Flor Elbada Agudelo Correa, John Romario Arce Aranguren
An Approach to the Concept of Social and Emotional Adaptation: State of the Art Research Project	Jhon Pablo Marín Yusty, Carlos Andrés Ramírez Castillo
Normative Framework of Sexual Violence against Men in the Framework of the Armed Conflict and Effective Participation in the Different Instances Established by Law	Nury Gabriela Acosta Lugo, Gustavo Adolfo Gutiérrez Puerta

Poster Presentations

Study of Metals Leaching from Nonferrous Mine Tailings in Organic and Inorganic Extractants	Emilia Neag, Maria-Alexandra Hoaghia, Anamaria Török, Erika Levei, Marin Şenilă, Cecilia Roman
Stratification of Fire Smoke and Testing Aerosol in a Road Tunnel: Computer Simulation	Peter Weisenpacher, Jan Glasa, Lukas Valasek
Circulating Micro RNAs as Tumour Markers in Lung Cancer	Erika Halasova, Tatiana Matakova, Maria Skerenova, Anton Dzian
Molecular Profiling of Progression and Metastasis of Solid Tumors	Tatiana Matakova, Erika Halasova, Maria Skerenova

20:00: Conference Dinner

Sunday 25th November 2018

Conference Room: A

Time: 09:00-11:00

Title: Informatics and e-Activities

Chair: Pavla Jindrová, Ainur Kozbakova

Smart Ordering Application for Assigning Sequence Numbers to Customers at Offline Sites	Myoungbeom Chung
Modelling of Insured Losses of Natural Catastrophes using Block Maxima Model	Pavla Jindrová, Viera Pacáková, Ivana Laštovičková
Findings Annihilator(s) via Fault Injection Attack (FIA) on Boolean Function of Grain v0	Muhammad Rezal Kamel Ariffin, Wan Zariman Omar@Othman, Solahuddin Shamsuddin, Zahari Mahad, Suhairi Mohd Jawi
E-Invexity and Generalized e-Invexity in e-Differentiable Multiobjective Programming	Najeeb Abdulaleem
Research of the Spectral Characteristics of Apodized Fiber Bragg Gratings	Maksat Kalimoldayev, Aliya Kalizhanova, Waldemar Wójcik, Gulzhan Kashaganova, Saltanat Amirgaliyeva, Azhibek Dasibekov, Ainur Kozbakova, Zhalau Aitkulov
Criteria and Methodology for the Evaluation of e-Learning Management Systems based on the Specific Needs of the Organization	Ivaylo Blagoev, Vladimir Monov
Designing Moocs and OERs in a Virtual Mobility Experience	Antonella Poce, Francesco Agrusti, Maria Rosaria Re, Francesca Amenduni

11:00-11:30: Coffee Break

Sunday 25th November 2018

Conference Room: A

Time: 11:30-13:30

Title: Applied and Computational Mathematics in Engineering Systems

Chair: Gabriella Bognár, Alexander Tatashev

Spectrum of Continuous Two-Contours System	Alexander G. Tatashev, Marina V. Yashina
Ferrofluid Flow along Stretched Surface under the Action of Magnetic Dipole	Gabriella Bognár, Krisztián Hriczó
Study of Convective Heat Transfer in Flat Plate Solar Collectors	Yedilkhan Amirgaliyev, Murat Kunelbayev, Aliya Kalizhanova, Beibut Amirgaliyev, Ainur Kozbakova, Omirlan Auelbekov, Nazbek Kataev
A Particular Block Vandermonde Matrix	Malika Yaici, Kamel Hariche
Linear Bearing Fault Detection in Operational Condition using Artificial Neural Network	Siwanu Lawbootsa, Prathan Chommaungpuck, Jiraphon Srisertpol
Assessing the Impact of Demographic Trends in European Metropolitan Areas upon Sustainable Development by using Principal Component Analysis and Hierarchical Classification Techniques	Sorin Avram, Carmen Gheorghe, Alexandru Sin, Luminița Chivu, Silvia Dedu
Preliminary Design of Aeroelastically Tailored Wing Box Structures with Bend-Twist Coupling	Mihai Mihaila-Andres, Paul-Virgil Rosu, Ciprian Larco, Maria Demsa, Lucian Constantin, Radu Pahonie
Failure Prediction Models for Accelerated Life Tests	Vivien Sipkás, Gabriella Bognár

Sunday 25th November 2018

Conference Room: A

Time: 13:30-15:30

Title: Communications

Chair: Seppo Sirkemaa, Antoniya Tasheva

Analysis of the Limited Resources Queuing System with Signals and Multiple Flows of Customers	Eduard Sopin, Konstantin Samouylov
Counting and Locating People in Outdoor Environments: A Comparative Experimental Study using WiFi-based Passive Methods	Antonio Guillen-Perez, Maria-Dolores Cano
Towards Understanding the Role of Trust in Electronic Business	Seppo Sirkemaa
Transient Analysis of a Repairable Single Server Queue with Working Vacations and System Disasters	M. I. G. Suranga Sampath, K. Kalidass, Jicheng Liu
A Biometric Security Model for Mobile Applications	Sorin Soviany, Sorin Puscoci, Virginia Sandulescu, Cristina Soviany
A Study on Linear Complexity of p -ary Pseudo Random Sequences Generated by pGSSG	Antoniya Tasheva, Zhaneta Savova-Tasheva, Boyan Petrov

15:30-16:00: Coffee Break

Sunday 25th November 2018

Conference Room: A

Time: 16:00-18:00

Title: Sensors and Signal Processing

Chair: Olga Naumova, Joel Diaz-Reyes

Interface-State Density in SOI-FET Sensors	O. V. Naumova, B. I. Fomin
Windshear Identification Algorithms by Doppler Pulse Lidar	Nikolay Baranov, Ekaterina Lemishchenko
Continuous Speech Recognition of Kazakh Language	Orken Mamyrbayev, Mussa Turdalyuly, Nurbapa Mekebayev, Kuralay Mukhsina, Alimukhan Keylan, Bagher BabaAli, Gulnaz Nabieva, Aigerim Duisenbayeva, Bekturgan Akhmetov
Structural Characterization of $Al_xGa_{1-x}Sb$	José Eladio Flores-Mena, Joel Díaz-Reyes, José Moisés Gutiérrez-Arias, María Montserrat Morin-Castillo
Physical Property Characterization of $Cu_{x(1,2)}O$ Nanofilms Grown on (100) Silicon by Thermal Copper Oxidation	Joel Díaz-Reyes, José Eladio Flores-Mena, Roberto Saúl Castillo-Ojeda, José Moisés Gutiérrez-Arias, María Montserrat Morin-Castillo
Initial Database Creation for Scientific and Technical Solutions Efficiency Assessment based on Artificial Intelligence Approach	Alexandra Khalyasmaa, Elena Zinovieva, Stanislav Eroshenko, Daria Shatunova

Poster Presentations

Determination of the Elemental Composition of Human Remains from the Necropolises of the Moscow Kremlin	Dmitriev A. Yu., Borzakov S. B., Chepurchenko O. E.
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